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The Hague, February 20, 2020

In accordance with Law of 23 December 2016, on market abuse, Repsol International Finance B.V. (the “**Company**”) is filing the attached Consolidated Annual Financial Report 2019 of Repsol, S.A., the Guarantor of the Company’s Euro 10,000,000,000 Guaranteed Euro Medium Term Note Programme.

The Consolidated Annual Financial Report 2019 of Repsol, S.A. has been filed today by Repsol, S.A. with the Spanish Securities Market Commission (*Comisión Nacional del Mercado de Valores*).

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

Audit Report,
Consolidated Financial statements and
Consolidated Management Report
as at 31 December 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 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, 2019, 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, 2019, 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.

Key audit matter	How our audit addressed the key audit matter
<p data-bbox="261 474 790 566">Assessment of the recovery of the carrying amount of the Group's non-current assets in Upstream</p> <p data-bbox="261 598 823 871">The accompanying consolidated financial statements present intangible assets (including goodwill) and property, plant and equipment in the Upstream segment amounting to €3,038 million and €11,447 million, respectively, 31 December 2019. These assets are allocated to cash generating units (CGUs) as indicated in notes 12 and 13 to the accompanying consolidated financial statements.</p> <p data-bbox="261 902 826 1086">Similarly, as indicated in note 14 to the accompanying consolidated financial statements, the Group has several investments in the Upstream segment carried under the equity method with a carrying amount at year-end 2019 of €6,780 million.</p> <p data-bbox="261 1117 836 1359">The Group performs an analysis of impairment of the assets indicated by CGU on an annual basis, in accordance with the criteria described in note 3.5. 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.</p> <p data-bbox="261 1391 839 1879">As indicated in notes 2.4 and 21, the Board of Directors of the parent company approved a new strategic approach in late 2019, which will form the basis for the Group's forthcoming strategic plan (2020-2025), in which the Group commits to achieving net zero carbon dioxide emissions in 2050 and a gradual reduction in its carbon intensity indicator in keeping with the Paris Agreement and UN Sustainable Development goals. This, coupled with the new dynamics on the hydrocarbon markets, particularly the North American natural gas market, has meant that future price expectations of crude oil and natural gas, taken into account in the annual impairment testing, have been revised downwards.</p>	<p data-bbox="861 598 1433 719">We started our analysis by gaining an understanding on both the methodology applied and the relevant controls that the Group has in place to analyse asset recovery.</p> <p data-bbox="861 750 1444 902">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.</p> <p data-bbox="861 934 1460 1117">Moreover, we gained an understanding of the environment (price performance, presentation of results of other companies in the industry, analyst reports, etc.) in order to assess the Group's vision for consistency with the real situation in the global hydrocarbon marketplace.</p> <p data-bbox="861 1149 1476 1422">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 prices, the estimation of hydrocarbon reserves by internal and external experts, production profiles, operational costs, the necessary investments to develop existing reserves and discount rates.</p> <p data-bbox="861 1453 1476 1606">Specifically, with respect to future hydrocarbon prices, we compared management's estimates with the information published by investment banks, consultancy firms and relevant industry organisations and agencies.</p>



Key audit matter	How our audit addressed the key audit matter
<p>The key assumptions employed in estimating these cash flows for the purposes of analysing impairment are detailed in notes 3.5 and 21 to the accompanying consolidated financial statements.</p> <p>In addition, management has carried out a sensitivity analysis (note 21.2) on the key assumptions which, in light of earlier experience, may reasonably show variations.</p> <p>As a result of these analyses, Group management has recognised measurement adjustments, net of reversals, in the Upstream segment for the amounts indicated in note 21.1.</p> <p>This matter is key because it entails management applying critical judgements and significant estimates in terms of the key assumptions used, which are subject to uncertainty, while significant future changes in key assumptions could have a significant impact on the Group's consolidated financial statements.</p>	<p>Concerning the estimation of hydrocarbon reserves, we gained an understanding of the process established by the Group in this respect, which includes the use of management experts, and assessed the results of the work and competence, capacity and objectivity of these experts, in order to satisfy ourselves that they were properly qualified to calculate an estimate of volumes. In addition, we verified the consistency of the volumes estimated by management experts with the data used in determining the recoverable value of the assets.</p> <p>Similarly, we checked the mathematical accuracy of the calculations and models prepared by management and 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.</p> <p>We assessed the sensitivity calculations carried out by management and the estimates of the magnitude of the change in the key assumptions required to trigger asset impairment, or the reversal of the impairment allowance.</p> <p>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.</p> <p>Based on the procedures carried out, we consider that management's approach and conclusions and the information disclosed in the accompanying consolidated financial statements are reasonable and consistent with the evidence obtained.</p>

Key audit matter	How our audit addressed the key audit matter
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<p>Assessment of the recovery of the carrying amount of deferred tax assets</p>	<p>We started our analysis by gaining an understanding on both the methodology applied and the relevant controls that the Group has in place to analyse the recovery of these assets.</p> <p>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.</p> <p>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.</p> <p>We also assessed the sufficiency of the information disclosed in the consolidated financial statements concerning the measurement and recognition of these assets.</p> <p>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.</p>
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As shown in the accompanying consolidated balance sheet, at 31 December 2019 the deferred tax asset balance amounts to €4,050 million, with, available tax loss carryforwards and deductions amounting to €3,193 million, according to note 23.3 to the accompanying consolidated financial statements.

When assessing whether the amount recognised in the consolidated financial statements for these assets is recoverable, Group management factors in, as mentioned in notes 3.5 and 23.3, future tax profits forecast 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 regarding the recoverability of such assets.

As a result of the above analyses, Group management has reduced the amount of deferred tax assets recognised on the balance sheet by the amount indicated in notes 21.1 and 23.3.

This is a key matter due to the nature and significance of the assets recognised and because it entails the use of significant estimates in terms of future tax profits, affecting the assessment of the recovery of these assets.

Assessment of the recovery of the Group's assets in Venezuela

As indicated in note 21.3 to the accompanying consolidated financial statements, the Group's asset exposure in Venezuela at 31 December 2019 amounts to €239 million. This amount mainly includes the financing in dollars granted by the Group to the joint ventures Cardon IV, S.A. and Petroquiriquire, S.A. (note 9.1) amounting to €426 million and the trade receivables with Petróleos de Venezuela, S.A. (PDVSA) amounting to €347 million that are presented as Other non-current assets (Note 16), less provisions for liabilities and charges amounting to €495 million (note 14).

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.

Key audit matter	How our audit addressed the key audit matter
<p>As detailed in note 21.3, 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 intervention and involvement, with sharply declining output in the past few years, political instability, the state of economic emergency and international disciplinary measures, among others.</p> <p>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 21.3 to the accompanying consolidated financial statements.</p> <p>Within the context described, the Group analysed the recovery of its investments in Venezuela and the credit risk associated with its accounts receivable with PDVSA and recognised impairment of €180 million in the consolidated income statement, as detailed in note 21.3.</p> <p>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.</p> <p>This matter requires a high level of judgement and estimation that management should make in order to assess the recovery of its assets in Venezuela and so has been considered a key audit matter.</p>	<p>With respect to the investment in Cardón IV, S.A., we assessed the competence and objectivity of the auditor of this component and obtained and assessed the communications issued by him, including his overall findings, conclusions and opinion.</p> <p>Additionally, we applied certain audit procedures on the financial statements of Cardón IV, S.A. and Petroquiriquire, S.A. that have been included in the Group's consolidated financial statements using the equity method.</p> <p>With respect to the analysis of impairment losses on non-current assets of the above companies, we carried out audit procedures like those described previously in the key audit matter section "Assessment of the recovery of the carrying amount of the Group's non-current assets in Upstream"</p> <p>In addition, we analysed the reasonableness of the provision for contingencies and charges recorded.</p> <p>In order to analyse the credit risk on the loans granted to the joint ventures and the accounts receivable with PDVSA, we carried out the following audit procedures, among others:</p> <ul style="list-style-type: none"> • Obtaining and assessment of the loan contracts with Cardon IV, S.A. and Petroquiriquire, S.A. 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 report of the independent expert, 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 properly qualified to perform that engagement.



Key audit matter	How our audit addressed the key audit matter
	<p>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.</p> <p>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</p>

Analysis of the effects of the partial arbitration award in relation to the acquisition of Talisman Energy UK Limited (TSEUK), currently Repsol Sinopec Resources UK Limited (RSRUK)

As mentioned in note 15 to the accompanying consolidated financial statements, Addax Petroleum UK Limited (Addax) and Sinopec International Petroleum Exploration and Production Corporation (Sinopec) filed a "Notice of arbitration" against Talisman Energy Inc. (currently "Repsol Oil & Gas Canada Inc. – ROGCI) and Talisman Colombia Holdco Limited (TCHL) in relation to the acquisition of 49% of the shares of TSEUK in 2012 by Addax and Sinopec. This transaction took place before the acquisition of the Talisman group by Repsol in 2015.

On 29 January 2020 the Arbitration Court of Singapore issued a partial arbitration award, deciding that ROGCI and TCHL are liable vis-à-vis Sinopec and Addax for certain information and representations provided during the aforementioned acquisition process. The partial award issued addresses one of the five issued to be settled with respect to the liability phase of the established procedure. The Court has signalled that it will decide on the other issues through subsequent awards although it is currently unknown when these will be issued. Once a decision has been taken on all issues, a new procedural phase will be necessary in order to determine the amounts involved, no timeline having yet been established. Repsol Group management considers that the final award will not be issued before the first quarter of 2022, time when the amount of the indemnity to be settled will be established.

Our audit procedures relating to this matter included the following, among others:

- Meetings and discussions with Group management to understand their analysis and assessment of the risks underlying the arbitration award.
- Obtaining the assessment of the Group's external lawyers concerning the classification of the risks identified for the Repsol Group in the award received and their implications.
- With the collaboration of our legal experts, we analysed the award documentation and assessed whether the risks identified therein by internal and external lawyers agree with its content.
- Understanding and assessing the methodology applied by the Group in order to quantify the risks deriving from its analysis of the arbitration award and verifying whether the risks quantified by the Group agree with those resulting from the award received.
- Checking the estimates made with the documentation included in the arbitration award and verifying the mathematical accuracy of the calculations prepared by management.



Key audit matter	How our audit addressed the key audit matter
<p>Under these circumstances, and in view of this first partial award and the information currently available, Repsol Group management estimated the economic impacts that could finally result from the dispute as a whole and established the relevant provision in its consolidated financial statements at 31 December 2019, as indicated in note 15.</p> <p>This is a key matter as it entails management applying critical judgements and significant estimates in the calculations made, which are subject to uncertainty, and because changes in the evolution of such arbitration could have a significant impact on the Group's consolidated financial statements</p>	<p>Finally, we considered the sufficiency and adequacy of the information disclosed in the consolidated financial statements concerning this matter.</p> <p>Based on the procedures carried out, we consider that management's approach and conclusions and the information disclosed in the accompanying consolidated financial statements are consistent with the available evidence.</p>

Other information: Consolidated management report

Other information comprises only the consolidated management report for the 2019 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 exist, 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 2019 financial year, and its content and presentation are in accordance with the applicable regulations.



Responsibility of the directors and the audit and control 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 and control 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.



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

- 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 and control 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 and control committee with a statement that we have complied with relevant ethical requirements, including those relating to independence, and we communicate with the audit and control 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 and control 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 and control committee

The opinion expressed in this report is consistent with the content of our additional report to the Parent company's audit and control committee dated February 20, 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.



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

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 Goirienea Basualdu (16198)

February 20, 2020



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

REPSOL\OPINION 31-12-19 CONSOL INGLES/ N° Protocolo 156759

REPSOL, S.A.

AUDIT REPORT, CONSOLIDATED FINANCIAL STATEMENTS AND CONSOLIDATED
MANAGEMENT REPORT AT 31 DECEMBER 2019

DISTRIBUCION

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PwC - Madrid

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REPSOL Group

2019

Consolidated
financial
statements

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



Repsol, S.A. and Investees comprising the Repsol Group
Balance sheet at December 31, 2019 and 2018

ASSETS	Note	€ Million	
		12/31/2019	12/31/2018
Intangible assets	12	4,470	5,096
Property, plant and equipment	13	23,145	25,431
Investment property		66	68
Investments accounted for using the equity method	14	7,237	7,194
Non-current financial assets	9	1,125	1,103
Deferred tax assets	23	4,050	3,891
Other non-current assets	16	1,315	701
NON-CURRENT ASSETS		41,408	43,484
Non-current assets held for sale		5	6
Inventories	17	4,597	4,390
Trade and other receivables	18	5,911	6,105
Other current assets		195	296
Other current financial assets	9	2,800	1,711
Cash and cash equivalents	9	2,979	4,786
CURRENT ASSETS		16,487	17,294
TOTAL ASSETS		57,895	60,778

EQUITY AND LIABILITIES	Note	€ Million	
		12/31/2019	12/31/2018 ⁽¹⁾
Share capital		1,566	1,559
Share premium and reserves		26,731	25,894
Treasury shares and own equity investments		(1,170)	(350)
Net income for the period attributable to the parent		(3,816)	2,341
Other equity instruments		1,024	1,024
SHAREHOLDERS' EQUITY	7	24,335	30,468
Equity instruments with changes through other comprehensive income		24	13
Hedging transactions	10	(109)	(106)
Translation differences		678	253
OTHER CUMULATIVE COMPREHENSIVE INCOME		593	160
NON-CONTROLLING INTERESTS		281	286
EQUITY	7	25,209	30,914
Non-current provisions	15	3,912	3,431
Non-current financial liabilities	8	10,929	10,818
Deferred tax liabilities	23	2,375	2,335
Other non-current liabilities		385	470
NON-CURRENT LIABILITIES		17,601	17,054
Current provisions	15	865	500
Current financial liabilities	8	6,538	4,486
Trade and other payables	19	7,682	7,824
CURRENT LIABILITIES		15,085	12,810
TOTAL EQUITY AND LIABILITIES		57,895	60,778

⁽¹⁾ Includes all modifications necessary in relation to changes in the presentation of lease payables (see Note 3.2.1) and provisions for tax-related administrative and judicial proceedings due to uncertain income tax positions (see Notes 3.2.1 and 23).

Repsol, S.A. and Investees comprising the Repsol Group
Income statement for the years ending December 31, 2019 and 2018

	Note	€ Million	
		2019	2018
Sales		49,006	49,701
Income from services rendered		322	172
Changes in inventories of finished goods and work in progress		11	130
Other operating income		725	1,073
Procurements		(36,803)	(38,056)
Amortization and depreciation of non-current assets		(2,434)	(2,140)
(Provision for)/Reversal of provisions for impairment		(5,322)	(1,066)
Personnel expenses		(1,946)	(1,874)
Transport and freights		(1,314)	(1,114)
Supplies		(888)	(739)
Gains/(Losses) on disposal of assets		147	62
Other operating expenses		(4,755)	(3,696)
OPERATING NET INCOME	20	(3,251)	2,453
Net interest		(243)	(230)
Change in fair value of financial instruments		216	200
Exchange gains/(losses)		(27)	467
Impairment of financial instruments		6	(370)
Other financial income and expenses		(253)	(240)
FINANCIAL RESULT	22	(301)	(173)
NET INCOME FROM INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD	14	351	1,053
NET INCOME BEFORE TAX		(3,201)	3,333
Income tax	23	(588)	(1,386)
NET INCOME FROM CONTINUING OPERATIONS		(3,789)	1,947
NET INCOME FROM CONTINUING OPERATIONS ATTRIBUTABLE TO NON-CONTROLLING INTERESTS		(27)	(18)
NET INCOME FROM CONTINUING OPERATIONS ATTRIBUTABLE TO THE PARENT		(3,816)	1,929
NET INCOME FROM DISCONTINUED OPERATIONS ATTRIBUTABLE TO THE PARENT	24	—	412
TOTAL NET INCOME ATTRIBUTABLE TO THE PARENT		(3,816)	2,341
EARNINGS PER SHARE ATTRIBUTABLE TO THE PARENT	25	Euros / share	
Basic		(2.48)	1.38
Diluted		(2.48)	1.38

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

Statement of recognized profit or loss corresponding to the years ending December 31, 2019 and 2018

	€ Million	
	2019	2018
CONSOLIDATED NET INCOME FOR THE PERIOD ⁽¹⁾	(3,789)	2,359
Due to actuarial gains and losses	(5)	4
investments accounted for using the equity method	(3)	25
Equity instruments with changes through other comprehensive income	14	3
Tax effect	1	4
OTHER COMPREHENSIVE INCOME. ITEMS NOT RECLASSIFIABLE TO NET INCOME	7	36
Cash flow hedging:	1	39
Valuation gains / (losses)	(55)	3
Amounts transferred to the income statement	56	36
Translation differences:	406	332
Valuation gains / (losses)	431	383
Amounts transferred to the income statement	(25)	(51)
Share of investments in joint ventures and associates:	—	181
Valuation gains / (losses)	—	—
Amounts transferred to the income statement	—	181
Tax effect	12	14
OTHER COMPREHENSIVE INCOME. ITEMS RECLASSIFIABLE TO NET INCOME	419	566
TOTAL OTHER COMPREHENSIVE INCOME	426	602
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	(3,363)	2,961
a) Attributable to the parent	(3,391)	2,940
b) Attributable to non-controlling interests	28	21

⁽¹⁾ Corresponds to the sum of the following consolidated income statement headings: "Net income from continuing operations" and "Net income from discontinued operations attributable to the parent".

Repsol S.A. and Investees comprising the Repsol Group Statement of changes in equity corresponding to the years ending December 31, 2019 and 2018

€ Million	Equity attributable to the parent and other equity instrument holders							Equity
	Shareholders' equity					Other cumulative comprehensive income	Non-controlling interests	
	Share capital	Share premium and reserves	Treasury shares and own equity investments	Net income for the period attributable to the parent	Other equity instruments			
Closing balance at 12/31/2017	1,556	25,541	(45)	2,121	1,024	(404)	270	30,063
Impact of new standards	—	(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 shareholder remuneration	—	(275)	—	—	—	—	(5)	(280)
Transactions with treasury shares and own equity investments (net)	(69)	(1,072)	(305)	—	—	—	—	(1,446)
Increases/(reductions) due to changes in scope	—	—	—	—	—	—	—	—
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
Impact of new standards (see Note 3.2.1)	—	(162)	—	—	—	—	—	(162)
Adjusted opening balance	1,559	25,732	(350)	2,341	1,024	160	286	30,752
Total recognized income/(expenses)	—	(7)	—	(3,816)	—	432	28	(3,363)
Transactions with partners or owners								
Share capital increase/(reduction)	78	(78)	—	—	—	—	—	—
Dividends and shareholder remuneration	—	(330)	—	—	—	—	(7)	(337)
Transactions with treasury shares and own equity investments (net)	(71)	(932)	(820)	—	—	—	—	(1,823)
Increases/(reductions) due to changes in scope	—	21	—	—	—	4	(25)	—
Other transactions with partners and owners	—	—	—	—	—	—	—	—
Other equity variations								
Transfers between equity-line items	—	2,341	—	(2,341)	—	—	—	—
Subordinated perpetual obligations	—	(29)	—	—	—	—	—	(29)
Other variations	—	13	—	—	—	(3)	(1)	9
Closing balance at 12/31/2019	1,566	26,731	(1,170)	(3,816)	1,024	593	281	25,209

Repsol S.A. and Investees comprising the Repsol Group
Statement of cash flows corresponding to the years ending December 31, 2019 and 2018

	Note	€ Million	
		2019	2018
Income before tax		(3,201)	3,333
Adjustments to income:		8,632	2,360
Amortization and depreciation of non-current assets	12 and 13	2,434	2,140
Other (net)		6,198	220
Changes in working capital		137	(389)
Other cash flows from operating activities:		(719)	(725)
Dividends received		464	472
Income tax refunded/(paid)		(975)	(762)
Other proceeds from/(payments for) operating activities		(208)	(435)
CASH FLOWS FROM OPERATING ACTIVITIES	26	4,849	4,579
Payments for investments:	5, 12 and 13	(6,390)	(5,501)
Group companies and associates		(107)	(807)
Property, plant and equipment, intangible assets and investment property		(3,227)	(2,661)
Other financial assets		(3,056)	(2,033)
Proceeds from divestments:	5	1,895	4,074
Group companies and associates		17	3,372
Property, plant and equipment, intangible assets and investment property		133	119
Other financial assets		1,745	583
Other cash flows		88	68
CASH FLOWS FROM INVESTING ACTIVITIES	26	(4,407)	(1,359)
Proceeds from and (payments for) equity instruments:	7	(1,844)	(1,595)
Acquisition		(1,911)	(1,808)
Disposal		67	213
Proceeds from and (payments for) financial liability instruments:	8	412	(796)
Issue		13,213	18,127
Return and amortization		(12,801)	(18,923)
Payments on shareholder remuneration and other equity instruments	7	(396)	(297)
Other cash flows from financing activities:		(461)	(344)
Interest payments		(467)	(454)
Other proceeds from/(payments for) financing activities		6	110
CASH FLOWS FROM FINANCING ACTIVITIES	26	(2,289)	(3,032)
EXCHANGE RATE FLUCTUATIONS EFFECT		40	(3)
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	26	(1,807)	185
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD		4,786	4,601
CASH AND CASH EQUIVALENTS AT END OF PERIOD:	9	2,979	4,786
Cash and banks		2,370	4,124
Other financial assets		609	662

Repsol S.A. and Investees comprising the Repsol Group
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⁽¹⁾ The Appendices form an integral part of the consolidated Financial Statements.

GENERAL INFORMATION

(1) ABOUT THIS REPORT

These 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, 2019, as well as the Group's earnings performance, the changes in the consolidated equity and the consolidated cash flows for the year then ended.

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

These consolidated Financial Statements have been prepared by the Board of Directors of Repsol, S.A. at its meeting held on February 19, 2020 and they will be submitted, together with the financial statements of its investees, for approval at their respective Annual General Meetings; it is expected that they will be approved without any modifications¹.

The Group's Management Report is published together 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.

(2) ABOUT THE REPSOL GROUP

2.1) About Repsol

Repsol is a group of companies with a presence worldwide (hereinafter "*Repsol*", "*Company*", "*Repsol Group*" or "*Group*") that, with a vision of being a multi-energy efficient, sustainable and competitive company, performs activities in the hydrocarbon sector throughout its entire value chain (exploration, development and production of crude oil and natural gas, refining, production, transportation and sale of a wide range of oil and petrochemical products, oil derivatives and natural gas), as well as activities for the generation and sale of electricity².

2.2) About the parent company

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 law, which is subject to the Spanish Companies Act (*Ley de Sociedades de Capital*)³, and all other legislation related to listed companies.

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

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)⁴. The Company also has an ADS (American Depositary Shares) Program, which is quoted on the OTCQX market (a platform in the US over-the-counter markets that differentiates those issuers with better market information policies and solid business activities).

2.3) About the Repsol Group

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

The Group carries out its transactions in various business segments (see Note 4) and its main activities are: i) *Upstream*; exploration and production of crude oil and natural gas reserves, and ii) *Downstream*; refining and petrochemicals, trading and transportation of crude oil and oil products, sale of oil, chemical and LPG products, sale, transportation and regasification of

¹ The 2018 Consolidated Financial Statements were approved at Repsol's Annual General Meeting held on May 31, 2019.

² For further information, see section 2.1 Value chain and business segments of the 2019 Management Report, available at www.repsol.com.

³ Consolidated text approved by Legislative Royal Decree 1/2010, of July 2.

⁴ On January 28, 2019, the shares of Repsol, S.A. were withdrawn from the public offering and listing regime in Argentina.

natural gas and liquefied natural gas (LNG), and generation of electricity and sale of electricity and gas in Spain. The main metrics by segments are summarized as follows:

€Million	Income (from third parties)		Income from operations		Adjusted net income		Capital employed	
	2019	2018	2019	2018	2019	2018	2019	2018 ⁽¹⁾
Upstream	5,270	5,699	1,969	2,514	1,050	1,325	17,205	21,515
Downstream	46,763	47,008	1,928	2,143	1,456	1,583	14,078	11,338
Corporate	—	—	(236)	(261)	(464)	(556)	2,009	1,500
TOTAL	52,033	52,707	3,661	4,396	2,042	2,352	33,292	34,353

Note: Figures calculated in accordance with the Group's reporting model described in Note 4.

⁽¹⁾ Capital employed without considering the impact of IFRS 16 Leases.

The Repsol Group comprises subsidiaries, joint arrangements and associates. The Group's main companies and the summarized corporate organization chart are presented in section 2.6 of the 2019 Management Report. For detailed information, see Appendix IA to these Financial Statements.

In 2019 changes were made to the composition of the Group, mainly due to the acquisition of new businesses related to the energy transition (most notably renewable electricity generation projects in Spain) and the international expansion of the Service Station business in Mexico and the Lubricants business in Singapore. In 2018, the sale of the 20% interest in Naturgy Energy Group, S.A. and the acquisition of Viesgo are noteworthy of mention.

For further information on changes in the Group's composition, see Note 5 and Appendix IA and IB.

2.4) Main new developments in the year⁵

- In the last few months of 2019, Repsol initiated a strategic change with the publication in December of its commitment to gradually reduce its carbon intensity indicator⁶ to become a company with **net zero emissions by 2050**.
- These targets will serve as a basis for the 2020-2025 Strategic Plan, which will be presented to the market and investors in the first half of 2020. The Company is therefore making progress in its commitment to lead the energy transition, in line with the objectives of the Paris Agreement and the United Nations Sustainable Development Goals.
- In line with this new strategic approach and in the context of the new dynamics of the oil and gas markets that have been consolidated over the last year, as well as the new public policies aimed at the decarbonization of the economy and driving the energy transition, the main **assumptions for assessing** both future investments and existing assets have been reviewed. In particular, expectations for crude oil and gas prices have been lowered, long-term estimates regarding the consumption of oil products have been reduced, and the costs of CO₂ emissions have been increased. Although acceptance of these new scenarios has made it possible to optimize sustainability and the value of the businesses in this new environment, it has had an impact of €4,849 million after tax on the measurement of assets for accounting purposes in 2019, mainly in the *Upstream* segment, on gas-producing assets in the US and Canada (see Note 21).
- With regard to the management of the asset portfolio, the *Upstream* segment notably includes the acquisition of the 63% interest in the asset of unconventional production of crude oil, gas and associated liquids at **Eagle Ford** (Texas, United States) from Equinor for \$352 million (see Note 5) in which Repsol now controls 100% and is the operator of the asset.
- In *Downstream*, after completing the acquisition of Viesgo, investments in **renewable electricity generation assets in Spain** totaled €119 million, highlighting in 2019 two wind projects (€87 million) of 335 MW in Aragon and 225 MW in Palencia, and two other solar projects of 204 MW in Cadiz and 127 MW in Ciudad Real.

Accordingly, **the refinery maintenance plan was completed** to minimize the production of fuel oil and maximize the production of products with lower carbon intensity and higher value, as well as to adapt to the new international specifications for low sulfur marine fuel.

In the commercial business, the Company has strengthened its position as a **customer-centered** multi-energy supplier, with a **differentiated service** and a clear commitment to **digitalization**. Repsol Electricity and Gas exceeds 1 million customers

⁵ For a complete description of the main events during the period, see section 1 *2019 Highlights* of the year at the Consolidated Management Report, available at www.repsol.com.

⁶ For additional information regarding the new strategic approach and the risks associated with climate change, see sections 2.4 *Strategy* and 6.1 *Climate change*, respectively, at the Consolidated Management Report.

and the Waylet payment application has exceeded 1.4 million users, who can now pay in the more than 3,500 service stations of the Repsol network and more than 4,600 related retailers.

- **Shareholder remuneration.** Through the "*Repsol Flexible Dividend*" program, Repsol offered shareholders a return in 2019 equal to €0.916/share, under the scrip dividend formula. In addition, a capital reduction was carried out through the redemption of treasury shares, aimed at offsetting the dilutive effect of the bonus share issue formalized in 2019 within the framework of the "*Repsol Flexible Dividend*" program.

In addition, the Board of Directors has agreed to submit a proposal for approval at the next Annual General Meeting to reduce share capital by an amount equal to 5% of share capital at December 31, 2018, independently of any proposal that may be submitted at the Annual General Meeting in the context of the "*Repsol Flexible Dividend*" program (see Note 7).

(3) ABOUT THESE FINANCIAL STATEMENTS

3.1) General 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, 2019, and other provisions of the applicable regulatory framework.

Repsol prepares its consolidated financial statements including the investments in all its subsidiaries, joint arrangements and associates, 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.

3.2) Comparative information

The most notable new developments in the accounting standards applied by the Group as of January 1, 2019⁷ due to their impact on these financial statements, include IFRS 16 *Leases* and IFRIC 23 *Uncertainty over income tax treatments*, as described below.

3.2.1) Application of new accounting standards

IFRS 16 Leases⁸

Application

IFRS 16 Leases introduces changes for the lessee who, at the inception date of a lease, is required to recognize in the balance sheet a liability for lease payments and an asset for the right to use the “underlying asset” over the lease term. In addition, an expense for the financial restatement of the lease liability must be recognized separately from the expense for the amortization of the right-of-use asset.

IFRS 16 has been applied for the first time in the 2019 financial statements.

The first-time application was carried out through a simplified retrospective approach on January 1, 2019, without restating the comparative information in relation to 2018. The impacts of its first-time application have been recognized directly in equity.

The Group has decided to make use of the options envisaged in the standard for lessees, which permits lease liabilities and right-of-use assets corresponding to lease agreements for assets of little value (amount in euros equivalent to USD 5,000) and short-term leases (leases for a period equal to or less than one year) not to be recognized in the balance sheet.

In agreements that contain lease and other components, mainly services, the Repsol Group has separated such components, recognizing solely the lease component pursuant to IFRS 16 and the other component as a performance contract, with the expense recognized on an accrual basis under the terms of the agreement.

A specific review of the inventory of lease agreements classified as operating leases according to the previous standard was carried out, as well as certain service contracts that could be classified as leases according to the new standard. No significant difference has arisen as a result of this analysis.

The Group has calculated the lease liability as the present value of the outstanding payments of the lease agreements in force at the date of first-time application and retrospectively calculated the value of the right-of-use asset, only for those agreements with the greatest quantitative significance, having considered the value of the lease liability as the initial value of the corresponding right-of-use asset for the remaining agreements.

⁷ In addition, the following standards have been applied as of January 1, 2019 without significant impacts for the Group: i) Amendments to IFRS 9 *Prepayment features with negative compensation*; ii) Amendments to IAS 28 *Long-term interests in associates and joint ventures*; iii) Amendments to IAS 19 *Employee benefits: plan amendment, curtailment or settlement*; and vi) Annual improvements to IFRSs, 2015-2017 Cycle.

⁸ Replaces IAS 17 *Leases*, IFRIC 14 *Determination of whether an arrangement contains a lease*, SIC 15 *Operating leases - Incentives*, and SIC 27 *Evaluation of the substance of the transactions with the legal form of a lease*.

The lease term of the agreements was determined as the non-cancellable period of a lease taking into consideration the option to extend or terminate the lease when there is reasonably high probability that this option will be exercised.

With regard to the discount rate used for these calculations, the Group generally used the incremental borrowing rate of the lessee at January 1, 2019, which was determined taking into consideration, among other factors, the term of the agreement, the economic climate of the country and the currency in which it was denominated and, when relevant, the characteristics of the underlying asset. The weighted average discount rate applied to operating lease liabilities recognized at the date on which IFRS 16 was initially applied was 3%.

Lastly, in relation to the recognition of leases in joint operations, which is very common in hydrocarbon exploration and production activities, the Group performed a specific analysis of all its contractual obligations and recognized all those arrangements for which it has a contractual obligation with the lessor in the balance sheet, i.e. all those arrangements that: (i) it has signed in full as operating partner on its own behalf; (ii) it has jointly signed with the other partners in a joint arrangement, in line with its percentage of ownership in the arrangement; or (iii) have been signed by the operating partner on behalf of the consortium (jointly and severally) or the other 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 head lease arrangement, and the control by the Group of the right to use the asset identified.

Financial impact of first-time application

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

	12/31/2018	Adjustment IFRS 16	01/01/2019
Assets for rights of use of the assets (Note 13)	754	1,153	1,907
Investments accounted for using the equity method	7,194	(50)	7,144
Accounts receivable	—	30	30
Current and non-current financial liabilities ⁽¹⁾	(1,624)	(1,351)	(2,975)
Non-current provisions and other ⁽²⁾	(4,738)	122	(4,616)
Effect on net assets and liabilities		(96)	
Deferred tax assets and liabilities		13	
Effect on equity		(83)	

⁽¹⁾ Includes the finance lease liabilities in accordance with the previous accounting standard, recognized in 2018 under "Other non-current liabilities" and "Trade and other payables" in the balance sheet. In 2019, the Group, as a result of the application of IFRS 16, decided to present its lease payables under "Current financial liabilities" and "Non-current financial liabilities" in the balance sheet.

⁽²⁾ The onerous charge associated with certain operating lease agreements was canceled against the corresponding asset.

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 December 31, 2018	1,599
Financial discount on future payments	(225)
Short-term and low-value leases	(23)
Operating lease liability recognized as at January 1, 2019	1,351

Other impacts of IFRS 16

The new accounting treatment of leases did not have a significant impact on the Group's net income in 2019. However, other financial aggregates have been affected and, for example, operating income has increased (lower operating expenses) and the financial result has decreased (higher financial expenses). The cash generated has remained unaltered by the application of IFRS 16, but its classification has changed since cash flow from operating activities has increased and cash flow from financing activities has decreased, to the same extent.

In relation to the Alternative Performance Measures used by the Group, the application of IFRS 16 has had several effects: i) EBITDA ("Earnings Before Interest, Tax, Depreciation and Amortization") has increased as it now includes the expense corresponding to the leases as amortization and financial expenses; ii) cash flows from operations have also increased, since

from now the cash outflows for leases are included in cash flows from financing activities; iii) as of January 1, 2019, the calculation of net debt, capital employed and the ROACE ("*Return on average capital employed*") now includes lease liabilities (those recognized in accordance with the previous accounting standard and the new lease liabilities recognized due to the application of IFRS 16); and, to make it easier to monitor the current Strategic Plan and the historic performance of return and debt, the Group also presents these magnitudes excluding the effect of the lease liabilities (criteria followed by the Group up until December 31, 2018).

With regard to testing the assets for impairment, the recognition of right-of-use assets made it necessary to assign their carrying amount to different cash-generating units and to exclude the corresponding fixed lease payments from the calculations of value in use, in order to ensure consistency in assessing the recoverability of the assets and calculating their recoverable amount.

IFRIC 23 Uncertainty over income tax

IFRIC 23⁹ clarifies how to apply the recognition and measurement requirements of IAS 12 *Income taxes* in those circumstances where there is uncertainty.

The application of this interpretation has led the Group to reevaluate certain tax liabilities for an additional amount of €79 million. This change is a result of having determined that various uncertain tax treatments, in accordance with the information available and the expectation of resolution of the situation: (i) must be considered jointly instead of individually, and (ii) it is more appropriate to measure the amount of the liability to be recognized in accordance with the expected value instead of the most likely value. This impact was recognized retrospectively, and cumulative as of January 1, 2019, under "*Equity - Retained earnings and other reserves*" in the balance sheet (see Note 7).

In relation to their presentation, the uncertain tax treatments that result in the recognition of income tax liabilities in accordance with the criteria of IFRIC 23 are recognized under "*Deferred tax liabilities and other*" (previously recognized under "*Non-current provisions*" and "*Current provisions*") in the balance sheet (see Note 23). The balances relating to 2018 were changed for comparison purposes.

3.2.2) Restatement of earnings per share

In accordance with accounting standards, earnings per share at December 31, 2018, have been restated with respect to the information published in the consolidated financial statements for 2018, as the average number of outstanding shares considered in the calculation should take account of the new number of shares issued after the capital increase carried out as part of the "*Repsol Flexible Dividend*" shareholder remuneration program described in Note 7.

3.3) 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 first application
Adopted by the European Union	
Amendments to IFRS 9, IAS 39 and IFRS 7: <i>Interest rate benchmark reform</i> ⁽¹⁾	January 1, 2020
Amendments to IAS 1 and IAS 8: <i>Definition of material</i> ⁽²⁾	January 1, 2020
Amendments to <i>References to the Conceptual Framework for Financial Reporting</i> ⁽²⁾	January 1, 2020
Pending adoption by the European Union	
Amendments to IFRS 3 <i>Definition of a business</i> ⁽²⁾	January 1, 2020
IFRS 17 <i>Insurance contracts</i> ⁽³⁾	January 1, 2021
Amendments to IAS 1 <i>Classification of liabilities as current and non-current</i>	January 1, 2022
Amendments to IFRS 10 and IAS 28 <i>Sale or contribution of assets between an investor and its associate or joint venture</i> ⁽⁴⁾	Undefined

⁽¹⁾ The Group has adopted these changes early so as to avoid the possible discontinuation of certain interest rate cash flow hedging relationships, which are detailed in Note 10. There are no additional significant impacts from their application.

⁽²⁾ The Group has not identified any significant impact from the initial application of these regulatory changes, given their nature and prospective application, beyond any changes that may be made, where appropriate, to the information disclosed following the change in the concept of materiality.

⁽³⁾ The Group is assessing the impact that the application of this standard could have on its consolidated financial statements, but no significant effects have been identified to date.

⁽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.

⁹ International Financial Reporting Interpretations Committee No. 23

3.4) Accounting policies

3.4.1) General accounting policies

The Financial Statements have been prepared in accordance with EU-IFRSs at December 31, 2019 and other provisions of the applicable regulatory framework. This section includes clarifications or specificities that improve their understanding.

Repsol prepares its consolidated financial statements including the investments in all its subsidiaries, joint arrangements and associates¹⁰.

The items included in these consolidated Financial Statements relating to the Group companies are measured using their functional currency, which is the currency of 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), and iii) any exchange differences arising as a result of the foregoing are recognized under "*Equity - Translation differences*".

Transactions in currencies other than the functional currency of a Group company 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 recognized under "*Financial result - Exchange gains/(losses)*".

The exchange rates against the euro of the main currencies used by the Group companies at December 31, 2019 and 2018 were as follows:

	December 31, 2019		December 31, 2018	
	Closing rate	Accumulated average rate	Closing rate	Accumulated average rate
US dollar	1.12	1.12	1.15	1.18

3.4.2) Specific accounting policies

In order to facilitate the reading and understanding of the disclosures in the notes to these financial statements, those accounting policies that are considered relevant or represent an accounting option for the Group are described: principles of consolidation (Note 3), calculation of the recoverable amount of the assets (Note 3), business combinations (Note 5), accounting hedges (Note 10), oil product exchange and revenue recognition (Note 20) and CO₂ emission rights (Note 31).

Accounting policies relating to hydrocarbon exploration and production activities

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:

The costs of acquiring **exploration permits and the geological and geophysical (G&G) costs** incurred during the exploration phase are capitalized under "*Exploration permits*" in intangible assets. They are not amortized during the exploration and evaluation phase and they are tested for impairment at least once a year and, in any case, when there is an indication that they may have become impaired, in accordance with the indicators of IFRS 6 *Exploration for and evaluation of mineral resources*. Once the exploration and evaluation phase is over, if no reserves are found, the amounts capitalized are recognized as an expense in the income statement.

¹⁰ Classified based on the control exercised over them:

- i) subsidiaries: those over which Repsol exercises direct or indirect control and are fully consolidated;
- ii) joint ventures: those in which strategic operational and financial decisions require the unanimous consent of the parties sharing control (joint control) and are classified as i) joint operations arranged through a Joint Operating Agreement (JOA) or similar vehicle and whose interests are held by the Group through its ownership interest in subsidiaries that are fully consolidated, or ii) joint ventures (JVs) that are accounted for using the equity method.

In the Oil & Gas industry, hydrocarbon exploration and production activities are usually carried out through collaboration or association with companies that qualify as joint agreements that are set up through JOAs that are included in the financial statements of the partners on the basis of the interest in the assets, liabilities, income and expenses arising from the agreement or as joint ventures that are included in the financial statements of the partners using the equity method; and

- iii) associates: interests over which it has significant influence, which do not require consent from Repsol in making strategic operating and financial decisions but over which it has the power to participate, and that are accounted for using the equity method.

The costs of acquiring **new interests, including those acquired in business combinations, in areas with proved and unproved reserves and resources** (including licenses, resource-related costs, legal costs, etc.) are capitalized as incurred under "*Investments in areas with reserves*" in property, plant and equipment.

Exploratory drilling costs are recognized as assets under "*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 recognized 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:

- a. If additional investments are required prior to the start of production, they continue to be capitalized as long as the following conditions are met: (i) the amount of reserves found justifies the completion of a productive well if the required investment is made, 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 are treated as impaired, and are expensed in the income statement.
- b. 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 are recognized as an expense in the income statement.
- c. The costs incurred in exploratory drilling work that have yielded a commercially exploitable reserve are reclassified to "*Investments in areas with reserves*" under property, plant and equipment at their carrying amount.

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

Development expenditure incurred in lifting proved reserves and in processing and storing oil and gas are recognized as assets under "*Investments in areas with reserves*" in property, plant and equipment.

Future field abandonment and dismantling costs 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 line item for dismantling provisions (see Note 15).

The investments capitalized as described above are **depreciated** according to the unit of production method and in accordance with the following criteria:

- a. 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 those reserves.
- b. 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.
- c. Investments made in fields that are in the exploration or development 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.

Accounting policies relating to Downstream and Corporate:

Non-current assets are recognized at acquisition cost and depreciated on a straight-line basis over their estimated useful lives once they are in optimum conditions for use. The estimated useful lives of the main assets of *Downstream* and Corporate are detailed below:

Estimated useful life	Years
Buildings and other constructions	20-50
Machinery and plant:	
Machinery, plant and tools	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

In relation to the connection rights of service stations, their ownership is conditional on the life of the contracts that give rise to them, which are amortized on a straight-line basis over the term of each contract (between 25 and 30 years).

3.5) Accounting estimates and judgements

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 significantly depending on the estimates made.

The accounting policies and areas that require the highest degree of judgement and estimates in the preparation of these financial statements are: (i) crude oil and natural gas reserves; (ii) calculation of the recoverable amount of assets (see Notes 12,13,14 and 21); (iii) business combinations (see Note 5), (iv) provisions for litigation, dismantling and other contingencies (see Note 15); (v) income tax, tax credits and deferred tax assets (see Note 23); (vi) market value of derivative financial instruments (see Note 10); (vii) calculation of expected loss on financial instruments; and (viii) assessment of investments in Venezuela (see Notes 14 and 21).

Crude oil and gas reserves

The estimate of oil and gas reserves¹¹ and resources 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 "*Recoverable amount of assets*" in this Note). Changes in volumes of reserves and resources could have a significant impact on the Group's results.

To estimate oil and gas reserves and 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).

Recoverable amount of assets

Impairment test

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*").

¹¹ The classification of reserves can be consulted below:

Proved reserves: 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.

Probable reserves: 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.

Developed reserves: Proved or probable quantities expected to be recovered from existing wells and facilities.

Contingent resources: 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. Independent engineering firms periodically audit registered volumes (at least 95% of the reserves are audited externally in a three-year cycle). For information on the Group's reserves, see "*Information on hydrocarbon exploration and production activities*" available at www.repsol.com.

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

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

Cash-generating units

For the “*impairment test*”, assets are grouped into cash-generating units (CGUs) if, when individually considered, they 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 judgements and the determination, among other criteria, of the business units and geographical areas in which the Group 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 correspond to the business activities (mainly Refining, Chemicals, Commercial businesses -Mobility, LPG, Lubricants, Asphalt and Specialisms-, Wholesaler and Gas Trading, and electricity generation and sale) and geographical areas. In 2019, there were no significant changes to the composition of the UGEs.

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, up to the limit of the business segment.

Calculating the recoverable amount

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 income, expenses and investments of the CGUs using sector forecasts, prior results and the outlook for the performance of the business and development of the market:

- Macroeconomic variables are those used in the preparation of budgets and strategic plans that define a macroeconomic framework for the countries in which the Group operates and that consider variables such as inflation, GDP, exchange rate, etc. 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 oil and natural gas price trend estimates used for the impairment test are prepared on the basis of available macroeconomic, financial and market information and the forecasts provided by analysts. Key market variables and their foreseeable evolution are analyzed for this calculation, 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 price trends, forecast reports produced by a selection of investment banks, macro consultants and international benchmark agencies are taken into account.¹²
 - ii. The sources that present a sufficiently detailed analysis of long-term forecasts are the benchmark agencies

¹² The macro consultants used are Platts Analytics, IHS and Wood Mackenzie. The reference agencies are the International Energy Agency (IEA) and the US Energy Information Administration (EIA).

(International Energy Agency (IEA) and Energy Information Administration (EIA) in US)

Note 21.1 specifies the assumptions regarding future prices used to perform the annual impairment test, which have led to valuation adjustments to significant assets.

Discount rates

Future cash flows are discounted to their present value at a specific rate for each CGU, determined based on the currency of its cash flows and the risks associated with them. The discount rate used by Repsol is the weighted average cost of capital employed after tax for each country and business. This rate seeks to reflect current market assessments with regard to the time value of money and the specific risks of the asset. Therefore, the discount rate used takes into account the risk-free rate, the country risk, the currency in which the cash flows are generated and the market, credit and business risk¹³. For the sake of consistency, estimated future cash flows do not reflect the risks that have already been considered in the discount rate or vice versa. The discount rate used considers the average leverage of the sector over the last five years, as a reasonable approximation of the optimal capital structure, using comparable oil companies as a reference. Note 21.1 shows the discount rates used in the 2019 impairment test.

Hydrocarbon exploration and production activities

Valuations of Exploration and 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 permits, agreements or contracts. The general principles applied to determine the variables that most affect the cash flows of this business are described below:

- Hydrocarbon sale 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, resources 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 (see previous heading "*Crude oil and gas reserves*").
- Operating expenses and investments. These are calculated for the first year on the basis of the Group's annual budget and thereafter in accordance with the asset development programs, applying an escalation factor for operating expenses and investments (basically of 1-1.5%).

Downstream assets

In the *Downstream* segment, the cash flows of the various businesses are estimated on the basis of the outlook for their key variables (demand for oil products, unit contribution margins, fixed costs and investment flows required to maintain the level of activity), in accordance with the expectations reflected in the annual budget and in the strategic plans for each business, in line with the new scenario of energy transition and decarbonization of the economy. However, cash inflows and outflows corresponding to future restructuring exercises or investments 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 and Mobility businesses in Spain, long-term projections were made up to 2040 (in line with the time frame used by the IEA in its estimated demand for oil products).
- The cash flows for the Wholesale and Trading Gas businesses were estimated in accordance with the following key assumptions:

¹³ The main components of the discount rate are detailed as follows:

- The risk-free interest rate for cash flows in US dollars relate to that of the US 10-year sovereign bond and for cash flows in euros to that of the German 10-year sovereign bond;
- With regard to country risk, the following are used: (i) market quotations, such as the spread of sovereign bonds in euros or US dollars over debt issued by Germany (euros) or the US (USD), respectively, (ii) country risk estimates contained in the EMBI (Emerging Markets Bond Index) published by JP Morgan, and (iii) country risk estimates published by three external providers - Country Risk Rating (IHS Global Insight), International Country Risk Guide (PRS Group) and Business Monitor (Fitch Group) - all adjusted for business-specific risks;
- A different credit risk premium is used depending on the currency (EUR and USD); and
- Business risk premiums are specifically calculated on the basis of 5-year historical series from comparable companies, for the Upstream, Refining & Marketing, Chemical, LPG and Gas & Power businesses.

Compared to 2018, there were no significant changes in country risk or business risk in 2019.

- i. Gas and LNG prices. The international benchmark prices used are: HH, Algonquin, JKM (Japan Korea Marker) and NBP (National Balancing Point), adjusted in accordance with references in the corresponding market if the prices do not reflect market circumstances.
- ii. Gas and LNG sales 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 in accordance 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.

Associates and joint ventures

The recoverability of the Group's investments in associates or joint ventures is assessed by verifying the impairment losses for the entire carrying amount of the investment, including any goodwill that may be implicit in the investment, by comparing its recoverable amount with its carrying amount (see Note 13). The recoverable amount of an investment in an associate or joint venture is assessed individually, unless the associate or joint venture does not generate cash inflows from continuing use that are largely independent of those from the Group's other assets or cash-generating unit.

Sensitivities

In view of the foregoing, changes in the key assumptions used in calculating the recoverable amount of the assets may have a significant effect on the Group's results (see Note 21.2).

Business combinations

The Group's business combinations are accounted for using the acquisition method (see Note 5) 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 these fair values. Note 5 specifies the main business combinations for the year.

Provisions for litigation, dismantling and other contingencies

The final cost of settling complaints, claims and litigation may vary from the estimates previously made due to differences in the identification of dates, interpretation of rules, technical opinions and assessments of the amount of damages and liabilities.

Repsol uses judgements and estimates to recognize provisions for the cost of dismantling its hydrocarbon 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 used as a result 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 4.0%

Additionally, Repsol makes judgements and estimates in recognizing costs and establishing provisions for environmental clean-up and remediation costs, which are based on current information regarding costs and expected plans for remediation based on applicable laws and regulations, the identification and assessment of the effects on the environment, as well as sanitation technologies.

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 15).

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. Collections and payments may be materially different from these estimates as a result of changes in the expected performance of the Company's businesses or in tax regulations or their interpretation, as well as unforeseen future transactions that impact the Company's tax balances (see Note 23).

Market value of derivative financial instruments

The valuation techniques used for the derivative financial instruments classified in levels 2 and 3¹⁴ of the hierarchy are based, in accordance with accounting standards, on an income approach, which consists of discounting known or estimated future flows using discount curves constructed on the basis of reference market interest rates (in the case of derivatives, they are estimated using implied market forward curves), including adjustments for credit risk based on the life of the instruments. In the case of options, price-fixing models based on Black & Scholes formulas are used.

The main variables for the valuation of financial instruments vary depending on the type of instrument valued, but are mainly the following: exchange rates (spot and forward), interest rate curves, counterparty risk curves, equity prices and volatilities of all the aforementioned factors. In all cases, market data are obtained from recognized information agencies or correspond to quotations from official bodies.

Calculation of expected loss on financial instruments

Repsol makes judgements and estimates for the recognition of impairment of its financial instruments. The valuation models used by the Group are widely accepted in the markets. However, the complexity of their calculation lies in determining variables such as the probability of default, exposure and loss given default (see Note 11).

Any change in the variables or circumstances related to these provisions could have a significant effect on the provisions.

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 the country generates increased 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 and trade receivables, it is necessary to use certain hypotheses and assumptions (such as asset development plans, compliance with the agreements signed and the changes in the environment) which involves judgements and estimates that may vary from those initially made (see Notes 11, 14 and 21.3).

¹⁴ Financial assets recognized at fair value are classified, in accordance with their calculation methodology, into three levels:

- Level 1: Valuations based on a quoted price in an active market for an identical instrument and relate 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.

SEGMENT REPORTING

(4) BUSINESS SEGMENT REPORTING¹⁵

4.1) Definition of 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 Group's business segments is based on 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 Committee) analyzes the main operating and financial aggregates in order to make decisions about resource allocation and to assess how the Company is performing.

At December 31, 2019 and 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, (ii) petrochemistry, (iii) trading and transportation of crude oil and oil products, (iv) sale of oil, chemical and LPG products, (v) sale, transport and regasification of natural gas and liquefied natural gas (LNG), and (vi) generation of electricity and sale of electricity and gas in Spain.

Lastly, *Corporate 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.

4.2) Presentation model of the results by segments

In presenting the results and other financial aggregates of its operating segments, Repsol includes the results of its joint ventures¹⁶, in accordance with the Group's interest, considering its operational and economic metrics in the same manner and with the same level of 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, uses a measure of segment profit known as 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*"). The financial result is assigned to the adjusted net income of *Corporate and others*.

The Current Cost of Supply (CCS), commonly used in this industry to present the results of *Downstream* businesses that 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 the monitoring of 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 procurement and production costs incurred during that same period. Therefore, 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 obtained 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, restructuring charges, asset impairment losses, and provisions for contingencies and charges and other relevant income/expenses that do not form part of the ordinary management of the businesses. These results are presented separately, net of the tax effect and non-controlling interests.

¹⁵ 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 the EU-IFRS financial statements in Appendix II.

¹⁶ In the segment reporting model, joint ventures are consolidated proportionally in accordance with the Group's ownership interest. See Note 14 and Appendix I, where the Group's main joint ventures are identified.

4.3) Financial information by business segment

Results

SEGMENTS	€ Million	
	2019	2018
Upstream	1,050	1,325
Downstream	1,456	1,583
Corporate and other	(464)	(556)
ADJUSTED NET INCOME	2,042	2,352
Inventory effect	(35)	(68)
Special items	(5,823)	57
NET INCOME	(3,816)	2,341

The main financial information by business segment is included in this note. Additional information can be found in the Management Report attached to these financial statements, which is published together with these financial statements, and is easily accessible at www.repsol.com.

Cash flows and capital employed

€ Million	Cash flow from operations		Free cash flow		Capital employed	
	2019	2018	2019	2018	2019	2018 ⁽¹⁾
Upstream	3,140	3,341	765	1,453	17,205	21,515
Downstream	2,777	1,854	1,419	105	14,078	11,338
Corporate	(80)	233	(124)	3,498	2,009	1,500
TOTAL	5,837	5,428	2,060	5,056	33,292	34,353

⁽¹⁾ Capital employed without considering the impact of IFRS 16 Leases.

Disclosures by geographical area

The breakdown, by geographical area and segment, of the main aggregates at December 31, 2019 and 2018, for which geographic segmentation is material, is provided below:

	€ Million					
	Results from operations		Adjusted net income		Operating investments ⁽¹⁾	
	2019	2018	2019	2018	2019	2018
Upstream	1,969	2,514	1,050	1,325	2,429	1,973
Europe, Africa and Brazil	1,326	1,614	653	768	526	442
Latin America-Caribbean	522	726	387	501	341	314
North America	96	273	76	212	1,025	659
Asia and Russia	371	465	182	264	164	166
Exploration and other	(346)	(564)	(248)	(420)	373	392
Downstream	1,928	2,143	1,456	1,583	1,376	1,831
Europe	1,822	2,039	1,398	1,500	1,226	1,578
Rest of the world	106	104	58	83	150	253
Corporate and other	(236)	(261)	(464)	(556)	56	70
TOTAL	3,661	4,396	2,042	2,352	3,861	3,874

⁽¹⁾ Includes investments accrued during the period.

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

MAIN ACQUISITIONS AND DIVESTMENTS

(5) 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, recognizing the identifiable assets acquired and liabilities assumed at their fair value at the acquisition date, provided that this 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 fair 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.

When a business combination is achieved in stages, the acquisition-date carrying amount of the previously held equity interest in the acquiree is remeasured at its acquisition-date fair value, with any resulting gain or loss recognized in profit or loss.

5.1) Acquisition of businesses from Viesgo

On November 2, 2018, Viesgo's unregulated low-emission electricity generation business and its regulated and unregulated gas and electricity retailers were acquired for €733 million.

The accounting at December 31, 2019 for this business combination was definitive, once the 12-month period from the acquisition ended, as provided for in IFRS 3 *Business Combinations*. During this period, the measurement of the assets and liabilities acquired was reviewed, without any significant changes in the amount of goodwill initially recognized:

€ Million	Carrying amount of Repsol	Carrying amount of the acquired company
Intangible assets	118	60
Property, plant and equipment	361	391
Deferred tax assets	257	257
Other non-current assets	20	20
Other current assets	138	138
Cash and cash equivalents	26	26
Total Assets	920	892
Current and non-current provisions	(66)	(68)
Deferred tax liabilities	(12)	(5)
Other current liabilities	(158)	(158)
Total Liabilities	(236)	(231)
NET ASSETS ACQUIRED	684	661
COST OF ACQUISITION	733	
GOODWILL	49	

5.2) Acquisition of 63% of the Eagle Ford block

In November 2019, the 63% interest of its partner, Equinor, in the assets of Eagle Ford was acquired for \$352 million. This unconventional asset, located in southern Texas (United States), produces crude oil and gas with associated liquids. With this transaction, Repsol now controls 100% of the asset, operating the asset and incorporating approximately 280 net square kilometers of the mining concession, and 34,000 barrels of oil equivalent daily.

The purchase price was provisionally allocated to the assets acquired (mainly property, plant and equipment) and the liabilities assumed based on their estimated fair values at the date of acquisition¹⁷. No significant differences were identified between the acquisition price and the estimated fair value and, therefore, no goodwill was recognized.

5.3) Sale of the interest in Naturgy Energy Group

On May 18, 2018, Repsol, S.A. completed the sale of its interest in Naturgy Energy Group, S.A. (200,858,658 shares representing 20.072% of the share capital) for a total price of €3,816 million, equal to €19 per share, all in accordance with the terms established in the sale and 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 tax, recognized under “*Net income from discontinued operations*” in the income statement (see Note 24), which also includes the profit generated by this interest up until February 22, 2018, amounting to €68 million.

¹⁷ The fair value of the assets (property, plant and equipment) was calculated using an income approach, i.e. discounted cash flows by considering unobservable market variables consistent with those described in Note 21.

CAPITAL STRUCTURE, DEBT AND FINANCIAL RESOURCES

(6) FINANCIAL STRUCTURE

Repsol, as an essential part of its strategy, has committed to a policy of financial prudence. The target financial structure 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 debt¹⁸ (including, where appropriate, lease liabilities) and capital employed¹⁹. Both metrics are calculated, for these purposes, in accordance with the Group's reporting model described in Note 4 and the reconciliation of these figures to those established in EU-IFRSs and used for the preparation of these consolidated financial statements can be found in the Management Report (www.repsol.com). The calculations of these ratios at December 31, 2019 and 2018, are as follows:

€ Million	With leases	Without leases	
	2019	2019	2018
Equity	25,209	25,336	30,914
Non-current financial liabilities	10,929	8,220	9,392
Current financial liabilities	6,538	6,114	4,289
Non-current financial assets ⁽¹⁾	(974)	(953)	(974)
Other current financial assets	(2,800)	(2,792)	(1,711)
Cash and cash equivalents	(2,979)	(2,979)	(4,786)
Financial instruments from interest rate derivatives and others (see Note 10)	(48)	(48)	(48)
Net debt from joint ventures	(2,583)	(3,342)	(2,723)
Net financial debt ⁽²⁾	8,083	4,220	3,439
Capital employed ⁽²⁾	33,292	29,556	34,353
Leverage ratio	24.3%	14.3%	10.0%

⁽¹⁾ Corresponds to "Non-current financial assets" in the balance sheet without including equity instruments.

⁽²⁾ Alternative Performance Measures. For further information, see Appendix I of the consolidated Management Report.

(7) EQUITY

	€ Million	
	2019	2018
Shareholders' equity:	24,335	30,468
Share capital	1,566	1,559
Share premium and Reserves:	26,731	25,894
Share premium	6,278	6,428
Legal reserve ⁽¹⁾	312	299
Retained earnings and other reserves ⁽²⁾	20,248	19,342
Dividends and remuneration on account	(107)	(175)
Treasury shares and own equity investments	(1,170)	(350)
Net income for the period attributable to the parent	(3,816)	2,341
Other equity instruments	1,024	1,024
Other cumulative comprehensive income	593	160
Non-controlling interests	281	286
TOTAL EQUITY	25,209	30,914

⁽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 the impact of first-time application of IFRS 16 and IFRIC 23 in 2019 (see Note 3.2.1) and the impact of first-time application of IFRS 9 and IFRS 15 in 2018.

7.1) Share capital

The subscribed share capital at December 31, 2019 and 2018 registered with the Companies Register was represented by 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. The Company participates in an ADS (American Depositary Share) program in the United States, whose shares are traded on the OTCQX market.

¹⁸ The formula considers net and not gross debt to factor in the effect of financial investments.

¹⁹ Corresponds to the sum of net financial debt and equity.

Following the bonus share issue concluded in January 2020 (see Note 7.3) the share capital of Repsol, S.A. is currently represented by 1,566,043,878 shares, each with a par value of €1. Under accounting regulations, because the above-mentioned capital increase was registered with the Companies Register before the Board of Directors authorized the financial statements for issue, this bonus share issue has been recognized in the Group's financial statements at December 31, 2019.²⁰

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	% of voting rights attributed to shares		% of voting rights through financial instruments	% of total voting rights
	Direct	Indirect		
Sacyr, S.A. ⁽¹⁾	—	7.835	—	7.835
BlackRock, Inc. ⁽²⁾	—	4.762	0.236	4.998
Norges Bank	2.905	—	0.165	3.070

⁽¹⁾ Sacyr, S.A. holds its interest through Sacyr Investments II, S.A., Sacyr Investments S.A. and Sacyr Securities, S.A.

⁽²⁾ BlackRock, Inc. holds its interest through a number of controlled entities. The information relating to BlackRock, Inc. is based on the statement submitted by this company to the CNMV on December 10, 2019, indicating that share capital amounted to 1,527,396,053 shares.

At December 31, 2019 the following Group companies' shares were publicly listed:

Company	Traded	Listed	Stock exchanges ⁽¹⁾	Closing	Quarter average	Currency
Repsol, S.A.	1,527,396,053	100%	Spanish stock exchanges (Madrid, Barcelona, Bilbao, Valencia)	13.93	14.51	Euros
			OTCQX	15.68	15.99	Dollars
Refinería La Pampilla, S.A.	8,319,175,713	100%	Lima stock exchange	0.123	0.101	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.

7.2) Treasury shares and own equity investments

The main transactions undertaken by the Repsol Group involving treasury shares²¹ were as follows:

€ Million	2019			2018		
	No. of shares	Amount	% capital	No. of shares	Amount	% capital
Opening balance	24,157,554	350	1.55%	3,028,924	45	0.19%
Market purchases ⁽¹⁾	176,384,235	2,561	11.26%	149,753,457	2,343	9.61%
Market sales ⁽¹⁾	(48,948,699)	(717)	3.13%	(60,081,841)	(913)	3.85%
Capital redemption ⁽²⁾	(71,394,987)	(1,024)	4.56%	(68,777,683)	(1,125)	4.41%
Repsol Flexible Dividend ⁽³⁾	570,802	—	0.04%	234,697	—	—%
Balance at year end⁽⁴⁾	80,768,905	1,170	5.16%	24,157,554	350	1.55%

⁽¹⁾ In 2019 "Market purchases" included purchases made under the Share Repurchase Program for their redemption (see next section), which began on August 30 and ended on November 5, through which 70,368,868 shares have been acquired. Also in 2019 and 2018 "Market purchases" and "Market sales" included the shares acquired and delivered within the framework of the Share Acquisition Plan and Share Purchase Plans for the beneficiaries of the multi-year variable remuneration programs (696,565 shares were delivered in 2019 in accordance with the provisions of each of the plans (see Note 29.4) and other transactions within the framework of the discretionary treasury share transactions described in the Repsol Group's Internal Code of Conduct in the securities market area.

⁽²⁾ Includes 1,026,119 treasury shares acquired before March 27, 2019 (date of the call notice for the 2019 Annual General Meeting).

⁽³⁾ New shares received in the share capital increases carried out within the framework of the "Repsol Flexible Dividend" program corresponding to treasury shares.

⁽⁴⁾ At December 31, 2019, includes derivatives arranged by Repsol, S.A. with financial institutions for a notional total of 70 million shares.

²⁰ At December 31, 2019, a capital reduction was recognized under "Dividends and remuneration on account" in the balance sheet, as well as a payment obligation under "Trade and other payables", to the shareholders who had accepted the irrevocable commitment to purchase the bonus share issue closed in January 2020, corresponding to the sale of rights to Repsol for an amount of €107 million.

²¹ The shareholders at the Annual General Meeting held on March 28, 2014 and May 11, 2018, authorized the Board of Directors 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 already held by Repsol and any of its subsidiaries does not exceed 10% of the Company's share 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 shareholders at the Annual General Meeting of May 11, 2018) was granted for a period of five years from the date of the Annual General Meeting, and rendered void the authorization granted at the Annual General Meeting held on March 28, 2014, in relation to any part thereof that had not been used.

7.3) Dividends and shareholder remuneration

In 2019 and 2018, the Company's shareholders were also remunerated by means of the "Repsol Flexible Dividend" program, the figures of which are included in the following chart:

	No. of bonus issue rights sold to Repsol	Purchase commitment price (€/right)	Disbursement in cash (€ Million)	New shares issued	Remuneration in shares (€ Million)
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
December 2018/January 2019	425,542,521	0.411	175	31,481,529	453
June/July 2019 ⁽¹⁾	441,300,729	0.505	223	39,913,458	564

⁽¹⁾ To replace what would have been the final dividend for 2018.

In November 2019, a capital reduction was carried out through the redemption of €71 million treasury shares²² (representing approximately 4.56% of Repsol's share capital at December 31), approved by the shareholders at the Annual General Meeting on May 31, 2019, aimed at offsetting the dilutive effect of the capital increases through the bonus share issue formalized in 2019 within the framework of the "Repsol Flexible Dividend" program. The acquisition cost of the shares redeemed amounted to €1,024 million.

In addition, in January 2020, under the "Repsol Flexible Dividend" program, replacing what would have been the interim dividend from 2019, Repsol paid out €107 million in cash (€0.424 per right before withholdings) to those shareholders opting to sell their bonus share rights back to the Company, and delivered 38,647,825 shares, worth €541 million, to those opting to take their dividend in the form of new shares from the Parent.

At the date of authorization for issue of these consolidated Financial Statements, the Company's Board of Directors plans to propose at the next Annual General Meeting to continue the "Repsol Flexible Dividend" program, through a bonus share issue, on the dates on which the final dividend has traditionally been paid and the corresponding capital reduction through the redemption of treasury shares to offset the dilutive effect of these capital increases. The Board also agreed to submit for approval at the next Annual General Meeting a proposal to reduce capital by an amount equal to 5% of share capital at December 31, 2018, through the redemption of treasury shares. This last proposal for a capital reduction is independent of any proposal that may be submitted at the next Annual General Meeting in the context of shareholder remuneration through the "Repsol Flexible Dividend" program.

7.4) Other equity instruments

On March 25, 2015, Repsol International Finance, B.V. (hereinafter, "RIF") issued a perpetual subordinated bond guaranteed by Repsol, S.A., with a value of €1,000 million, with no defined maturity date, and 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 listed on the Luxembourg Stock Market, accruing a fixed annual coupon of 3.875% payable to the bondholders annually from the issuance date until March 25, 2021, and, thereafter, a fixed annual coupon equal to the 6-year swap rate applicable plus a spread.

The issuer can defer the coupon payments without triggering an event of default. Coupons so deferred will be cumulative and must be paid in certain cases described in the related terms and conditions of the issue (for further information, see the informational prospectus on the issue available at www.repsol.com).

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 liability²³. The financial expense, net of taxes, associated with the coupon on the subordinated bond has been recognized under "Retained earnings and other reserves" amounting to €29 million.

²² The capital reduction was carried out through the redemption of existing treasury shares as of the date of the Board of Directors meeting held on March 27, 2019 and the shares acquired through the share repurchase program completed on November 5, 2019.

²³ 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.

7.5) Non-controlling interests

The equity attributable to non-controlling interests at December 31, 2019 and 2018 relates basically to the following companies:

	€ Million	
	2019	2018
Petronor, S.A.	187	173
Refinería La Pampilla, S.A.	48	66
Repsol Comercial de Productos Petrolíferos, S.A.	33	32
Other companies	13	15
TOTAL	281	286

In 2019 Refinería La Pampilla, S.A. completed a capital increase amounting to \$201 million, of which 99.8389% was subscribed by the Group. As a result of this capital increase, Repsol's ownership interest in this company increased by 10% to 92.42%.

(8) FINANCIAL RESOURCES

8.1) Financial liabilities

The breakdown of financial liabilities included in the balance sheet headings can be found below:

	€ Million	
	2019	2018
Non-current financial liabilities:		
Non-current financial liabilities ⁽¹⁾	10,929	10,818
Non-current trade derivatives ⁽²⁾	11	18
Current financial liabilities:		
Current financial liabilities ⁽¹⁾	6,538	4,486
Current trade derivatives ⁽³⁾	350	250
TOTAL	17,828	15,572

⁽¹⁾ The change is mainly due to the application of IFRS 16 and to the commitments acquired to purchase treasury shares through derivative instruments described in the previous section, which have been partially offset by the cancellation of a bond at maturity and the reclassification between both headings of bonds maturing within a period of no more than 12 months.

⁽²⁾ Recognized under "Other non-current liabilities" on the balance sheet.

⁽³⁾ Recognized under "Trade and other payables" on the balance sheet.

The breakdown of these financial liabilities at December 31, 2019 and 2018, is provided below:

€ Million	December 31, 2019 and 2018							
	At fair value through profit or loss		At amortized cost		Total		Fair value	
	2019	2018	2019	2018	2019	2018	2019	2018
Bonds and obligations	—	—	4,199	5,243	4,199	5,243	4,551	5,493
Loans ⁽¹⁾	—	—	2,946	2,789	2,946	2,789	2,946	2,789
Lease liabilities	—	—	2,709	1,427	2,709	1,427	n/a	n/a
Bank borrowings	—	—	917	1,208	917	1,208	934	1,161
Derivatives ⁽²⁾	82	74	—	—	82	74	82	74
Other financial liabilities	—	—	88	95	88	95	88	96
Non-current	82	74	10,859	10,762	10,941	10,836	8,601	9,613
Bonds and obligations	—	—	3,721	2,855	3,721	2,855	3,748	2,862
Loans	—	—	970	660	970	660	970	660
Lease liabilities	—	—	424	197	424	197	n/a	n/a
Bank borrowings	—	—	1,328	704	1,328	704	1,328	704
Derivatives ⁽²⁾	397	300	—	—	397	300	397	300
Other financial liabilities	—	—	48	20	48	20	48	20
Current	397	300	6,491	4,436	6,888	4,736	6,491	4,546
TOTAL ^{(2) (3)}	479	374	17,350	15,198	17,829	15,572	15,092	14,159

⁽¹⁾ Includes mainly the loan granted by Repsol Sinopec Brasil, S.A. (see Note 8.2), the interest rate of which is renewed on an annual basis.

⁽²⁾ In 2019 it includes non-current and current hedging derivatives amounting to €73 million and €24 million, respectively (€56 million and €1 million in 2018, respectively). For further information, see Note 10.

⁽³⁾ In relation to liquidity risk, the distribution of funding by maturity at December 31, 2019 and 2018 is provided in Note 11.

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

€Million	2019		2018	
	Average volume	Average cost	Average volume	Average cost
Bonds and obligations	7,709	2.29%	8,598	2.59%
Other financial liabilities	2,521	2.46%	2,037	2.99%
Bank borrowings	3,684	3.28%	3,016	2.98%
TOTAL	13,914	2.58%	13,651	2.74%

8.2) Loans

This includes loans granted to Group companies that are not eliminated in the consolidation process. At December 31, 2019 and 2018, there were loans amounting to €3,915 million and €3,449 million, respectively, worth particular note is the loan granted by Repsol Sinopec Brasil S.A. via its subsidiary Repsol Sinopec Brasil B.V. (see Note 14) to its shareholders in proportion to their respective shareholdings, which at December 31, 2019 and 2018 showed a balance for the Group of €2,946 million and €2,788 million, respectively.

8.3) Lease liabilities

The breakdown of the liabilities recognized²⁴ for lease payables at December 31, 2019 is as follows:

	€ Million					Total
	2020	2021	2022	2023	2024 and sub. years ⁽¹⁾	
Lease payments	424	282	250	238	1,939	3,133

¹⁾ 12% of the portfolio is for lease agreements with a maturity of more than 15 years.

8.4) 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.

8.5) Bonds and obligations

Key issues, repurchases and redemptions carried out in 2019²⁵

- In February 2019 the bond issued by Repsol International Finance B.V. (RIF) in January 2012 as part of the European Medium Term Notes (EMTN) Program was repaid upon maturity for a nominal amount of €1,000 million, with a fixed annual coupon of 4.875%.
- In July 2019, a bond issued by RIF in July 2016 for a nominal amount of €100 million, with a fixed annual coupon of 0.125%, was redeemed at maturity as part of the EMTN Program.
- In August 2019, RIF issued bonds underwritten by Repsol, S.A., as part of the EMTN Program, for an amount of €750 million, with a fixed annual coupon of 0.25% and maturing in August 2027.

²⁴ The liabilities recognized do not include: (i) variable lease payments, which are not significant with respect to fixed payments. (ii) the options for expanding the current portfolio of contracts for 2020-2076, the estimated future undiscounted payments of which would amount to €199 million (this does not include the optional extensions of the contracts with Emera Brunswick Pipeline and Maritimes & North East Pipeline described in Note 13 due to the low probability of execution), the most significant being the five-year extension of the lease agreement for a ship amounting to €115 million (with two further similar extensions); and (iii) the signed leases that have not yet begun, with fixed future payments amounting to €20 million in 2020 and €90 million in 2021 and subsequent years.

²⁵ Main issues, repurchases or redemptions in 2018: (i) in January a bond issued by ROGCI (nominal amount of \$251 million and an annual fixed coupon of 3.75%) was redeemed early, (ii) in February a bond issued by RIF (nominal amount of €750 million and an annual fixed coupon of 4.375%) was canceled at maturity, (iii) in July a bond issued by RIF (nominal amount of €600 million and an annual coupon tied to 3-month Euribor plus a spread of 70 basis points) was canceled at maturity.

The outstanding balance of the bonds and obligations at December 31, 2019 is as follows:

ISIN	Issuer	Date of issue	Currency	Nominal amount (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.	Jan-06	Dollar	102	5.850%	Feb-37	—
US87425EAK91 ⁽³⁾	Repsol Oil & Gas Canada Inc.	Nov-06	Dollar	115	6.250%	Feb-38	—
US87425EAN31 ⁽³⁾	Repsol Oil & Gas Canada Inc.	May-12	Dollar	57	5.500%	May-42	—
XS0933604943 ⁽¹⁾	Repsol International Finance, B.V.	May-13	Euro	1,200	2.625%	May-20	LuxSE
XS0975256685 ⁽¹⁾	Repsol International Finance, B.V.	Oct-13	Euro	1,000	3.625%	Oct-21	LuxSE
XS1148073205 ⁽¹⁾	Repsol International Finance, B.V.	Dec-14	Euro	500	2.250%	Dec-26	LuxSE
XS1207058733 ⁽²⁾	Repsol International Finance, B.V.	Mar-15	Euro	1,000	4.500% ⁽⁴⁾	Mar-75	LuxSE
XS1334225361 ⁽¹⁾	Repsol International Finance, B.V.	Dec-15	Euro	600	2.125%	Dec-20	LuxSE
XS1352121724 ⁽¹⁾	Repsol International Finance, B.V.	Jan-16	Euro	100	5.375%	Jan-31	LuxSE
XS1613140489 ⁽¹⁾	Repsol International Finance, B.V.	May-17	Euro	500	0.500%	May-22	LuxSE
XS2035620710 ⁽¹⁾	Repsol International Finance, B.V.	Aug-19	Euro	750	0.250%	Aug-27	LuxSE

Note: Does not include the subordinated perpetual bond issued by RIF on March 25, 2015 in the amount of €1,000 million, which qualifies as an equity instrument (see Note 7.4).

⁽¹⁾ Issues made under the EMTN Program and guaranteed by Repsol, S.A.

⁽²⁾ Subordinated bond issued by Repsol International Finance B.V. and guaranteed by Repsol, S.A.

⁽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 OTC markets are not considered.

RIF also runs a Euro Commercial Paper (ECP) Program, underwritten by Repsol, S.A., with a limit up to €2,000 million. Under this program, several issues and cancellations took place over the course of the period, with a nominal amount of €1,845 million at December 31, 2019 (€1,635 million at December 31, 2018).

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 €4,650 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 failure to comply with 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 since 2013 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 subordinated bond issue of €1,000 million 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 perpetual subordinated bond of €1,000 million described in Note 7.4²⁶.

At the date of authorization for issue of these 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, 2019 and 2018 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.

8.6) Fair value

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

€ Million	Level 1		Level 2		Level 3		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
At fair value ⁽¹⁾	319	223	160	151	—	—	479	374
TOTAL	319	223	160	151	—	—	479	374

⁽¹⁾ Includes level 1 and level 2 hedging derivatives amounting to €97 million and €57 million, respectively.

See Note 3 for classification and valuation techniques for financial instruments.

²⁶ This bond does not include a contractual obligation to deliver cash or another financial asset or an obligation to exchange financial assets or liabilities.

(9) FINANCIAL ASSETS

The breakdown of the current and non-current financial assets included under the headings of the balance sheet is as follows:

	€ Million	
	2019	2018
Non-current assets		
Non-current financial assets	1,125	1,103
Non-current trade derivatives ⁽¹⁾	9	33
Current assets		
Other current financial assets	2,800	1,711
Current trade derivatives ⁽²⁾	168	241
Cash and cash equivalents ⁽³⁾	2,979	4,786
TOTAL	7,081	7,874

⁽¹⁾ Recognized under "Other non-current assets" on the balance sheet.

⁽²⁾ Recognized under "Other receivables" on the balance sheet.

⁽³⁾ See the statement of cash flows.

The breakdown, by type of asset, of financial assets included in the balance sheet can be found below:

€ Million	December 31, 2019 and 2018							
	At fair value through profit or loss		At fair value through other comprehensive income		At amortized cost ⁽³⁾		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
Equity instruments ⁽²⁾	29	24	122	105	—	—	151	129
Derivatives ⁽⁴⁾	9	33	—	—	—	—	9	33
Loans	—	—	—	—	759	921	759	921
Time deposits	—	—	—	—	150	—	150	—
Others	43	53	—	—	22	—	65	53
Non-current	81	110	122	105	931	921	1,134	1,136
Derivatives ⁽⁴⁾	238	308	40	10	—	—	278	318
Loans	—	—	—	—	203	174	203	174
Time deposits	—	—	—	—	2,481	1,455	2,481	1,455
Cash and cash equivalents	8	9	—	—	2,971	4,777	2,979	4,786
Others	—	3	—	—	6	2	6	5
Current	246	320	40	10	5,661	6,408	5,947	6,738
TOTAL ⁽¹⁾	327	430	162	115	6,592	7,329	7,081	7,874

⁽¹⁾ Does not include "Other non-current assets" and "Trade and other receivables" in the balance sheet, which at December 31, 2019 amounted to €1,306 million for non-current and €5,743 million for current, while at December 31, 2018 these headings amounted to €668 million for non-current and €5,864 million for current, respectively.

⁽²⁾ This heading includes non-controlling 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 nominal value whenever the effect of not discounting the related cash flows is not significant.

⁽⁴⁾ Includes current cash flow hedging derivatives (through other comprehensive income) amounting to €40 million (€10 million in 2018), and non-current fair value derivatives amounting to €2 million.

9.1) Loans

In 2019 and 2018, current and non-current loans include those loans granted mainly to companies accounted for using the equity method, which are not eliminated in the consolidation process, amounting to €962 million and €1,095 million. These included financing to joint ventures in Venezuela (see Notes 14 and 22), the balance of which at December 31, 2019 and 2018 amounted to €426 million and €518 million, respectively.

The average accrued return on these financial assets²⁷ amounts to an average interest rate of 4.3% and 5.07% in 2019 and 2018, respectively, and their maturity is as follows:

²⁷ Also includes time deposits amounting to €150 million.

	€ Million	
	2019	2018
2020	—	195
2021	139	142
2022	67	60
2023	77	54
Subsequent years	476	470
TOTAL	759	921

9.2) Cash and cash equivalents

Cash and cash equivalents are as follows:

	€ Million	
	2019	2018
Cash equivalents ⁽¹⁾	609	662
Cash on hand and at banks	2,370	4,124
TOTAL	2,979	4,786

⁽¹⁾ They primarily correspond to liquid financial assets, deposits or liquid financial 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.

9.3) Fair value

The classification of the financial assets recognized at fair value (FV), by fair value calculation method, is as follows:

€ Million	Level 1		Level 2		Level 3		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
At FV through profit or loss	121	204	175	202	29	24	325	430
At FV through other comprehensive income	2	—	40	10	122	105	164	115
TOTAL	123	204	215	212	151	129	489	545

See Note 3 for classification and valuation techniques for financial instruments.

(10) DERIVATIVE AND HEDGING TRANSACTIONS

10.1) Accounting hedges

The Group contracts derivatives to hedge exposure to changes in cash flows, most notably in 2019 and 2018:

- A cash flow hedge²⁸ in dollars in the form of interest rate swaps associated with the funding for the investment in the Canaport LNG project (Canada), for a notional amount of €289 million, maturing at long term, and with a negative fair value of €72 million at December 31, 2019. Under this hedge, the Group paid an average fixed interest rate of 5.279% and receives 3-month Libor. The fair value recognized in equity, yet to be recognized in profit or loss, amounts to -€53 million after tax at December 31, 2019 (-€40 million after tax at December 31, 2018). The impact before tax recognized in 2019 and 2018 in the income statement amounted to €9 million.
- Cash flow hedges in the form of interest rate swaps²⁶ arranged in 2014 for a notional amount of €1,500 million to hedge future bond issues in late 2014 and early 2015. Under these hedges, the Group paid a weighted average interest rate of 1.762% and receives 6-month Euribor. The fair value recognized in equity, yet to be recognized in profit or loss, amounts to -€63 million after tax at December 31, 2019 (-€73 million after tax at December 31, 2018). The impact before tax recognized in 2019 in the income statement amounted to €14 million (€13 million in 2018).
- Cash flow hedges to mitigate the risk of fluctuations in electricity purchase prices maturing between 2020 and 2023. At December 31, 2019, its notional amount was €226 million and its negative fair value was €24 million.
- Cash flow hedges to mitigate the risk of fluctuations in gas prices maturing in 2020. At December 31, 2019, its notional amount was -€267 million and its positive fair value was €40 million (€10 million at December 31, 2018).

²⁸ Hedges tied to [LIBOR/EURIBOR]. In accordance with the "Amendments to IFRS 9 and IAS 39: Interest rate benchmark reform" applied early (see Note 3.3), the cash flows of the hedging instrument and the hedged item will not be altered as a result of this reform.

In addition, the Group maintains instruments to hedge its exposure to fluctuations in foreign exchange rates relating to the ownership interest in the net assets of foreign operations. Of note are the financial instruments designated as hedges of net investments with respect to certain dollar assets in the *Upstream* segment, the notional amount of which at December 31 amounted to \$3,836 million (€3,416 million). In 2018, the notional amount was \$3,108 million (€2,714 million).

The instruments designated as accounting hedges²⁹ at December 31, 2019 and 2018 are detailed below:

€ Million	Nominal amounts hedging instruments ⁽¹⁾		Carrying amount of the hedging instrument								Total FV		Changes in FV	
	2019	2018	Non-current assets		Current assets		Non-current liabilities		Current liabilities		2019	2018	2019	2018
Cash flows	248	189	—	—	40	10	(72)	(56)	(24)	(1)	(56)	(47)	1	23
Interest rate	289	298	—	—	—	—	(71)	(56)	(1)	(1)	(72)	(57)	(15)	13
Product price	(41)	(109)	—	—	40	10	(1)	—	(23)	—	16	10	16	10
Fair value	(22)	—	2	—	—	—	(1)	—	—	—	1	—	1	—
Product price	(22)	—	2	—	—	—	(1)	—	—	—	1	—	1	—
Net investment	(3,416)	(2,714)	—	—	—	—	(2,857)	(2,714)	(559)	—	(3,416)	(2,714)	(59)	(126)
Exchange rate	(3,416)	(2,714)	—	—	—	—	(2,857)	(2,714)	(559)	—	(3,416)	(2,714)	(59)	(126)
TOTAL ⁽²⁾⁽³⁾	(3,190)	(2,525)	2	—	40	10	(2,930)	(2,770)	(583)	(1)	(3,471)	(2,761)	(57)	(103)

(1) Instruments in US dollars translated into euros at year-end rates.

(2) Fair value measurement methods are described in Note 9.3.

(3) The information relating to hedged items is broken down as follows:

€ Million	Changes in FV	
	2019	2018
Cash flow hedges: interest rate	15	(13)
Cash flow hedges: product price	(16)	(10)
Fair value hedges: product price	(1)	—
Hedges of net investments: exchange rate	59	126

The changes in reserves relating to hedging instruments at December 31, 2019 and 2018 recognized under "Other cumulative comprehensive income" in the balance sheet are detailed below:

€ Million	2019		2018	
	Cash flow hedges	Hedges of net investments ⁽¹⁾	Cash flow hedges	Hedges of net investments
Opening balance at December 31	(106)	(41)	(163)	54
Gains/(Losses) for measurement allocated to other comprehensive income	(55)	(59)	3	(126)
Amounts transferred to the income statement	56	—	36	—
Translation differences	(1)	—	(3)	—
Share of investments in joint ventures and associates	—	—	11	—
Effective tax	(3)	16	10	31
Closing balance at December 31	(109)	(84)	(106)	(41)

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

²⁹ 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 the income statement. 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. Hedges of net investments 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 transaction is disposed of, at which time they are transferred to the income statement.

The cumulative balances by type of hedging instrument at December 31, 2019 and 2018 are:

€ Million	Cash flow hedging reserve and translation reserve	
	2019	2018
Cash flow hedges	(109)	(106)
- Interest rate	(163)	(162)
- Product price	11	10
- Share of investments in joint ventures and associates	—	—
- Tax effect	43	46
Hedges of net investments	(84)	(41)
- Exchange rate	(139)	(80)
- Tax effect	55	39

10.2) Other derivative transactions

Furthermore, 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 CO₂) that are not recognized as accounting hedges under IFRS 9. These derivatives include currency forward contracts that mature in less than a year, as part of the global strategy to manage the exposure to exchange-rate risk. Additionally, the Group has entered into futures and swap contracts to hedge the product risk that derives from future physical transactions such as the sale and/or purchase of crude oil and other oil products.

The breakdown of these derivative instruments is as follows:

€ Million	Non-current assets		Current assets		Non-current liabilities		Current liabilities		Total fair value	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Exchange rate	—	—	110	77	—	—	(46)	(49)	64	28
Product price	7	33	128	231	(9)	(18)	(327)	(250)	(201)	(4)
TOTAL ⁽¹⁾	7	33	238	308	(9)	(18)	(373)	(299)	(137)	24

⁽¹⁾ In 2019, this heading includes derivatives whose measurement in respect of interest rates amounts to €24 million. (2018: €9 million).

The breakdown of these derivatives at December 31, 2019 and 2018 is provided below:

€ Million	Maturity fair values											
	2019						2018					
	2020	2021	2022	2023	Sig.	Total	2019	2020	2021	2022	Sig.	Total
Exchange rate	64	—	—	—	—	64	28	—	—	—	—	28
Product price	(198)	(1)	4	(6)	—	(201)	(19)	10	—	1	4	(4)
Purchase futures	17	—	(10)	—	—	7	(455)	1	(1)	—	—	(455)
Sale futures ⁽¹⁾	(230)	—	13	(6)	—	(223)	365	(13)	—	—	2	354
Options	1	—	—	—	—	1	—	—	—	—	—	—
Swaps	(32)	(1)	1	—	—	(32)	54	6	1	1	2	64
Others ⁽²⁾	46	—	—	—	—	46	17	16	—	—	—	33
TOTAL	(134)	(1)	4	(6)	—	(137)	9	10	—	1	4	24

⁽¹⁾ The following is a breakdown of the physical units and the fair value of the product price derivatives associated with sales contracts:

Sale futures	2019		2018	
	Physical units	FV (€Million)	Physical units	FV (€Million)
EUAs CO ₂ (Thousand tons)	24,749	(179)	35,829	(326)
Crude oil (Thousand barrels)	17,924	(51)	43,300	395
Gas (TBTU)	290	7	34	79
Products	—	—	—	206
Total		(223)		354

⁽²⁾ 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 2019 and 2018, short-term forward contracts and currency swaps were arranged that generated a financial profit of €157 million and €127 million, respectively, which are recognized under "Financial result - Change in fair value of financial instruments".

In 2019 and 2018, the impact of the valuation of product derivatives and the price of CO₂ on "Operating income" was €281 million and €134 million, respectively.

(11) 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.

11.1) Market risk

Market risk is the potential loss faced due to adverse changes 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. This strategy is complemented with other risk management measures when required by the nature of the risk exposure. Accordingly, the risk that affects the result is subject to maximum risk levels, measured in terms of Value at Risk (VaR), defined by the Executive Committee in line with the different authorization levels and supervised on a daily basis by an area that is separate from 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 "*Other comprehensive income*") as a result of the financial instruments held by the Group at the reporting date. The sensitivity analysis uses changes in variables representative of their historical behavior.

a) Exchange rate risk

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, liabilities and monetary flows in currencies other than the functional currency of the Group's parent 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.

Repsol constantly 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 flow hedges are arranged for the purpose of 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 flows are distributed over a period of time.

For exchange rate derivatives, see Note 10.

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, is illustrated below:

	Appreciation (+) / depreciation (-) in exchange rate	€ Million
Effect on net income after tax	5%	6
	(5)%	(6)
Effect on equity	5%	89
	(5)%	(81)

b) Interest rate risk

Fluctuations in interest rates can affect interest income and expense from 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 fluctuations can affect the carrying amount of assets and liabilities due to variations in the discount rates of applicable cash flows, the return on investments and the future cost of raising financial resources.

Repsol's debt is linked to the most competitive financial instruments at any given time, both in terms of the capital market and banking market, and based on those market conditions considered to be ideal for each of them. 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-rate debt issues, which are designated in general as hedging instruments (see Note 10).

At December 31, 2019 and 2018, the net debt balance at fixed rates amounted to €6,423 million and €7,183 million, respectively. This is equivalent to 84% and 116%, respectively, of total net debt including interest rate derivative financial instruments.

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 shown in the following table:

	Increase (+) / decrease (-) in interest rates (basis points)	€ Million
Effect on net income after tax	50 p.b.	5
	-50 p.b.	(5)
Effect on equity	50 p.b.	11
	-50 p.b.	(12)

In relation to the process of transitioning to new interest rate benchmarks currently under way in various jurisdictions worldwide, the Group has begun reviewing its inventory of contracts, in accordance with the timetable envisaged in the reform, in order to identify those that include interest rate clauses that may be affected, as well as the substitute interest rate clauses (fall-back clauses) contained therein.

c) Commodity price risk

The Group's results are exposed mainly to volatility in the prices of oil, derivative products, natural gas and electricity.

In some cases, Repsol arranges derivatives to mitigate its exposure to commodity 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 10).

At December 31, 2019 an increase or decrease of 10% in these prices would have approximately led to the following changes in net income.

	Increase (+) / decrease (-) in commodity prices	€ Million
Effect on net income after tax	+10%	15
	(10)%	(15)

11.2) Liquidity risk

The liquidity policy applied by Repsol is structured around guaranteeing the availability of the necessary funds to ensure compliance with the obligations assumed and the evolution of the Group's business plans, while maintaining 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 instruments³⁰ and undrawn lines of credit that are sufficient to cover current debt maturities 1.2 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 lines of credit amounting to €1,808 million and €2,249 million at December 31, 2019 and 2018, respectively.

The tables below contain an analysis on the maturities of the financial liabilities existing at December 31, 2019 and 2018:

	Maturities (€ Million)							Maturities (€ Million)						
	2019							2018						
	2020	2021	2022	2023	2024	Seq.	Total	2019	2020	2021	2022	2023	Seq.	Total
Bonds and obligations ⁽¹⁾	3,815	1,123	587	86	86	5,333	11,030	2,953	1,966	1,122	586	83	4,606	11,316
Loans and other financial debts ⁽¹⁾	2,383	198	246	80	3,041	585	6,533	1,426	250	239	337	88	3,465	5,805
Derivatives ⁽²⁾	(39)	—	—	—	—	—	(39)	59	7	7	6	6	23	108
Suppliers	3,638	—	—	—	—	—	3,638	3,244	—	—	—	—	—	3,244
Other payables	3,854	—	—	—	—	—	3,854	4,506	—	—	—	—	—	4,506

³⁰ Includes immediately available time deposits recognized under "Other current financial assets" amounting to €2,631 million.

NOTE: The amounts shown are the contractual undiscounted cash flows and, therefore, they differ from the amounts included on the balance sheet. Lease liabilities are not included (see Note 8.2).

- (1) Corresponds to future maturities of amounts recognized under "Non-current financial liabilities" and "Current financial liabilities", including interest or future dividends related to these financial liabilities. It does not include financial derivatives.
(2) The contractual maturities of the derivatives included under this heading are outlined in Note 10. It does not include trade derivatives recognized under "Other non-current liabilities" and "Other payables" on the balance sheet.

11.3) Credit risk³¹

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, 2019 for each of them, is broken down as follows:

	Gross balance	Average impairment	Impairment	Net balance 12/31/2019	Net balance 12/31/2018
Current financial assets and Cash ⁽¹⁾	5,779	—	—	5,779	6,497
Non-current financial assets ⁽²⁾	3,827	61%	2,331 ⁽³⁾	1,496	1,583
Other current and non-current assets ⁽⁴⁾	2,123	29%	(612)	1,510	996
Trade and other receivables ⁽⁵⁾	6,111	3%	(200)	5,911	6,105

- (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). The Group's cash surplus is used to acquire safe and liquid short-term instruments, including short-term bank deposits and other instruments with similar characteristics. The portfolio of these investments is diversified to avoid a concentration of risk in any one instrument or counterparty.
(2) This heading is presented in the balance sheet net of the provision for the equity deficit of Cardón IV (see Note 14).
(3) Includes assets impaired in Phase III (see following section, "Expected loss"). The impairment losses at December 31, 2019 relate mainly to ongoing litigation and bankruptcy proceedings (€1,748 million) and to loans and lines of credit granted to joint ventures in Venezuela (€537 million).
(4) Includes mainly assets impaired in Phase III corresponding mainly to accounts receivable related to activity in Venezuela (see Notes 20.4 and 21.3).
(5) See the following section "Trade and other receivables".

Trade and other receivables

The trade receivables are shown on the balance sheet at December 31, 2019 and 2018, net of provisions for impairment, for an amount of €5,911 million and €6,105 million, respectively. The following table shows the age of trade receivables net of provisions for impairment (including expected loss):

Maturities	€ Million			
	2019		2018	
	Debt	Impairment	Balance	Balance
Unmatured debt	5,580	44	5,536	5,667
Matured debt 0-30 days	242	7	235	257
Matured debt 31-180 days	108	29	79	116
Matured debt over 180 days	141	80	61	65
TOTAL	6,071	160	5,911	6,105

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 after its trade receivables have become impaired, including official bodies and public sector entities, does not exceed 1.7%.

As a general rule, the Group establishes a bank guarantee issued by financial institutions as the most suitable instrument of protection from credit risk. In some cases, the Group has contracted credit insurance policies whereby this partially transfers 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 amount of €3,206 million at December 31, 2019 and €3.584 million at December 31, 2018. Of this balance, the trade receivables secured by guarantees stood at €908 million at December 31, 2019 and €531 million at December 31, 2018, respectively.

³¹ 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 "Net income 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.

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 default, the balance at risk and the estimated Loss Given Default (LGD), taking into account all the information available for each customer. As a general rule, 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.

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 risk³¹. The impairment losses on the **financial assets**, to which the expected credit loss model is applicable, are calculated using the following formula:

$$\text{Expected credit loss} = \text{Probability of default}^{(1)} \times \text{Exposure}^{(2)} \times \text{LDG}^{(3)}$$

⁽¹⁾ Probability of default: is calculated individually for each trade debtor according to the solvency models approved by the 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 performance). An internal rating and an associated probability of default are obtained for each debtor, according to the models.

⁽²⁾ Exposure: is calculated taking into account the total amount of outstanding credit and a potential future exposure according to the available risk limit.

⁽³⁾ Loss Given Default (LGD): 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 regard to financial instruments relating to operations in **Venezuela**, the expected loss was calculated by considering the cash flow scenarios expected for the business, weighted by their estimated probability. Three LGD 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 (Moody's Report: "Sovereign Default and Recovery Rates, 1983-2017") and Management's expectations. The estimation of the cash flow scenarios is consistent with those used for the purpose of calculating the recoverable amount of assets. 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 judgements.

³² 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.

NON-CURRENT ASSETS AND LIABILITIES

(12) INTANGIBLE ASSETS

The breakdown of the intangible assets and of the related accumulated amortization and impairment losses at December 31, 2019 and 2018 is as follows:

	€ Million									Total
	Upstream				Downstream			Corporate		
	Goodwill	Exploration permits	Computer software	Other assets	Service station association rights and other rights ⁽⁴⁾	Computer software	CO ₂ emission allowances ⁽⁵⁾	Concessions and others ⁽⁶⁾	Computer software and others	
GROSS COST										
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
Disposals or reductions	(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
First-time application of IFRS 16 ⁽²⁾	—	—	—	—	(562)	—	—	—	—	(562)
Balance at January 1, 2019	3,203	2,420	198	83	244	365	112	334	333	7,292
Investments ⁽¹⁾	17	217	15	5	59	86	114	99	24	636
Disposals or reductions	—	(67)	—	—	(9)	(2)	(1)	(13)	(29)	(121)
Translation differences	53	42	4	2	2	1	—	—	—	104
Change in scope of consolidation	(7)	—	—	—	—	—	—	25	—	18
Reclassifications and other movements	(69)	73	1	1	10	11	88	2	—	151
Balance at December 31, 2019	3,197	2,685	218	91	306	461	313	447	328	8,080
ACCUMULATED AMORTIZATION AND IMPAIRMENT LOSSES										
Balance at January 1, 2018	(184)	(1,052)	(102)	(66)	(468)	(175)	—	(159)	(238)	(2,444)
Amortization	—	(122)	(21)	(1)	(40)	(21)	—	(6)	(24)	(235)
Disposals or reductions	—	113	8	—	69	8	—	—	5	203
(Provision for)/Reversal of provisions for impairment ⁽³⁾	(8)	(210)	—	(1)	—	—	—	1	(4)	(222)
Translation differences	—	(49)	(6)	(5)	(3)	(1)	—	(1)	—	(65)
Changes 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)
First-time application of IFRS 16 ⁽²⁾	—	—	—	—	274	—	—	3	—	277
Balance at January 1, 2019	(192)	(1,308)	(121)	(73)	(168)	(189)	—	(169)	(261)	(2,481)
Amortization	—	(48)	(20)	—	(25)	(37)	—	(23)	(25)	(178)
Disposals or reductions	—	67	—	—	9	2	—	12	30	120
(Provision for)/Reversal of provisions for impairment ⁽³⁾	(868)	(296)	—	—	—	—	(6)	(3)	(3)	(1,176)
Translation differences	—	(22)	(2)	(1)	(1)	(1)	—	—	—	(27)
Changes in scope of consolidation	—	—	—	—	—	—	—	—	—	—
Reclassifications and other movements	34	121	—	1	9	—	—	1	—	132
Balance at December 31, 2019	(1,026)	(1,486)	(143)	(73)	(176)	(225)	(6)	(182)	(259)	(3,610)
Net balance at December 31, 2018	3,011	1,112	77	10	364	176	112	162	72	5,096
Net balance at December 31, 2019	2,171	1,199	75	18	130	236	307	265	69	4,470

⁽¹⁾ Investments in 2019 and 2018 come from the direct acquisition of assets. Investments in "Exploration permits" mainly refer to the acquisition of acreage and geological and geophysical costs in the amount of €199 million and €170 million in 2019 and 2018, respectively.

⁽²⁾ Rights of use reclassified as property, plant and equipment (see Notes 3.2.1 and 13).

⁽³⁾ See Note 21.

⁽⁴⁾ Includes both the service stations association rights (see Note 3.4.2). At December 31, 2019 the capitalized costs of obtaining contracts amounted to €102 million.

⁽⁵⁾ In 2019, it included €201 million corresponding to the CO₂ emission allowances assigned free of charge for 2019 in accordance with the National Allocation Plan (€63 million in 2018) and the reduction of the allowances consumed by the emissions produced in 2019 amounting to €113 million (€70 million in 2018). For additional information on CO₂ allowances, see Note 31.1.

⁽⁶⁾ Includes the customer portfolio acquired from Viesgo (see Note 4).

Goodwill

The breakdown of goodwill, by segment and company, at December 31, 2019 and 2018 is as follows:

Goodwill	€ Million	
	2019	2018
Upstream:		
Repsol Oil & Gas Canada, Inc.	1,640	2,441
Other companies	106	89
Downstream⁽¹⁾:		
Repsol Portuguesa, S.A.	154	154
Repsol Gas Portugal, S.A.	106	106
Repsol Comercial de Productos Petrolíferos, S.A.	103	104
Repsol Electricidad y Gas, S.A.	49	49
Other companies	13	68
TOTAL⁽²⁾	2,171	3,011

⁽¹⁾ Corresponds to a total of 12 CGUs, with the most significant individual amount not exceeding to 31% of the total of segment. Of the total, €424 million and €443 million in 2019 and 2018, respectively, correspond to companies whose main activities are carried on in Europe.

⁽²⁾ Includes €1,026 million and €191 million of accumulated impairment losses in 2019 and 2018, respectively.

Upstream:

The goodwill that arose from the acquisition of ROGCI, which was allocated to the segment for the purpose of assessing its recoverability, is justified, among other reasons, by the synergies arising from the acquisition as a result of savings in corporate functions and support functions that benefit the segment as a whole, and which could not be allocated to specific assets on a non-arbitrary basis.

Once most of these synergies had been captured and after the decrease in the recoverable amount of the assets in the *Upstream* segment (see Note 21.2), an impairment loss of €793 million was recognized on the goodwill. Unfavorable changes in the key assumptions that determine the recoverable amount of segment assets, mainly declining oil and gas prices, sales volume (production) and increases in the discount rate, would result in additional impairment losses on the goodwill of ROGCI. Note 21.2 includes additional information on the effect of changes in the key assumptions made on the value of segment assets.

Downstream:

The recoverability of the goodwill of the *Downstream* segment was analyzed in accordance with the criteria detailed in Note 3. In addition, for those CGUs where the goodwill allocated thereto is significant compared to the total amount of goodwill, Repsol analyses whether there are reasonably foreseeable changes in the key assumptions for determining the recoverable amount.

Specifically, the most relevant sensitivity analyses have been carried out, on an individual basis, on the following assumptions: i) a decrease in sales volume (5%), ii) an increase in operating and investment costs (5%), iii) a decrease in the unit contribution margin (5%), and iv) an increase in the discount rate (100 basis points). Repsol considers that, based on present knowledge, reasonably foreseeable changes in these assumptions would not have a significant impact on the Group's financial statements at December 31, 2019.

(13) PROPERTY, PLANT AND EQUIPMENT

The breakdown of “Property, plant and equipment” and of the related accumulated depreciation and impairment losses at December 31, 2019 and 2018 is as follows:

	€ Million								Total
	Upstream			Downstream			Corporate		
	Investments in areas with reserves	Operating investments	Other property, plant and equipment	Land, buildings and other constructions	Machinery and plant	Other property, plant and equipment	Property, plant and equipment in progress	Land, construction and others ⁽⁶⁾	
GROSS COST									
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
Disposals or reductions	(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 ⁽¹⁾	—	—	—	5	345	—	7	—	357
Reclassifications and other movements ⁽²⁾	(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
First-time application of IFRS 16	(80)	—	255	417	1,084	123	—	19	1,818
Balance at January 1, 2019	24,827	3,620	838	2,424	21,080	1,453	838	1,079	56,159
Investments	1,601	184	160	30	149	169	848	19	3,160
Disposals or reductions	(103)	(151)	(16)	(25)	(122)	(19)	(3)	(33)	(472)
Translation differences	479	67	17	11	62	8	3	—	647
Change in scope of consolidation ⁽¹⁾	—	(3)	—	9	7	—	9	—	22
Reclassifications and other movements ⁽²⁾	(366)	(582)	(97)	66	695	68	(794)	—	(1,010)
Balance at December 31, 2019	26,438	3,135	902	2,515	21,871	1,679	901	1,065	58,506
ACCUMULATED DEPRECIATION AND IMPAIRMENT LOSSES ⁽³⁾									
Balance at January 1, 2018	(10,476)	(2,498)	(188)	(982)	(12,121)	(827)	—	(462)	(27,554)
Depreciation	(1,028)	(115)	(14)	(35)	(635)	(41)	—	(37)	(1,905)
Disposals or reductions	1,385	179	15	18	162	15	—	2	1,776
(Provision for)/Reversal of provisions for impairment ⁽⁴⁾	(438)	(29)	(34)	1	14	(60)	—	—	(546)
Translation differences	(470)	(100)	(9)	(18)	(86)	(6)	—	—	(689)
Changes in scope of consolidation	—	—	—	(1)	—	—	—	—	(1)
Reclassifications and other movements ⁽²⁾	19	(15)	3	—	(2)	4	—	—	9
Balance at December 31, 2018	(11,008)	(2,578)	(227)	(1,017)	(12,668)	(915)	—	(497)	(28,910)
First-time application of IFRS 16	65	—	(88)	(222)	(459)	325	—	—	(379)
Balance at January 1, 2019	(10,943)	(2,578)	(315)	(1,239)	(13,127)	(590)	—	(497)	(29,289)
Depreciation	(1,161)	(54)	(60)	(58)	(793)	(89)	—	(41)	(2,256)
Disposals or reductions	2	151	6	18	109	16	—	33	335
(Provision for)/Reversal of provisions for impairment ⁽⁴⁾	(3,887)	(392)	(9)	(3)	284	(9)	—	—	(4,016)
Translation differences	(196)	(45)	(7)	(8)	(46)	4	—	—	(298)
Changes in scope of consolidation	—	3	—	—	—	—	—	—	3
Reclassifications and other movements ⁽²⁾	45	409	3	(22)	(270)	(5)	—	—	160
Balance at December 31, 2019	(16,140)	(2,506)	(382)	(1,312)	(13,843)	(673)	—	(505)	(35,361)
Net balance at December 31, 2018	13,899	1,042	356	990	7,328	415	838	563	25,431
Net balance at December 31, 2019	10,298	629	520	1,203	8,028	1,006	901	560	23,145

⁽¹⁾ See Note 5.

⁽²⁾ In 2019 and 2018 this item includes reclassifications from “Property, plant and equipment in progress” mainly to “Machinery and plant”, as a result of several upgrade, repair and remodeling projects of the Group's refineries. In 2019, the reclassification of the Upstream assets in Vietnam to “Other non-current assets” is worthy of note (see Notes 16 and 21.3). “Machinery and plant” includes the reclassification of the net reversal of the impairment loss on the Gas & Trading business in North America to “Onerous contracts” (see Note 15).

⁽³⁾ See Note 3 for the measurement and useful life of the items of property, plant and equipment.

⁽⁴⁾ See Note 21. At December 31, 2019 and 2018, the provisions for impairment losses on assets came to €7,553 million and €3,532 million, respectively.

⁽⁵⁾ In 2019 and 2018, includes property, plant and equipment in progress corresponding 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 €459 million and €460 million in 2019 and 2018, respectively. “Other” mainly includes, “Machinery and plant” and “Other properties” in the amount of €101 million and €103 million in 2019 and 2018, respectively.

The breakdown, by geographical area, of the Group's most significant investments is detailed in “Disclosures by geographical area” included in Note 4.3, which is presented using the Group's reporting model.

This heading also includes investments made by the Group in service concession arrangements in the amount of €243 million and €256 million at December 31, 2019 and 2018, respectively. These concessions revert to the State over a period of time ranging from 2020 to 2066.

The figures corresponding to non-depreciable assets, i.e., land and property, plant and equipment in progress, amount to €586 million and €1,054 million at December 31, 2019, respectively, and €584 million and €974 million at December 31, 2018, respectively.

“Property, plant and equipment” includes fully depreciated items in the amount of €9,536 million and €9,303 million at December 31, 2019 and 2018, respectively.

In accordance with industry practices, Repsol insures its assets and operations worldwide. The risks insured include 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.

The breakdown of and changes in the right-of-use assets, as well as their accumulated depreciation, are as follows:

€ Million	Machinery and plant ⁽²⁾	Transport elements ⁽³⁾	Buildings ⁽⁴⁾	Land	Other property, plant and equipment	Total
Balance at December 31, 2018	643	—	—	111	—	754
First-time application of IFRS 16 ⁽¹⁾	805	144	111	73	20	1,153
Balance at January 1, 2019	1,448	144	111	184	20	1,907
Acquisitions	147	159	38	9	1	354
Disposals and reductions	(1)	—	(11)	(1)	(6)	(19)
Depreciation and amortization	(167)	(48)	(26)	(18)	(10)	(269)
Translation differences and other	62	1	(2)	11	(4)	68
Balance at December 31, 2019	1,489	256	110	185	1	2,041

⁽¹⁾ Includes rights of use previously classified under intangible assets.

⁽²⁾ Includes service stations, gas pipelines and operation platforms.

⁽³⁾ Includes ships and land transport vehicles.

⁽⁴⁾ Includes offices and parking lots.

The most significant lease agreements 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, 2019, the rights of use under this contract were provisioned in full and future payments were recognized as financial liabilities at \$429 million (€382 million).
- 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 (USA) 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, 2019, the corresponding rights of use amounted to €468 million³³ and the future payments recognized as a financial liability were \$1,072 million (€954 million).
- For the service stations that the Group has in Spain, Portugal, Italy, Peru and Mexico, lease agreements are signed for various concepts and with varying terms. At December 31, 2019, the corresponding rights of use amounted to €936 million and the future payments recognized as a financial liability were €911 million.

³³ Contract provisioned for an amount of €256 million (see Note 15).

(14) INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Movement in this heading during 2019 and 2018 was as follows:

	€ Million	
	2019	2018
Opening balance for the year	7,194	9,268
Impact of new standards (Note 3.2.1)	(50)	—
Adjusted opening balance for the year	7,144	9,268
Net investments	(7)	5
Changes in scope of consolidation ⁽¹⁾	56	(3,235)
Net income from investments accounted for using the equity method ⁽²⁾	351	1,053
Net income from discontinued operations	—	68
Dividends paid out	(426)	(597)
Translation differences	145	209
Reclassifications and other movements ⁽³⁾	(26)	423
Balance at year end	7,237	7,194

⁽¹⁾ In 2018 it mainly includes the write down of the investment in Naturgy.

⁽²⁾ Corresponds to the net income for the period from continuing operations. It does not include "Other comprehensive income" amounting to €142 million in 2019 (€139 million for joint ventures) and €234 million in 2018 (€230 million for joint ventures), mainly due to translation differences.

⁽³⁾ Includes mainly the reclassification of the equity deficit 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⁾	
	2019	2018
Joint ventures	7,126	7,037
Associates ⁽¹⁾	111	157
TOTAL	7,237	7,194

⁽¹⁾ This mainly includes the interest in Petrocarabobo, S.A. together with Oleoducto de Crudos Pesados (OCP) Ltd.

⁽²⁾ In 2019, €6,780 million correspond to *Upstream* (€6,812 million in 2018).

Joint ventures are considered, to the extent that the shareholders have a right to the net assets, 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 interest is implemented by holding shares representing 60% of the share capital of Sinopec Brasil, S.A. The remaining 39.991% corresponds to Tittop Loxembourg, S.A.R.L.

This company's main businesses are hydrocarbon exploration and production, the import and export of oil and gas and derivative products, the storage, distribution and sale of 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 a 48.33% interest in YPFB Andina, S.A., through Repsol Bolivia, S.A., with the other shareholders being YPF Bolivia (51%) and non-controlling shareholders (0.67%). It engages in hydrocarbon exploration, operation and sale. 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.). The remaining 70% is owned by British Petroleum. This company and its subsidiaries mainly engage in hydrocarbon exploration, operation and sale, and other related activities, such as the construction and operation of oil rigs, pipelines and other facilities in Trinidad and Tobago.

Petroquiriquire, S.A.

Repsol has a 40% interest 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 21.3.

Cardón IV, S.A.

Repsol has a 50% interest 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 21.3.

Repsol Sinopec Resources UK Ltd. (RSRUK)

A company held by Talisman Colombia Holdco, Ltd. and Addax Petroleum UK Limited ("Addax"), a subsidiary of the Sinopec Group, with a 51% and 49% interest, respectively, and whose core activity is hydrocarbon exploration and operation 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% interest in RSRUK, see Note 15.

Equion Energía Ltd.

Equion is a company held 51% and 49% by Ecopetrol, S.A. and Talisman Colombia Holdco, Ltd, respectively. Equion mainly engages in the exploration, research, operation, development and sale of hydrocarbon 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 provides a summary of the financial information for these investments, prepared in accordance with EU-IFRS accounting policies, as detailed in Note 3 and its reconciliation with the carrying amount of of the investment in the consolidated financial statements:

Income from joint ventures:

€ Million	RSB		YPFB Andina		BPRY		Petroquiriquire		Cardón IV		RSRUK		Equion	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Revenue	1,339	1,560	213	217	1,794	2,162	244	277	538	570	1,156	1,253	337	399
Amortization and provisions for impairment	(413)	(253)	(85)	(96)	(1,890)	(990)	(77)	(122)	(46)	(650)	(401)	(336)	(130)	(169)
Other operating income/(expenses) ⁽²⁾	(466)	(782)	(90)	(139)	(932)	(1,037)	(60)	(77)	(144)	189	(276)	186	(79)	(34)
Operating income	460	525	38	(18)	(1,028)	135	107	78	348	109	479	1,103	128	196
Net interest	168	128	10	7	(95)	(95)	(51)	(37)	(146)	(189)	23	—	13	3
Financial result	(62)	15	(7)	(10)	(26)	(10)	3	(5)	(7)	(5)	(94)	(146)	(30)	2
Net income from investments accounted for using the equity method-net of taxes	23	23	14	13	—	—	—	—	—	—	—	—	—	—
Net income before tax	589	691	55	(8)	(1,149)	30	59	36	195	(85)	408	957	111	201
Tax expense ⁽³⁾	(159)	(238)	(12)	6	690	(93)	(87)	193	(107)	(282)	(136)	373	(45)	(84)
Net income attributable to the parent	430	453	43	(2)	(459)	(63)	(28)	229	88	(367)	272	1,330	66	117
Repsol interest	60%	60%	48%	48%	30%	30%	40%	40%	50%	50%	51%	51%	49%	49%
Consolidation income	258	272	21	(1)	(138)	(19)	(11)	92	44	(184)	139	678	32	57
Dividends	274	283	44	1	—	—	—	247	—	—	—	—	—	—
Other comprehensive income⁽⁴⁾	87	193	10	21	13	29	(8)	(22)	(10)	(18)	17	(5)	5	11

Note: The itemized amounts below feature the Group's percentage of ownership interest in each of the companies:

- ⁽¹⁾ In 2019, BPRY includes impairment losses recognized as a result of the new gas price scenarios (see Note 21). In addition, in 2019 Petroquiriquire and Cardón IV includes the impairment of property, plant and equipment and accounts receivable from PDVSA amounting to €5 million and €29 million, respectively. In 2018, it included the impairment of property, plant and equipment of Petroquiriquire and Cardón IV, amounting to €323 million.
- ⁽²⁾ In 2018 it included lease expenses for the year mainly arising from the lease of the floating production storage and offloading (FPSO) platforms guaranteed by the Group (see Note 27) amounting to €126 million.
- ⁽³⁾ In 2018, in Venezuela it includes the impact of the cancellation of deferred tax assets as a result of Presidential Decree No. 35, offset by the positive tax impacts arising from translation differences.
- ⁽⁴⁾ Relates to "Valuation gains/(losses)" and "Amounts transferred to the income statement" in the statement of recognized income and expense.

Value of interest in joint ventures:

€ Million	RSB		YPFB Andina		BPRY		Petroquiriquire		Cardón IV		RSRUK		Equion	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Assets														
Non-current assets	9,434	7,951	894	867	7,067	7,660	215	210	1,033	1,009	3,278	3,543	36	252
Current assets	1,316	473	435	445	582	797	4,093	3,926	309	222	1,556	1,016	690	541
Cash and cash equivalents	27	35	94	53	74	64	13	13	12	41	8	26	51	50
Other current assets	1,289	438	341	392	508	733	4,080	3,913	297	181	1,548	990	639	491
Total Assets	10,750	8,424	1,329	1,312	7,649	8,457	4,308	4,136	1,342	1,231	4,834	4,559	726	793
Liabilities														
Non-current liabilities	2,056	648	234	235	5,481	5,910	898	852	1,605	1,803	2,875	2,857	20	124
Financial liabilities	933	—	—	—	1,656	1,810	740	698	1,203	1,410	143	—	—	—
Other non-current liabilities ⁽¹⁾	1,123	648	234	235	3,825	4,100	158	154	402	393	2,732	2,857	20	124
Current liabilities	1,432	528	168	121	382	345	4,459	4,284	629	388	248	283	95	134
Financial liabilities	141	213	—	—	—	—	—	—	—	—	—	—	—	—
Other current liabilities	1,291	315	168	121	382	345	4,459	4,284	629	388	248	283	95	134
Total Liabilities	3,488	1,176	402	356	5,863	6,255	5,357	5,136	2,234	2,191	3,123	3,140	115	258
NET ASSETS	7,262	7,248	927	956	1,786	2,202	(1,049)	(1,000)	(892)	(960)	1,711	1,419	611	535
Repsol interest	60%	60%	48%	48%	30%	30%	40%	40%	50%	50%	51%	51%	49%	49%
Share in net assets ⁽²⁾	4,357	4,349	445	459	536	661	(420)	(400)	(446)	(480)	873	724	299	262
Capital gains/(losses)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Carrying amount of the investment	4,357	4,349	445	459	536	661	—	—	—	—	873	724	299	262

Note: The itemized amounts below feature the Group's percentage of ownership interest in each of the companies:

⁽¹⁾ In 2019 and 2018 RSB includes non-current provisions for dismantling obligations for the amount of €112 million and €101 million.

⁽²⁾ Petroquiriquire: in 2019 and 2018 a provision was recognized for contingencies and charges rose to €420 million and €400 million at December 31, respectively, corresponding to the equity deficit of Petroquiriquire (see Note 15).

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 9.1), and a provision for contingencies and charges is also recognized for the remaining equity deficit in 2019 in the amount of €75 million.

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.

(15) CURRENT AND NON-CURRENT PROVISIONS

15.1) Provisions

At December 31, 2019 and 2018, the balance and changes in these items during 2019 and 2018 are as follows:

	€ Million			
	Provisions for current and non-current contingencies and charges			
	Field decommissioning	Onerous contracts	Other provisions ⁽¹⁾	Total
Balance at January 1, 2018	2,175	812	1,028	4,015
Impact of new standards (see Note 3.2.1)	—	—	18	18
Balance at January 1, 2018	2,175	812	1,046	4,033
Provisions charged to income ⁽²⁾	85	55	365	505
Provisions reversed with a credit to income	(93)	(54)	(71)	(218)
Cancellation due to payment ⁽³⁾	(67)	(85)	(282)	(434)
Changes in scope of consolidation	16	—	43	59
Translation differences	50	34	16	100
Reclassifications and other ⁽⁴⁾	(204)	(31)	121	(114)
Balance at December 31, 2018	1,962	731	1,238	3,931
Impact of new standards (see Note 3.2.1)	—	(116)	—	(116)
Balance at January 1, 2019	1,962	615	1,238	3,815
Provisions charged to results ⁽²⁾	94	105	1,277	1,476
Provisions reversed with a credit to income	(85)	(12)	(33)	(130)
Cancellation due to payment	(99)	(51)	(86)	(236)
Changes in scope of consolidation	(4)	—	11	7
Translation differences	30	17	3	50
Reclassifications and other ⁽⁴⁾	(28)	(254)	77	(205)
Balance at December 31, 2019	1,870	420	2,487	4,777

⁽¹⁾ "Other provisions" includes mainly the provisions recognized to cover obligations arising from environmental risks (see Note 31), pension commitments (see Note 29), use of CO₂ allowances (see Note 31), employee incentive schemes (see Note 29), provisions for litigation (see Note 15.2), provisions for tax risks not related to income tax (see Note 23), provisions for workforce restructuring and other provisions to cover obligations arising from the Group's interests in companies. Following the application of IFRIC 23 (see Note 3.2.1), the tax provisions related to income tax are presented under "Deferred taxes and other" in the balance sheet (see Note 23).

⁽²⁾ Includes €114 million and €103 million reflecting the discounting to present value of provisions in 2019 and 2018. In 2019 "Provisions charged to results" includes the provisions corresponding to the arbitration initiated by Addax Petroleum UK Limited in relation to the purchase of Talisman Energy UK Limited (see 15.2) and the consumption of CO₂ rights during the year (see Note 31).

⁽³⁾ In 2018 "Other provisions", included mainly the payment arising from the settlement agreement that ended the "Galley" oil pipeline litigation and included the payments that canceled the provisions for workforce restructuring.

⁽⁴⁾ In 2019 "Onerous contracts" included the reclassification of the net reversal of the impairment of the Wholesaler&Trading Gas business in North America (see Notes 13 and 21). In 2019 and 2018 "Other provisions" included the adjustment for the negative value of the investments in Petroquiriquire and Cardón IV (see Note 14).

The following table provides an estimate of maturities of provisions at year-end 2019:

	Due dates ⁽¹⁾ € Million			Total
	Less than one year	From 1 to 5 years	> 5 years and/or undetermined	
Provisions for decommissioning fields	121	521	1,228	1,870
Provision for onerous contracts	52	148	220	420
Other provisions	692	865	930	2,487
TOTAL	865	1,534	2,378	4,777

⁽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 depending on the circumstances on which these estimates are based.

⁽²⁾ In 2019, a change in the discount rate of +/- 50 p.b. would have the effect of decreasing/increasing provisions for dismantling costs by €(108) million and €120 million, respectively.

15.2) Disputes

The amounts 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.

At December 31, 2019, Repsol's balance sheet includes provisions for proceedings in the ordinary course of its activities totaling €948 million (€106 million at December 31, 2018). The most significant legal or arbitration proceedings and their status as of the date of authorization for issue of these Consolidated Financial Statements 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. (currently “ROGCI”) and Talisman Colombia Holdco Limited (“TCHL”) in connection with the purchase of 49% of the shares of TSEUK (currently “RSRUK”, see Note 13). On October 1, 2015 ROGCI and TCHL submitted the answer to the “*Notice of Arbitration*”. On May 25, 2016, Addax and Sinopec formalized the arbitration claim, in which they requested that, in the event that their claims be estimated in their entirety, they be paid the amount of their initial investment in RSRUK, materialized in 2012 through the purchase of 49% of this from TCHL, a 100% subsidiary of ROGCI, together with any additional investment, past or future, in such company, as well as any loss of opportunity that could have occurred, estimating all this in a figure total of approximately \$5.500 million.

The dispute relates to events which took place in 2012, prior to Repsol’s acquisition of Talisman in 2015 -and that does not involve any actions by Repsol.

ROGCI and TCHL submitted their response to the arbitration complaint and corresponding evidence on November 25, 2016. Addax and Sinopec submitted a reply brief with additional evidence on May 31, 2017; and ROGCI and TCHL submitted a rejoinder brief and further evidence on August 2, 2017. New expert reports were exchanged on October 18, 2017, November 1, 2017, and May 23, 2018.

ROGCI and TCHL asked the Arbitral Tribunal to dismiss the claims of Addax and Sinopec based on contractual guarantees and in January 2017 the Court decided that it would deliberate on that request prior to other issues. The hearing regarding this request took place on June 19 and 20, 2017. On August 15, 2017, the Arbitral Tribunal issued a Partial Award dismissing Addax and Sinopec warranty claims.

The Arbitral Tribunal decided, among other procedural matters, the split of the procedure in two phases: the first addressing liability and the second dealing with the quantum of any liability found that, where appropriate, would have been determined. The oral hearing on liability issues took place between January 29 and February 22 and between June 18 and 29, 2018, this last period being devoted mainly to the testimonies of the experts proposed by the parties. The hearing on the oral conclusions was held from July 9 to 11, 2018 and the written conclusions were presented on September 29 and October 12, 2018.

On January 29, 2020, the Arbitral Tribunal issued its second Partial Award on one aspect of the five matters to be determined in the liability phase and, although Repsol had considered the claims to be without merit -supported by external advice-, and still does, the Tribunal has decided that ROGCI and TCHL are liable to Sinopec and Addax in respect of that aspect of the claim.

As indicated, the partial Award issued addresses one of the five claims regarding liability. The Court has indicated that it will decide the result of the remaining ones in due time, through subsequent awards, although the time at which they will be issued is currently unknown. In principle, once all of them have been decided, a new procedural phase will be necessary to determine the amounts, whose schedule has not yet been established. It is likely that this calendar should include deadlines for new allegation briefs, evidence, additional expert statements and a new oral hearing. It is estimated that the phase related to the determination of the amount, without taking into account any challenges to the awards, will not be resolved before the first quarter of 2022.

Repsol is analyzing the different actions that fit this partial award, including and foresees its challenge before the Singapore courts.

Although it is not known with certainty the amount of the eventual compensation (if any), since the litigation still has a long way and numerous pending decisions, in view of the partial award issued, Repsol, prudently, has made an estimate of the economic impacts that could be derived finally and as a whole from the litigation, having accrued the corresponding provision of 837 million euros in their financial statements as of December 31, 2019.

Additionally, on November 30, 2017 Repsol, S.A. commenced an arbitration against China Petroleum Corporation and TipTop Luxembourg S.A.R.L seeking relief from any adverse ruling on the arbitration mentioned above together with other damages yet unquantified. This procedure is based on their conduct towards Repsol during the months leading up to its acquisition of the Talisman Group.

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. 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*”) demanding, among other things, that Repsol and YPF be held liable for Maxus’ debts.

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. In February 2015, Repsol file a claim against OCC for the \$65 million that it had to pay to the State of New Jersey.

On April 5, 2016 the Presiding Judge decided to dismiss OCC’s suit against Repsol in full. On June 17, 2016 Maxus filed for bankruptcy with the Federal Bankruptcy Court of the State of Delaware, and also requested the stay of the Cross Claim. On October 19, 2017, the Presiding Judge upheld Repsol’s claim against OCC in full, ordering OCC to pay \$65 million plus interest and costs.

On September 14, 2018, Maxus (assuming right of ownership of the claim on behalf of OCC) and OCC filed an appeal against these rulings. At the same time, OCC filed an appeal against the claim ordering them to pay the \$65 million that Repsol had to pay to the State of New Jersey.

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 February, 2019, the Federal Bankruptcy Court rejected the petitions submitted by Repsol requesting that the Court reject the New Claim from the outset, which implies that the proceedings will be ongoing.

On December 10, 2019, the bankruptcy managers of Maxus filed an Insurance Claim in Texas against Greenstone Assurance Limited (a historical captive reinsurance company of the Maxus Group and currently 100% owned by Repsol - “*Greenstone*”), claiming that this company would be required to pay Maxus compensation for the liabilities arising from the indemnity granted to OCC, by virtue of alleged insurance policies issued by Greenstone between 1974 and 1998.

Repsol maintains the view, as has been shown in the Cross Claim, that the claims made in the New Claim and in the Insurance Claim are unfounded.

(16) OTHER NON-CURRENT ASSETS

This heading mainly includes, in 2019 and 2018, accounts receivable from PDVSA in Venezuela (see Notes 21.3 and 11.3) amounting to €347 million (€317 million in 2018), deposits associated with the dismantling of *Upstream* assets (“*sinking funds*”) in Malaysia and Indonesia amounting to €142 million (€119 million in 2018), and additionally, in 2019, the reclassification to this heading of the carrying amount of those assets whose activity was suspended in Vietnam (see Note 21.3).

CURRENT ASSETS AND LIABILITIES

(17) INVENTORIES

The breakdown of "Inventories" at December 31, 2019 and 2018 is as follows:

	€ Million	
	2019	2018
Crude oil and natural gas	1,457	1,640
Finished and semi-finished products	2,778	2,426
Materials and other inventories ⁽¹⁾	362	324
TOTAL ⁽²⁾	4,597	4,390

⁽¹⁾ Includes CO₂ allowances for a total of 1,616 thousand tons valued at €45 million.

⁽²⁾ Includes inventory write-downs of €51 million and €74 million at December 31, 2019 and 2018, respectively. The write-downs recognized and reversed amounted to -€6 million and €13 million, respectively (-€55 million and €13 million in 2018).

At December 31, 2019 the balance of commodity inventories, related to trading activity, recognized at fair value less costs to sell, amounted to €433 million, and the effect of their measurement at market value represented income of €20 million. Recoverable amounts are calculated using market information and benchmarks. Specifically, forward price curves provided by the market depending on the time horizon for the transactions. The main variables used are: prices taken from official publications (Platt's, Argus, OPIS, brokers, etc.) 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, 2019 and 2018 the Repsol Group complied with the legal requirements regarding minimum safety stocks established under prevailing legislation (see Appendix III) through its Spanish Group companies.

(18) TRADE AND OTHER RECEIVABLES

The breakdown of this heading at December 31, 2019 and 2018 is as follows:

	€ Million	
	2019	2018
Trade receivables for sales and services (gross amount)	3,984	3,947
Provisions for impairment	(200)	(189)
Trade receivables for sales and services	3,784	3,758
Receivables from operating activities and other receivables	669	917
Receivables from operations with staff	46	41
Public administrations	281	303
Trade operation derivatives (Note 9)	168	241
Other receivables	1,164	1,502
Current tax assets	963	845
Trade and other receivables	5,911	6,105

The changes in the provisions for impairment in 2019 and 2018 were as follows:

	€ Million	
	2019	2018
Opening balance for the year	189	173
Impact of new standards	—	71
Adjusted opening balance	189	244
Provision for/(reversal of) impairment losses ⁽¹⁾	11	(21)
Changes in scope of consolidation	—	28
Translation differences	2	5
Reclassifications and other movements	(2)	(67)
Balance at year end	200	189

⁽¹⁾ It is recognized under "(Provision for)/Reversal of provisions for impairment" in the balance sheet.

(19) TRADE AND OTHER PAYABLES

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

	€ Million	
	2019	2018
Suppliers	3,638	3,244
Payables to public administrations	600	538
Derivative financial instruments (Note 10)	350	250
Others	2,902	3,521
Other payables	3,852	4,309
Current tax liabilities	192	271
TOTAL	7,682	7,824

Information on the average period of payments to suppliers in Spain

The disclosures made in respect of the average period of payment for trade payables are presented in accordance with that established in applicable law.

	Days	
	2019	2018
Average period of payment to suppliers ⁽¹⁾	24	23
Ratio of transactions paid ⁽²⁾	24	24
Ratio of transactions payable ⁽³⁾	30	26
	Amount (€ Million)	
Total payments made	11,833	10,757
Total payments outstanding	625	563

⁽¹⁾ $((\text{Ratio of transactions paid} * \text{total payments made}) + (\text{Ratio of transactions payable} * \text{total payments outstanding})) / (\text{Total payments made} + \text{total payments outstanding})$.

⁽²⁾ $\Sigma (\text{Number of days of payment} * \text{amount of the transaction paid}) / \text{Total payments made}$.

⁽³⁾ $\Sigma (\text{Number of days outstanding} * \text{amount of the transaction payable}) / \text{Total payments outstanding}$.

In accordance with the transitional provisions of Law 15/2010, the maximum legal payment deadline is 60 days.

INCOME

(20) OPERATING INCOME

On the same date as these consolidated Financial Statements, Repsol published its 2019 consolidated Management Report, which includes an explanation of performance results and other aggregates. The report is available at www.repsol.com.

20.1) Sales and income from services rendered

In 2019 revenue from *Upstream* activities amounted to €4,684 million, while that of the *Downstream* segment totaled €46,325 million (€5,182 million and €46,712 million, respectively, in 2018)³⁴. In *Upstream*, income was mainly generated either from the sale of crude oil, condensed oil and LPG and natural gas, or from the provision of hydrocarbon operation services, depending on the contracts in force in each of the countries in which the Group operates. In *Downstream*, income is generated mainly from the sale of oil products (petrol, fuel oil, LPG, asphalt, lubricants, etc.), petrochemical products (ethylene, propylene, polyolefins and interim products), gas (natural gas and LNG) and electricity.

The decrease in revenue in the *Upstream* segment (-9.6%) is mainly due to lower realization prices for crude oil and gas and, to a lesser extent, to lower volumes sold, mainly in Libya (as a result of greater disruptions due to safety conditions), Canada and Southeast Asia (Malaysia, Indonesia and Vietnam). In *Downstream*, revenue dropped slightly compared to 2018 (-0.8%), and reduced revenue as a result of lower volumes of oil products sold was offset by the contribution of the new electricity generation and electricity and gas sale businesses and the international expansion in Mexico.

The distribution, by country, of revenue³⁵ from ordinary activities ("*Sales*" and "*Income from services rendered*") in 2019 and 2018 is shown below:

€ Million	2019	2018
Spain	26,175	25,332
United States	3,052	3,095
Peru	2,846	2,941
Portugal	2,611	2,673
Other	14,644	15,832
TOTAL ⁽¹⁾⁽²⁾	49,328	49,873

⁽¹⁾ The distribution by geographical area has been drawn up based on the markets to which the sales or income relate.

⁽²⁾ The distribution of the target markets is as follows: i) EU euro zone: €33,879 million (€33,514 million in 2018), ii) EU non-euro zone: €396 million (€1,066 million in 2018), and iii) Other countries: €15,053 million (€15,293 million in 2018).

This heading includes excise duties levied on hydrocarbon consumption amounting to €6,850 million and €6,295 million in 2019 and 2018, respectively.

In sales in which the Group acts as an agent, the Group only recognizes the net interest margin as revenue.

20.2) Other operating income

This heading reflects, inter alia, income recognized on the remeasurement of trade derivatives (see Note 10) and the reversal of provisions, taken to the income statement (see Note 15). It also includes operating grants amounting to €19 million and €20 million in 2019 and 2018, respectively.

³⁴ For further information, see Appendix II.

³⁵ 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 in exchange for these goods and services. There are five distinct steps 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. At December 31, there were no relevant performance obligations outstanding with customers.

20.3) Procurements

This heading includes the following items:

	€ Million	
	2019	2018
Purchases	36,960	38,481
Changes in inventories	(157)	(425)
TOTAL	36,803	38,056

This heading includes excise duties levied on hydrocarbon consumption mentioned in “Sales and income from services rendered”.

20.4) (Provision for)/Reversal of provisions for impairment

These headings include the following items:

	€ Million	
	2019	2018
Provision for impairment of assets (Notes 11.3, 18, 21)	(5,746)	(1,241)
Income from the reversal of provisions for impairment (Note 21)	424	175
TOTAL	(5,322)	(1,066)

In 2019, this relates mainly to provisions for the impairment of gas-producing assets in the US and Canada in the *Upstream* segment as a result of the new price paths assumed and the reversal in the Wholesaler and Trading Gas business in North America due to the expected change in margins, details of which are provided in Note 21. It also includes impairment losses on unsuccessful exploratory investments (see Note 3.4.2) amounting to €118 million, recognized in the normal course of operations (in addition to the annual calculation of the recoverable amount of the assets).

In 2019 and 2018 it also includes the provision for credit risk impairment of trade and other receivables and of other non-current assets, mainly in Venezuela, in the amount of €129 million and €300 million, respectively. For further information, see Notes 11.3 and 21.3.

20.5) Personnel expenses

“Personnel expenses” includes the following items:

	€ Million	
	2019	2018
Remuneration and other	1,493	1,456
Social security costs	453	418
TOTAL	1,946	1,874

20.6) Exploration expenses

Hydrocarbon exploration expenses in 2019 and 2018 amounted to €916 million and €627 million, of which €120 million and €227 million are recognized under “Amortization and depreciation of non-current assets” and €690 million and €298 million under “(Provision for)/Reversal of provisions for impairment” in 2019 and 2018, respectively. Note 3 explains the Group’s accounting policies in relation to exploration activity.

The geographical distribution of the costs taken to the income statement in respect of exploration activities (see Note 3) is as follows:

	€ Million	
	2019	2018
Europe	134	213
America	143	143
Africa	111	146
Asia	403	108
Oceania	125	17
TOTAL	916	627

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

20.7) Gains/(losses) on disposal of assets

No significant assets were disposed of in 2019 or 2018. These headings include translation differences recognized in the income statement for the abandonment of assets.

20.8) Transport and freights and other operating expenses

The higher costs under "*Transport and freight*" reflect the rise in prices for ship charters.

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

	€ Million	
	2019	2018
Operator expenses ⁽¹⁾	613	605
Services of independent professionals	537	506
Leases ⁽²⁾	170	307
Taxes ⁽³⁾	433	423
Taxes on production	154	159
Other	279	264
Repair and upkeep ⁽⁴⁾	272	271
Measurement of trade derivatives ⁽⁵⁾	305	126
Consumption of CO ₂ allowances ⁽⁶⁾	325	116
Others ⁽⁷⁾	2,100	1,342
TOTAL	4,755	3,696

Note: In order to minimize transport costs and optimize the Group's logistics chain, oil product exchanges of a similar nature are carried out with other companies in different geographical locations. These transactions are not recognized in the income statement for the year as individual purchases and sales, but rather any economic differences are recognized at their net amount.

- ⁽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⁾ In 2019, it included expenses for short-term and low-value leases (€127 million) and for variable payments (€43 million).
- ⁽³⁾ They correspond to taxes other than income tax (see Note 23). Taxes on hydrocarbon production in *Upstream* activities have been paid mainly in Libya, Algeria and Peru. The other taxes reflect mainly local taxes. For further information on taxes paid, please refer to section 6.7 of the Consolidated Management Report (www.repsol.com) and the report on payments to public authorities published by the Company, which is also available at www.repsol.com.
- ⁽⁴⁾ Relates to repair, upkeep and maintenance activities carried out mainly at the Group's industrial complexes.
- ⁽⁵⁾ Relates mainly to derivatives arranged in trading activities involving crude oil, gas, oil products and electricity (see Note 10).
- ⁽⁶⁾ See Note 31.2.
- ⁽⁷⁾ Includes, among others, the provisions (see Note 15). The increase in 2019 is explained, among others, by the provision to cover litigious risks (see Note 15).

The decrease in "*Leases*" in 2019 is due to the application of new criteria for recognizing rights of use arising from leases in accordance with IFRS 16; the expense relating to the leases affected is now reflected as amortization of rights of use and as a financial expense (see Notes 13 and 22).

"*Consumption of CO₂ allowances*" increased as a result of the rise in prices for CO₂ emission allowances and the inclusion of the Viesgo businesses (see Note 31.2).

(21) ASSET IMPAIRMENT

21.1) Asset impairment test

The Group has assessed the recoverable amount of its cash-generating units as per the methodology described in Note 3 and the scenarios consistent with its new vision of the market, the expected environment and the new strategic approach. The main assumptions are described below:

a) Price trend:

In 2019, medium- and long-term dynamics in the oil and gas markets have been consolidated, leading to revised expectations for crude oil prices and, especially, gas prices: in particular, the abundant gas production in North America associated with unconventional fields (shale gas, gas associated with tight oil), new gas discoveries in other parts of the world, new trends in the global gas markets (development of LNG projects and less demand, especially in China) and in the oil market (increase in production and world reserves despite OPEC's supply-restricting policies).

In addition, the general nature of the public policies and commitments aimed at the decarbonization of the economy and, therefore, at restricting the use of fossil fuels and the development of new alternative technologies that drive the energy transition and will mean a reduction in the demand for hydrocarbon products in the medium and long term should be noted.

This will require companies to have a strategy in place to adapt to the energy transition that Repsol, following the analysis of its Board of Directors, has already begun by assuming decarbonization obligations that are in line with the climate change objectives of the Paris Agreement and the UN Sustainable Development Goals³⁶.

It is against this new backdrop that the adaptation of the future crude oil and gas price forecasts for the 2019 impairment test must be understood:

	2020	2021	2022	2023	2024	2025	2030	2035	Subsequent
Brent (\$/ barrel)	65	69	70	71	72	74	81	87	87
WTI	59	65	67	68	69	71	78	84	Brent -3 \$/bbl
HH (\$/ Mbtu)	3	3	3	3	3	3	4	5	+2%
CO ₂ (\$/Tn)	28	30	33	35	38	40	50	60	(1)

(1) Further growth to reach \$70/ton by 2040. The assumptions relate to the prices of emission allowances under the current EU ETS mechanism. Specific assumptions have been developed for other countries with emission allowances or CO₂ taxes.

This new price trend for crude oil and gas is in line with the IEA's Sustainable Development scenarios (*World Economic Outlook 2019*, published in November 2019) -which has the most complete models and has carried out the most exhaustive work to develop scenarios that would allow a universal supply of clean and affordable energy compatible with the reduction in CO₂ emissions required by COP21-, the main assumptions and conclusions of which regarding demand and supply dynamics coincide with those reached by Repsol as indicated above.

b) Discount rates :

	2019	2018
UPSTREAM ⁽¹⁾		
Latin America-Caribbean	7.5% - 37.6%	7.7% - 37.6%
Europe, Africa and Brazil	7.3% - 13.1%	6.9% - 11.8%
North America	8.0%	8.2% - 8.3%
Asia and Russia	7.6% - 10.1%	8.2% - 10.7%
DOWNSTREAM ⁽²⁾	4.2% - 9.0%	3.7% - 9.3%

(1) Discount rates in US dollars.

(2) Discount rates in euros and US dollars.

c) Impairment recognized

In 2019 provisions have been recognized for the impairment of the Group's assets in these balance sheet headings:

€ Million	Notes	Total
Goodwill	12 and 21	868
Other intangible assets ⁽¹⁾	21	245
Property, plant and equipment ⁽¹⁾	21	3,955
Investments accounted for using the equity method ⁽²⁾	14 and 21	396
Onerous charges	15	73
Deferred tax assets	23	574

(1) It does not include impairment losses on unsuccessful exploratory investments (see Note 3.4.2) amounting to €118 million, recognized in the normal course of operations (apart from the annual calculation of the recoverable amount of the assets).

(2) Net of tax.

Provisions, net of reversals, amounted to €6,111 million before tax (€4,867 million after tax); mainly corresponding to extraordinary write-offs arising from the impairment test at the end of the year under the new price scenarios and geopolitical environment described in the previous section (€4,849 million after tax).

Upstream assets

The Group has recognized net impairment losses, before tax, on its *Upstream assets*³⁷ amounting to -€5,694 million, which mainly affect:

- North America (-€3,572 million)³⁸: mainly in gas production assets in the US and Canada as a result of lower expected gas prices and the review of the business plans for the assets to respond to the new environment.

³⁶ See Note 2.4 and section 2.4 in the 2019 Consolidated Management Report

³⁷ This relates to the impairment losses recognized under "Goodwill", "Other intangible assets", "Property, plant and equipment" and "Investments accounted for using the equity method" before tax.

³⁸ In 2018, impairment losses in North America amounted to -€479 million as a result of reduced production volumes and lower prices.

- Latin America (-€414 million)³⁹: mainly in Trinidad and Tobago as a result of lower gas prices, and in Colombia as a result of delays on the part of the operator in the development plans.
- Europe, Africa and Brazil (-€209 million): mainly in Spain due to expectations of reduced activity and in Algeria due to lower gas prices.
- Exploratory and development assets (-€786 million): mainly in Vietnam, Algeria and Papua New Guinea. The new price scenarios do not allow a favorable conclusion on the commercial viability of certain exploratory licenses and drilling capitalized, some of which are also subject to geopolitical uncertainties.
- Goodwill (-€793 million): associated with the business combination of ROGCI (see Note 12).

Also, deferred tax assets allocated to this segment were reduced by -€470 million (see Note 23).

The recoverable amount of the assets impaired during the period amounted to €11,663 million.

Downstream assets

An impairment loss before tax of €229 million (net of the provision for onerous charges) recognized for the Gas & Trading business in North America (mainly the Canaport regasification plant and the gas pipelines for transporting gas in North America) was reversed due to the expected changes in the net interest margins for gas.

Deferred tax assets have also been reduced by -€104 million (see Note 23).

In the rest of the Downstream segment, the new scenarios assumed, in the context of decarbonization and energy transition envisaged, consider an environment marked by a reduction in the demand for oil products and fuels and an increase in the expected cost of CO₂ emissions. The quality of the assets and the capacity of the business models to adapt to the new strategic approach mean that, even in the new and demanding scenarios, no significant impairment losses were observed during the year.

21.2) Sensitivities

A change in the estimated future price curves and discount rates used would affect the amount of the impairment of the Repsol Group assets. The principal sensitivities to these variations without taking into account 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:

	Increase (+) / decrease (-)	€ Million	
		Operating income	Net income
Change in hydrocarbons prices and production ⁽¹⁾	+10% (prices) / +5% (production)	2,597	2,390
	-10% (prices) / -5% (production)	(3,261)	(2,978)
Changes in margins and volumes ⁽²⁾	+5%	108	82
	-5%	(761)	(570)
Change in discount rate	+100 p.b.	(780)	(646)
	-100 p.b.	728	604

⁽¹⁾ Relates to the productive assets in the *Upstream* segment.

⁽²⁾ Relates primarily to the industrial businesses in the *Downstream* segment.

21.3) Geopolitical risks⁴⁰

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.) and that may have a negative impact on its business.

According to the ratings in the *Country Risk Rating of IHS Global Insight* and the *Country Risk Score of the Economist Group*, the

³⁹ In 2018, impairment losses in Latin America corresponded to assets in Venezuela (see Notes 14 and 21) due to the increase in discount rates as a result of changes in country risk indicators.

⁴⁰ 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.

Repsol Group is exposed to a particular geopolitical risk in Venezuela, Libya and Algeria. In addition, Vietnam has been added because the activities have been affected by the territorial conflict in the South China Seas.

Venezuela

Repsol's equity exposure⁴¹ in Venezuela at December 31, 2019 amounted to €239 million, which includes mainly the financing granted to its Venezuelan subsidiaries^{42,43} (see Note 9). At December 31, 2018 this line item amounted to €456 million. This reduction is explained by trade payables, as well as the revaluation of the credit risk for expected loss relating to PDVSA's debts to Group entities (see Notes 11 and 16).

In 2019, the situation of political instability, economic recession (GDP⁴⁴ dropped by 40% in 2019) and inflation⁴⁵ (7.374%⁴⁶ in 2019 and it is expected to be 3,000% in 2020) continues and, therefore, the State of Economic Emergency has been extended. Oil production has declined significantly in recent years. There was a significant devaluation of the Venezuelan currency against the euro (€52,231/BsS compared to €730/BsS at December 31, 2018, the SIMECA exchange rate) with no significant impact on the Group's financial statements, since the functional currency of its subsidiaries in the country is the US dollar, except in the case of Quiriquire Gas⁴⁷ (see Note 14).

In 2019 new sanctions were imposed against Venezuela. In particular, on January 28, 2019 the US extended the sanctions against PDVSA by including it on the "Specially Designated Nationals and Blocked Persons List" ("SDN List"). In addition, on April 17, 2019, the United States also included the Central Bank of Venezuela on the SDN List. This implies a prohibition for "US Persons"⁴⁸ to transact with PDVSA, the Central Bank of Venezuela and/or any of its controlled companies (interest greater than or equal to 50%) and an obligation to block their assets. Finally, on August 5, 2019, the United States issued the Executive Order on Blocking Property of the Government of Venezuela, ordering US Persons to freeze all assets of the Government of Venezuela and of any entity owned, controlled or acting on behalf of the Government of Venezuela that are in their possession or within US territory. The US has granted certain time limits to facilitate the orderly termination of transactions by granting various general licenses. Repsol has adopted the measures necessary to continue its activity in Venezuela, including the periodic reception of crude oil in payment of debts, with full respect for international regulations regarding sanctions, and is constantly monitoring its development and, therefore, any possible effects it may have on the aforementioned activities. These updates have not had a significant impact on the Group.

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 entered into force on January 1, 2019 and affects the determination and payment of all national taxes. The main impact recognized in 2018 was the cancellation of deferred tax assets in companies accounted for using the equity method. In the future, the Decree could simplify the determination of income tax and eliminate the negative impact on this tax as a result of from future devaluations.

The Group has assessed the recoverability of its investments and the credit risk on accounts receivable from PDVSA. As a result, the Group has recognized provisions for the credit profile of PDVSA and for the deterioration of the business environment in

⁴¹ Equity exposure relates to net consolidated assets exposed to own risks of the countries reported.

⁴² 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 part of the net investment of this company.

⁴³ 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) the 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 hydrocarbon production of the mixed-ownership company via transfer to Petroquiriquire, S.A. of payments arising from crude oil sale contracts to off-takers or through outright cash payments in an amount sufficient for the mixed-ownership company to meet its capital and operating expenditures 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, 2019, drawdowns for this credit facility amounted to \$831 million.

⁴⁴ Source: Estimate from the International Monetary Fund.

⁴⁵ The Central Bank of Venezuela has not officially released a cumulative inflation figure since 2016.

⁴⁶ National Price Index of the National Assembly (INPCAN).

⁴⁷ The reference currency for the operating income and expenses of Quiriquire Gas is the bolivar (its investment is zero, so any effect arising from the translation of the bolivar to the euro is not significant).

⁴⁸ "US Persons" will be understood as any US citizen or permanent foreign resident (green card holders), regardless of where they are located; companies organized under the laws of the US (including branches located abroad and any company controlled by a "US Person"); and any person that is physically located in US territory.

Venezuela, which affects the value of the financing instruments and accounts receivable from PDVSA (-€97 million)⁴⁹ as well as the value of the investments accounted for using the equity method (-€83 million).

Libya

Repsol's equity exposure in Libya as of December 31, 2019 amounts to about €327 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, 2019, Repsol has acreage on two contractual areas (with exploration and production activities) located in the Murzuq basin in the Sahara desert and whose proved reserves amount to 77.3 million barrels of oil equivalent.

The uncertainty regarding Libya's political future continues following the clashes for control over Tripoli between General Haftar's Libyan National Army (LNA) and the forces loyal to the GNA (the official government established in Tripoli and backed by the United Nations). The deterioration in the security situation continues to affect the prospects of its oil industry, though the country has recovered part of its oil production and exports.

As a consequence of the security conditions, during 2019 there have been intermittent shutdowns of production in Libya. Repsol's net crude oil production in 2019 amounted to 29 thousand barrels of oil per day (vs. 35.7 thousand barrels of oil per day during the same period in 2018). Shutdowns in production continues in 2020.

Algeria

Repsol's equity exposure in Argelia at December 31, 2019 amounted to about €673 million (including mainly property, plant and equipment at that date). This was lower than at December 31, 2018 after the impairment recognized in profit and loss (see Note 21.1).

In Algeria, Repsol has three blocks in the production/development phase (Reggane Nord, block 405a (with the MLN, EMK and Ourhoud licenses) and Tin Fouyé Tabankort (TFT)). It also had a block in the exploration phase (S.E. Illizi), the license for which ended on December 31, 2019.

Net average production in Argelia in 2019 came to 31.5 thousand barrels of oil equivalent per day (21.4 kboe in 2018) from Reggane Nord, block 405a and TFT.

The estimated net proved reserves at December 31, 2019 amount to 49.6 million barrels of oil equivalent. Around 34% of the net proved reserves refer to the gas production project at Reggane, which is located in the Algerian Sahara in the Reggane basin. Repsol holds a 29,25% interest 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 net production of the Reggane project in 2019 amounted to 8.2 thousand barrels of oil equivalent per day.

The social protests that began on February 22, 2019 led to the resignation of President Abdelaziz Boutefflika. Given the peaceful nature of most of these protests so far, they are not expected to have a significant impact at the operational level on the activities of the Oil & Gas industry, beyond a slowdown in the decision-making process, as a result of the current transition period and the institutional reorganization that is taking place following the elections called for December 12, 2019, the winner of which was former Prime Minister Abdelmayid Tebune.

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 km², (*Thang Long JOC*), one under development over 1,236 km² (*Ca Rong Do*) and four in the exploration phase, over a net surface area of 72,248 km² (among them blocks 135-136/03). Net average production in 2019 came to 5 thousand barrels of oil equivalent per day (6.5 barrels of oil equivalent per day in 2018). Net proved reserves at December 31, 2019 amounted to 1.9 million barrels of oil equivalent per day. Equity exposure of Repsol in Vietnam at December 31, 2019 amounts to about €602 million, down from €951 million in 2018, following the impairment loss recognized in the income statement (see Notes 16 and 21.1).

In March 22, 2018 Repsol received instructions from PetroVietnam to refrain, for the time being, from performing the programmed activities as part of the Ca Rong Do development project, located in the South China Sea. Furthermore, in July

⁴⁹ Recognized under "Provision for/(Reversal of) provisions for impairment" (see Note 20.4) and "Impairment of financial instruments" (see Note 21) in the income statement.

2017, PetroVietnam instructed Repsol to stop CKN-1X drilling activities in exploratory blocks 135-136/03, also located in the South China Sea. The duration of the suspension of activity has yet to be determined, and the Group is working with PetroVietnam to find actions that can be taken to satisfy the interests of both parties, allowing them to reach an amicable solution to the conflict. Repsol has initiated an arbitration process in defense of its rights and considers that it has solid legal grounds to claim compensation for the damages that could arise from this situation, as well as good prospects of success, both in the claim and in the recovery of the damages.

BREXIT

In the referendum held on June 23, 2016, the United Kingdom approved its exit from the European Union. After the absolute majority victory of the conservative party in the elections on December 12, 2019, Parliament voted in favor of the draft bill of the withdrawal agreement, which was finally approved. The UK left the EU on January 31, 2020. The exit from the EU is the first step in a process that will last from one to three years, during which the new government will have to try to reach a new trade agreement with the EU.

The European Union Emission Trade System (EU ETS)⁵⁰ is being affected by BREXIT, due to the fact that the European Commission decided to suspend any free allocation of benefits involving the United Kingdom. The economic impact of this is still unknown.

With regard to the extraction, transport and sale of hydrocarbons, no substantial changes are expected, as the British government has always had sovereignty and control over the key aspects for the sector, such as the licensing of mineral concessions and the tax framework for the activities of oil companies. The messages received by the sector during the Brexit process is one of regulatory stability.

The Group's exposure in the United Kingdom is limited mainly to its interest in Repsol Sinopec Resources UK Limited (RSRUK), which operates a mature business engaging in hydrocarbon exploration and production activities and whose functional currency is the US dollar, meaning that even under the most extreme Brexit scenarios no significant risks have been detected.

(22) FINANCIAL RESULT

The financial result has worsened mainly due to the comparison with the significant gains obtained in 2018 from specific positions in US dollars in a context of favorable developments in the exchange rate, mitigated by lower impairment losses on financial instruments in 2019 (in 2018 financial assets exposed to risks in Venezuela were impaired).

The breakdown of financial income and expenses in 2019 and 2018 is as follows:

€ Million	2019	2018
Financial income ⁽¹⁾	148	177
Financial expenses	(391)	(407)
Net interest	(243)	(230)
By interest rate	59	40
By exchange rate	98	87
Other positions	59	73
Change in fair value of financial instruments ⁽²⁾	216	200
Exchange gains/(losses) ⁽³⁾	(27)	467
Impairment of financial instruments ⁽⁴⁾	6	(370)
Adjustment for provision discounting	(105)	(94)
Interim interest	78	72
Lease liabilities	(185)	(133)
Gains/(losses) on disposal of financial instruments	—	(10)
Others	(41)	(75)
Other financial income and expenses	(253)	(240)
FINANCIAL RESULT	(301)	(173)

⁽¹⁾ Includes interest income from financial instruments valued at amortized cost in the amount of €146 million (€176 million in 2018).

⁽²⁾ Includes the results from the valuation and settlement of derivative financial instruments (see Note 10). "Other provisions" includes the results from the settlement of derivatives on treasury shares (see Note 7.2).

⁽³⁾ Includes the exchange gains and losses generated by the valuation and settlement of monetary items in foreign currency. The improvement compared to 2018 is explained by exchange differences arising from the impact of changes in 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 21.3).

⁵⁰ Under the multilateral trading system for greenhouse gas emissions, each Member State has a National Emission Allowance Allocation Plan that specifies a basket of greenhouse gas emissions, so that in order to comply with the Plan, companies can reduce their emissions by adjusting to the allowances allocated free of charge or turning to the market to cover their deficit.

(23) TAXES

23.1) Applicable taxes

With regard to taxation and, particularly, income tax, the 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 companies comprising the Group.

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 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. The aforementioned Consolidated Tax Group was composed of 65 companies in 2019, the most significant of which are: Repsol, S.A., Repsol Petróleo, S.A., Repsol Trading, S.A., Repsol Química, S.A., Repsol Butano, S.A., Repsol Exploración, S.A., Repsol Comercial de Productos Petrolíferos, S.A. and Repsol Electricidad y Gas, S.A.

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.

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 have been taxed at the general rate of 25% in 2019, 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 regime of Vizcaya, is taxed at 24%.

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, with the permanent establishments of the Spanish companies that carry out hydrocarbon 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	Country	Tax rate
Algeria ⁽¹⁾	38%	Norway	78%
Bolivia	25%	The Netherlands	25%
Canada ⁽²⁾	27%	Peru	29,5%
Colombia	33%	Portugal	22,5% - 31,5%
Ecuador	22%	United Kingdom	40%
United States ⁽³⁾	21%	Singapore	17%
Indonesia	32,5% - 48%	Trinidad and Tobago	55% - 57,2%
Libya	65%	Venezuela	34% (Gas) and 50% (Oil)
Malaysia	38%	Vietnam	32% - 50%

⁽¹⁾ Plus tax on exceptional profits (TPE).

⁽²⁾ Federal and provincial rate.

⁽³⁾ Does not include state taxes.

23.2) Accrued income tax expense

The table below shows how the income tax expense accrued for accounting purposes in 2019 and 2018 was calculated:

	€ Million	
	2019	2018
Current tax for the year	(948)	(1,028)
Adjustments to current tax ⁽¹⁾	(184)	(178)
Current income tax (a)	(1,132)	(1,206)
Deferred tax for the year	979	(135)
Adjustments to deferred tax ⁽²⁾	(435)	(45)
Deferred income tax (b)	544	(180)
Income tax (expense)/income(a+b)	(588)	(1,386)

⁽¹⁾ Includes changes in tax provisions amounting to -€85 million and other current tax adjustments amounting to -€99 million.

⁽²⁾ Includes the derecognition of deferred tax assets amounting to -€574 million and other deferred tax adjustments amounting to €139 million.

The reconciliation of "Income tax expense" recognised 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 income before tax and investees is as follows:

	€ Million	
	2019	2018
Net income before tax	(3,201)	3,333
Net income from investments accounted for using the equity method	351	1,053
Net income before tax and before considering the net income of companies accounted for using the equity	(3,552)	2,280
General nominal income tax rate in Spain	25 %	25 %
Income tax (expense)/income at the general nominal income tax rate in Spain	888	(570)
Income/(expense) taxed at different nominal rates than the general Spanish rate	(385)	(543)
Non-deductible expenses ⁽²⁾	(620)	(173)
Mechanisms to avoid double taxation ⁽¹⁾	116	78
Tax credits and incentives ⁽³⁾	67	38
Revaluation deferred taxes ⁽⁴⁾	(536)	112
Income tax risk provisions	(85)	(214)
Other items	(33)	(114)
Income tax (expense)/income	(588)	(1,386)

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

⁽²⁾ Corresponds mainly to accounting provisions that are not tax deductible (in 2019 the most noteworthy were those for impairment of assets recognized described in Note 21).

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

⁽⁴⁾ Includes the derecognition of deferred tax assets (€574 million in 2019) that have not passed the recoverability test in the new scenarios of lower oil and gas prices used in calculating the recoverable amount of the assets (see Note 23.3).

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	2019	2018
Losses, tax credits and similar benefits not yet used	3,193	3,671
Amortization differences for tax and accounting purposes	(1,648)	(2,688)
Provisions for decommissioning fields (non-deductible)	617	712
Staff and other non-deductible provisions	555	593
Other deferred taxes	507	575
Total deferred tax	3,224	2,863
Provisions for contingencies related to income tax ⁽¹⁾	(1,549)	(1,307)
Net deferred tax and other taxes	1,675	1,556

⁽¹⁾ The changes in provisions for contingencies related to income tax is as follows: (i) provisions/reversals charged to profit or loss, -€85 million; (ii) first-time application of IFRIC 23, -€79 million (see Note 3.2.1); (iii) reclassifications, €82 million; and (iv) translation and other differences, €4 million.

The tax assets recognized corresponding to tax losses and tax loss carryforwards amount to €3,193 million and correspond mainly to:

Country	€ Million	Legal expiry	Estimated recoverability
Spain	1,555	No time limit	In less than 10 years
United States	1,042	20 years	Mostly in 10 years
Canada	326	20 years	Mostly in 10 years
Other	270	-	-
Total	3,193		

Below is a breakdown of changes in deferred tax:

€ Million	2019	2018
Opening balance for the year	2,863	3,006
Impact of the new standards (Note 3.2.1)	13	91
Adjusted opening balance	2,876	3,097
Income (expense) in income statement	550	(190)
Income (expense) in equity	(7)	20
Translation differences or balances in foreign currency	(41)	39
Other items	(154)	(103)
Balance at year end	3,224	2,863

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 reporting date, the recognized deferred tax assets are reassessed to verify that they still qualify for recognition and they are considered to be recoverable in the future, and the appropriate adjustments are made on the basis of the outcome of the analyses performed. These analyses are based on: (i) the construction of assumptions 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.

In this regard, in 2019 the new scenarios of lower crude oil and gas prices determined for the asset impairment test made it difficult to justify the full recovery in the short/medium term of certain deferred tax assets associated with the impaired assets in North America (see Note 21) and, therefore, the Group has reduced the deferred tax assets recognized by €574 million.

The Group has deferred tax assets not recognized of €3,885 million and €3,390 million at 2019 and 2018, respectively.

The Group has deferred tax liabilities not recognized of €95 million and €94 million at year-end 2019 and 2018, 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 elapsed.

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	Country	Years
Algeria	2014 - 2018	Malaysia	2014 - 2018
Australia	2014 - 2018	Norway	2016 - 2018
Bolivia	2013 - 2018	The Netherlands	2017 - 2018
Canada	2013 - 2018	Papua New Guinea	2015 - 2018
Colombia	2013 - 2018	Peru	2014 - 2018
Ecuador	2015 - 2018	Portugal	2015 - 2018
Spain	2015 - 2018	United Kingdom	2012 - 2018
United States	2015 - 2018	Singapore	2014 - 2018
Indonesia	2013 - 2018	Trinidad and Tobago	2014 - 2018
Libya	2011 - 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 available 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.

As a general rule, the Group recognizes 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.

In view of the uncertainty generated by the materialization of existing tax risks associated with litigation and other tax contingencies, the Group has recognized provisions that are considered adequate to cover the aforementioned risks. At December 31, 2019, the Group recognized €1,549 million relating to uncertain income tax positions (€1,390 million at December 31, 2018). In addition, it recognized other tax provisions amounting to €131 million (€83 million at December 31, 2018), which are presented under "Other provisions" in Note 15.

At December 31, the main tax-related proceedings concerning the Repsol Group were as follows:

Bolivia

YPFB Andina, S.A. is involved in a lawsuit regarding the deductibility of royalty payments and hydrocarbon shares from the Company's income tax. This lawsuit is currently awaiting a ruling at second instance. The Company believes, despite the ruling handed down at first instance in 2019, that its position is expressly supported by law.

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 2008 to 2012, in connection with payments to foreign companies for charter contracts for exploration platforms and related services used in the blocks. All of the proceedings have been appealed and are either in the administrative (2009-2012) or judicial review process.

Likewise, Repsol Sinopec Brasil received notification of assessments for the same items and taxes (2009 and 2011), in connection with payments to foreign companies for contracts for exploration charters and related services used in blocks BMS 48, BMS 55, BMES 29 and BMC 33, in which Repsol Sinopec Brasil is the operator. The assessments have been appealed either through the administrative review process (2011) or judicial review process at first instance (2009). The Company considers that its actions are in accordance with the law and are in line with general practice in the sector.

These lawsuits are currently limited to CIDE and PIS/COFINS, after the company availed itself of a program authorized by Law 13,586/17, which made it possible to reduce the amount in dispute regarding personal income tax (IRRF) through the retroactive application of the price determination percentages (split) contained in this Law, abandoning the lawsuits in progress and without any penalties being applicable.

Canada

The Canadian Revenue Agency (CRA) periodically reviews the tax situation of the companies of Repsol Oil&Gas Canada Inc. (ROGCI, formerly Talisman Group, acquired by Repsol in 2015) resident in Canada. In recent years, and by applying good tax practices, Repsol has obtained a rating for ROGCI as a low-risk taxpayer, which has allowed it to reach agreements with the CRA to resolve existing disputes and avoid uncertain disputes. International operations from 2010 to 2016 and corporate income tax for 2015 and 2016 are currently being reviewed.

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 actions. In relation to the transfer price adjustments, the settlements have been annulled as a consequence of the resolution of a dispute by the Arbitration Board of the Economic Agreement with the Basque Country, the resolution of an amicable procedure with the US and two ruling handed down by the Central Economic Administrative Tribunal; which is why the inspection authorities must issue new assessments 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 the Company has appealed to the National High Court for the aspects that were not upheld (tax incentives for R&D, deduction of losses on overseas business), as the Company believes it has acted within the law.

- Financial years 2010 to 2013. The actions were concluded in 2017 without any penalties being imposed and, for the large part, by means of assessments signed on an uncontested basis 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 deduction of losses on overseas business,) the administrative decision has been subject to appeal, as the Company believes it has acted within the law. Currently, the claims are still in the administrative review process, and a ruling has yet to be handed down by the Central Economic Administrative Tribunal.
- Financial years 2014 to 2016. The audit ended in December 2019 without the imposition of any penalty and, for the most part, with assessments signed on an uncontested basis or agreements that did not generate significant liabilities for the Group. However, there are still disputes regarding the deduction of losses for foreign investments and the corresponding claim has been filed against the administrative ruling, since the Company believes that its actions have been in accordance with the law.

Indonesia

The Indonesian tax authorities have been questioning various aspects regarding the taxation of the profits of the permanent establishments that the Group has in the country, in particular with regard to the application of the reduced rate of the double taxation treaties signed by Indonesia. The company considers that its actions are in line with general practice in the sector and are in accordance with the law and, therefore, the disputes on which the aforementioned actions are based are being appealed through administrative proceedings or a ruling has yet to be handed down by the courts.

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) with regard to 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 have received a refund of the taxes initially retained by the IRB. In addition, these entities received an assessment from the IRB for 2014 questioning the deductibility of certain expenses. The assessments were appealed in January 2020 as the Company considered that its actions were in accordance with the law.

The Company does not expect any additional liabilities to arise that could have a significant impact on the Group's profit as a result of the above proceedings.

(24) NET INCOME FROM DISCONTINUED OPERATIONS

In 2018, "Net income from discontinued operations", net of taxes, included the results of the disposal of the holding in Naturgy (€344 million), as well as the profit generated by Naturgy until February 22, 2018, when it was reclassified as held for sale, for an amount of €68 million.

(25) EARNINGS PER SHARE

The earnings per share at December 31, 2019 and 2018 are detailed below:

Earnings per share (EPS)	2019	2018
Net income attributed to the parent ⁽¹⁾ (€ million)	(3,816)	2,341
Adjustment to the interest expense on subordinated perpetual bonds (€ million)	(29)	(29)
Weighted average number of shares outstanding (millions of shares) ⁽²⁾	1,548	1,671
Basic and diluted earnings per share (euros/share)	(2.48)	1.38

⁽¹⁾ In 2018 it includes the net income attributed to the parent company corresponding to discontinued operations amounting to €412 million, equal to an EPS of €0.26 per share.

⁽²⁾ The outstanding share capital at December 31, 2018 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 remuneration program, as per the applicable accounts regulations (see Note 3.2.2).

CASH FLOWS

(26) CASH FLOWS⁵¹

26.1) Cash flow from operating activities

During 2019 the net cash flow from operating activities amounted to €4,849 million, which represents an increase of 6% with respect to 2018. Part of this improvement is explained by the positive impact of the application of IFRS 16 (see Note 3.2.1), since in 2019 lease expenses are reflected in the income statement as amortization and financial expenses in the cash flows of the corresponding payments as cash flows from financing activities.

The breakdown of "Cash flows from operating activities" in the statement of cash flows is as follows:

	Notes	€ Million	
		2019	2018
Net income before tax		(3,201)	3,333
Adjusted result:		8,632	2,360
Amortization of non-current assets	3, 12 and 13	2,434	2,140
Operating provisions	11.3, 15 and 21	6,600	1,235
Net income from the disposal of assets	5 and 21	(147)	(62)
Financial result	22	301	173
Share of results of companies accounted for using the equity method, net of taxes	14	(351)	(1,053)
Other adjustments (net)		(205)	(73)
Changes in working capital:		137	(389)
Increase/Decrease in accounts receivable	18	276	119
Increase/Decrease in inventories	17	(182)	(531)
Increase/Decrease in accounts payable	19	43	23
Other cash flows from operating activities:		(719)	(725)
Dividends received		464	472
Income tax refunded/(paid) ⁽¹⁾		(975)	(762)
Other proceeds from/(payments for) operating activities ⁽²⁾		(208)	(435)
Cash flows from operating activities		4,849	4,579

⁽¹⁾ In 2019, the tax payments in Spain (installment payments for tax group 6/80), Libya and Indonesia are noteworthy of mention. For further information on the Group's tax contribution, see section 6.6 of the 2019 Consolidated Management Report.

⁽²⁾ Includes mainly payments for the application of provisions (see Note 15).

26.2) Cash flows from investing activities

During 2019 the net cash flow from investing activities resulted in the net payment of €4,407 million.

"Payments for/proceeds from investments in Group and associates" amount to -€90 million.

"Payments for/proceeds from investments in property, plant and equipment, intangible assets and property investments" came to -€3,094 million and primarily corresponds to investments in the *Upstream* segment in North America (which include the acquisition of a 63% interest in the assets of Eagle Ford, see Note 5), Norway and in the Exploration segment, and in the *Downstream* segment, those investments made for the upgrading and maintenance of the industrial complexes, Refining and Chemical businesses, as well as the undertakings for the international expansion of the commercial businesses in Mexico (service stations in the Mobility business) and Indonesia (acquisition of 40% of United Oil Company) and in the renewable projects in Spain. For additional information, see sections 4.1, 5.1 and 5.2 of the Consolidated Management Report.

"Payments for/proceeds from investments in other financial assets" came to -€1,311 million, corresponding to the arrangement of deposits and the changes in loans extended to joint ventures.

⁵¹ 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.

26.3) Cash flows from financing activities

In 2019 the net cash flow from financing activities resulted in the net payment of €2,289 million, which represents a decrease of 25% with respect to 2018. The lower net payments for financial liability instruments with respect to 2018 (issue of a bond of €750 million in 2019 - none in 2018 - and higher bond maturities and early redemptions in 2018) and the lower average cost and volume of debt were partially offset by greater treasury share purchases and shareholder remuneration (see Note 7) and by the impact of lease payments and interest under IFRS 16 (see Note 3.2.1), payments previously recognized in cash flows from operating activities.

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

	€ Million					Closing balance ⁽¹⁾
	2018	2019				
	Opening balance ⁽¹⁾	Cash flows	Other cash flows			
		Exchange rate effect	Changes in FV	Others ⁽³⁾		
Bank borrowings	1,912	215	34	—	84	2,245
Bonds and other marketable securities	8,098	(365)	16	—	171	7,920
Derivatives (liabilities)	106	(466)	8	461	9	118
Loans ⁽²⁾	3,449	276	66	—	124	3,915
Other financial liabilities	116	9	2	—	9	136
Lease liabilities	1,624	(425)	44	—	1,890	3,133
Remunerations to shareholders and perpetual bonds	1,204	(396)	—	—	329	1,137
Treasury shares and own equity instruments	(350)	(1,844)	—	—	1,024	(1,170)
Total liabilities from financing activities	16,159	(2,996)	170	461	3,640	17,434
Derivatives (assets)	(77)	634	(5)	(662)	—	(110)
Other proceeds from/payments for financing activities ⁽⁴⁾	—	73	—	—	—	73
Total other assets and liabilities	(77)	707	(5)	(662)	—	(37)
Total	16,082	(2,289)	165	(201)	3,640	17,397

⁽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 redemption of treasury shares amounting to €1,024 million (see Note 7.3), the increase in liabilities due to the first-time application of IFRS 16 (see Note 3.2.1), the addition of leases, and the accrual of interest and dividends.

⁽⁴⁾ Includes mainly the proceeds from/payments for short-term financing granted in the amount of €69 million (€24 million in 2018).

OTHER DISCLOSURES

(27) COMMITMENTS AND GUARANTEES

27.1) Contractual commitments

At December 31, 2019, the Group has contractually committed to the following purchases, investment and other expenditures:

€ Million	2020	2021	2022	2023	2024	Subsequent years	Total
Purchase commitments	4,367	1,209	991	1,139	1,283	19,816	28,805
Crude oil and others ^{(1) (3)}	3,325	404	392	392	393	3,652	8,558
Natural gas ^{(2) (3)}	1,042	805	599	747	890	16,164	20,247
Investment commitments ⁽⁴⁾	804	320	132	82	82	145	1,565
Provision of services ⁽⁵⁾	472	373	281	213	176	388	1,903
Transport commitments ⁽⁶⁾	209	198	173	165	131	403	1,279
TOTAL	5,852	2,100	1,577	1,599	1,672	20,752	33,552

Note: Commitments consist of future unconditional obligations (non-cancellable, or cancellable only under certain circumstances), as a result of commercial agreements. These commitments were quantified using Repsol's best estimates, and, if fixed total amounts were not stipulated, price estimates and other variables that are consistent with those considered for calculating the recoverable amount of the assets (see Notes 3 and 21).

⁽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 2020).

⁽²⁾ Primarily includes commitments to purchase liquefied natural gas (LNG) in North America (with "take or pay" clauses). In 2019 worthy of note is the contract for the supply of approximately one million tons of LNG per year for 20 years from the start-up of the Calcasieu Pass liquefaction facility (Cameron Parish, Louisiana) scheduled for 2022, signed with Venture Global LNG. These contracts are classified for accounting purposes as "own use".

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

Purchase commitments	Unit of measurement	2020	2021	2022	2023	2024	Subsequent years	Total
Crude oil	kbbl	42,445	198	187	190	187	685	43,892
Natural gas								
Natural gas	Tbtu	193	151	8	8	7	13	380
Liquefied natural gas	Tbtu	153	127	90	118	139	2,262	2,889

⁽⁴⁾ Includes mainly investment commitments in Spain, Algeria, Norway and Bolivia amounting to €537 million, €253 million, €203 million and €191 million, respectively.

⁽⁵⁾ Includes mainly commitments associated with hydrocarbon exploration and productions activities in *Upstream* totaling €1,064 million and commitments for technological developments amounting to €325 million.

⁽⁶⁾ It includes, primarily, hydrocarbon transportation commitments in North America, Peru and Indonesia amounting to approximately €1,218 million.

27.2) Guarantees

At December 31, 2019 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 \$514 million corresponding to 100% of RSB's interest (see Note 14) 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.
 - Two additional guarantees of \$462 million and \$428 million, corresponding to the 15% interest held indirectly by the Group in Guar 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 £579 million.

In addition, in line with general industry practice, the Group grants guarantees and commitments to compensate for obligations arising in the course of ordinary activities⁵², and for any liabilities arising from its activities, including environmental liabilities⁵³ and for the sale of assets⁵⁴.

The guarantees cannot be considered a definite outflow of resources to third parties, as the majority of these guarantees 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 a liability for these commitments to any material extent is remote.

(28) 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 as % of share capital December 31, 2019 ⁽¹⁾
Sacyr, S.A. ⁽²⁾	8.03
Temasek Holdings (Private) Limited ⁽³⁾	1.5

Note: Data available to the Company at December 31, 2019 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 28.4).
- c. People, companies or entities within the Group: includes transactions with Group companies or entities that were not eliminated in the consolidation process, corresponding mainly to transactions undertaken with companies accounted for using the equity method (see Note 14).

⁵² Guarantees granted in the ordinary course of business correspond to a limited number of guarantees totaling €24 million. Environmental guarantees are provided in the normal course of hydrocarbon exploration and production activity, where the probability of occurrence of the covered contingencies is remote, and the related amounts cannot be determined. In Venezuela an undetermined guarantee has been granted to Cardón IV to cover the commitment to supply gas to Petróleos de Venezuela, S.A. (PDVSA) until 2036. However, PDVSA has provided a guarantee to Cardón IV to cover collection rights for the supply commitment. The Group has also provided a guarantee to the Republic of Venezuela to cover the obligations assumed in the development of gas assets in the country.

⁵³ Environmental guarantees are arranged in the normal course of hydrocarbon exploration and production operations, however, the probability of occurrence of the contingencies covered is remote and their amounts indeterminable.

⁵⁴ 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.

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

€ Million	2019				2018			
	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
EXPENSES AND REVENUE								
Financial expenses	—	—	123	123	7	—	90	97
Leases	—	—	—	—	1	—	1	2
Services received	29	—	70	99	20	—	87	107
Purchase of goods ⁽²⁾	—	—	1,192	1,192	—	—	1,453	1,453
Other expenses	—	—	135	135	7	—	739	746
TOTAL EXPENSES	29	—	1,520	1,549	35	—	2,370	2,405
Financial income	—	—	124	124	4	—	162	166
Services provided	5	—	4	9	6	—	1	7
Sale of goods ⁽³⁾	178	—	386	564	180	—	575	755
Other revenue	1	—	190	191	1	—	66	67
TOTAL REVENUE	184	—	704	888	191	—	804	995

€ Million	2019				2018			
	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
OTHER TRANSACTIONS								
Financing agreements: credit and contributions of capital (creditor) ⁽⁴⁾	—	—	246	246	—	—	302	302
Financing agreements: loans and contributions of capital (borrower) ⁽⁵⁾	—	—	903	903	—	—	1,082	1,082
Guarantees and sureties given ⁽⁶⁾	—	—	654	654	44	—	669	713
Guarantees and sureties received ⁽⁶⁾	7	—	4	11	7	—	—	7
Commitments assumed ⁽⁷⁾	11	—	1	12	30	—	—	30
Dividends and other profits distributed ⁽⁸⁾	109	—	—	109	92	—	—	92
Other operations ⁽⁹⁾	35	—	1,565	1,600	135	—	1,906	2,041

€ Million	2019				2018			
	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
CLOSING BALANCES								
Customer and trade receivables	2	—	128	130	2	—	181	183
Loans and credits granted	—	—	962	962	—	—	1,096	1,096
Other receivables	—	—	77	77	—	—	1	1
TOTAL RECEIVABLE BALANCES	2	—	1,167	1,169	2	—	1,278	1,280
Suppliers and trade payables	12	—	85	97	9	—	93	102
Loans and credits received	—	—	3,915	3,915	—	—	3,442	3,442
Other payment obligations ⁽¹⁰⁾	3	—	2	5	47	—	1	48
TOTAL PAYABLE BALANCES	15	—	4,002	4,017	56	—	3,536	3,592

Note: In 2018 the tables for Expenses and Revenue and Other Transactions include transactions with the Naturgy Group until May 18, 2018 (see Note 1.4) and with Caixabank until September 20, 2018, 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 dividends and other remuneration received as a result of holding shares of the Company.

⁽²⁾ In 2019 "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 €790 million and €223 million in 2019, respectively (€875 million and €395 million in 2018).

⁽³⁾ In 2019 and 2018 "Significant shareholders" includes mainly the sales of crude oil to the Temasek group. In 2019 and 2018 "Persons, companies or entities of the Group" includes mainly sales of products to Iberian Lube Base Oil, S.A. (ILBOC) and Dynasol Group for €257 million and €107 million in 2019 and €252 million and €119 million in 2018, respectively, as well as sales to the Naturgy Group.

⁽⁴⁾ Includes mainly supplies and provisions for credit risks of accounts receivable and financial instruments (see Note 11.3 and 21.3).

⁽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⁾ Include the amounts corresponding to the sale to Repsol, at the guaranteed fixed price, of bonus share rights as part of the bonus share issue closed in January and July 2019 (in the 2018 table: January and July 2018), as part of the "Repsol Flexible Dividend" shareholder remuneration program (see Note 7.3).

⁽⁹⁾ In 2019 and 2018 "People, companies or entities within the Group" includes mainly the cancellations of guarantees provided to joint ventures in the UK and financing agreements.

⁽¹⁰⁾ In 2019 and 2018 "Significant shareholders" includes the amounts corresponding to the sale to Repsol, at the guaranteed fixed price, of the bonus share rights as part of the bonus share issue closed in January 2020 and 2019. These rights are recognized as accounts payable at December 31.

(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 in the event of full or absolute permanent disability, comprehensive disability and death. In the event of full or absolute permanent disability, comprehensive disability and death, pension plans have life insurance policies with an external entity. Additionally, outside Spain, certain Group companies 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 amounted to €54 million in 2019 and €56 million in 2018.

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*” (Executive welfare plan) which covers the participant's retirement, and their full or absolute permanent disability, comprehensive disability and death. Repsol makes defined contributions based on a percentage of participants' salaries. The plan guarantees a fixed return equal to 125% the National Consumer Price Index for the previous year. The plan is instrumented through collective insurances that cover pension obligations, underwritten by an insurance company. 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 2019 and 2018 amounted to €10 million and €12 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 2019 and 2018 was €11 million and €5 million, respectively, while the related balance sheet provision at year-end 2019 and 2018 stood at €82 million and €64 million, respectively (see Note 15).

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 sustainability of the Company's medium and long-term earnings as well as compliance with the Strategic Plan, while at the same time facilitating the retention by the Group of key personnel.

At year end, the 2016-2019, 2017-2020, 2018-2021 and 2019-2022 long-term incentive plans were in force. The 2015-2018 plan was closed, as originally stipulated, on December 31, 2018 and its beneficiaries received their bonuses in 2019.

The four long-term incentive plans in effect are independent of each other but their main characteristics are the same. Fulfillment of the respective objectives tied to each plan 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, a first variable coefficient is applied to the amount determined at the time the long-term incentive is granted, on the basis of the extent to which the objectives set are achieved, and then a second variable coefficient is applied 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 plan, 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 their beneficiaries, with the exception of the Chief Executive Officer, who is partially paid in shares. In this regard, the amount of the 2016-2019 Long-Term Incentive will be paid to the Chief Executive Officer in a proportion of 70% in cash and the remaining 30% in Company shares, so that he will receive €948,484 in cash and 14,743 Company shares equal to €187,438.

In accordance with the provisions of the current Director Remuneration Policy, the final number of shares to be delivered to the Chief Executive Officer is calculated taking into account: (i) the amount that is effectively payable 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 to pay the long-term incentive for the Chief Executive Officer in each of the Plans.

To reflect the commitments assumed under these incentive plans, the Group recognized a provision charge of €20 million and €31 million in the 2019 and 2018 income statement, respectively. At December 31, 2019 and 2018, the Group had recognized provisions totaling €67 million and €70 million, respectively, to fulfill all the plans described above.

In 2020, the Company plans to implement a new Long-Term Incentive Plan, the main difference of which with the previous Plans is based on the right to receive a "cash incentive" and a certain number of "performance shares" that will give the right to receive Repsol, S.A. shares, after the measurement period of the Plan has elapsed and subject to the performance of certain metrics. This new LIP is in line with regulations, corporate governance recommendations and best market practices.

29.4) Share Purchase Plans for Beneficiaries of Long-Term Incentive and Share Acquisition Plans

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

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 the Chief Executive Officer and the other Executive Committee members) to align themselves with the long-term interests of the Company and its shareholders. If the beneficiary maintains the acquired shares for a period of three years from the initial investment and the remaining conditions of the Plan are met, the Company would deliver to the employee one additional share for every three initially acquired.

In addition, the beneficiaries considered to be Senior Management, defined to this end as the Executive Directors and the other Executive Committee members, are subject to an additional performance requirement in order to qualify for receipt of these additional shares, namely overall fulfillment of at least 75% of the targets set in the long-term incentive plan closed in the year immediately preceding that of delivery of the shares.

At the date of authorization for issue of the accompanying consolidated financial statements, the seventh, eighth and ninth cycles of this Plan were in force (2017-2020, 2018-2021 and 2019-2022); key data for these cycles are provided below:

	No. of shares	Total initial investment (no. of shares)	Average price (Eur/Share)	Maximum commitment for delivery of shares
Seventh cycle (2017-2020)	153	135,047	14.9955	44,964
Eighth cycle (2018-2021)	158	150,476	16.3021	50,160
Ninth cycle (2019-2022) ⁽¹⁾	201	246,508	14.4101	82,168

⁽¹⁾ This amount includes the shares delivered to the Executive Directors as a partial payment of the 2015-2018 LIP, amounting to 23,544. In accordance with the provisions of the Director Remuneration Policy, the shares, if any, delivered to the Executive Directors under each long-term variable remuneration plan may be calculated for the purposes of the investment in shares referred to in the Share Purchase Plan for the Beneficiaries of the Long-Term Incentive Plans.

During this ninth cycle, the current members of the Executive Committee, including the Chief Executive Officer, have acquired a total of 112,236 shares.

As a result of this Plan, at December 31, 2019 and 2018, the Group had recognized an expense under "Personnel expenses" with a balancing entry under "Other reserves" in equity of €0.5 million.

In addition, the sixth cycle of the Plan vested on June 30, 2019. As a result, the rights of 114 beneficiaries vested 39,490 shares (receiving a total of 29,563 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 16,134 shares also vested (net of the withholding retained by the Company, these individuals received a total of 11,190 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 (2011-2012 Share Acquisition Plan), May 31, 2012 (2013-2015 Share Acquisition Plan), April 30, 2015 (2016-2018 Share Acquisition Plan) and May 11, 2018 (2019-2021 Share Acquisition Plan).

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 2019 the Group purchased 643,458 shares of Repsol, S.A. amounting to €9.2 million for delivery to employees. In 2018,

under the scope of this Plan, the Group acquired 518,228 Repsol, S.A. shares for a total of €8.2 million (see Note 7).

The members of the Executive Committee acquired 6,680 shares in accordance with the plan terms and conditions in 2019.

iii.) “Global Employee Share Purchase Plan: YOUR REPSOL”

In the last quarter of 2019, the Company launched the Global Employee Share Purchase Plan “YOUR REPSOL”, aimed at all employees. This Plan allows employees to allocate a certain amount to the purchase of Company shares and receive one free share for every two initially acquired, provided that the shares are held for a period of 2 years and the other conditions of the Plan are met.

The shares to be delivered under plans i.), ii.) and iii.) may come from Repsol's direct or indirect treasury shares, be newly issued or come from third parties with which agreements have been signed to ensure that the commitments assumed are met.

(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 Bylaws, 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 in 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 May 31, 2019 is €8.5 million.

The amount of remuneration accrued in 2019 by the members of the Board of Directors in their capacity as Board members with a charge to this bylaw-stipulated emoluments amounted to €6,963 million, the detail being as follows:

Board of Directors	Remuneration of Board members relating to their position (euros)						Total
	Board	Delegate C.	Audit C.	Appoints C.	Remun. C.	Sustain. C.	
Antonio Brufau Niubó ⁽¹⁾	(1)	(1)	—	—	—	—	2,500,000
Josu Jon Imaz San Miguel	176,594	176,594	—	—	—	—	353,188
Arantza Estefanía Larrañaga ⁽²⁾	117,729	—	—	12,877	—	25,753	156,359
María Teresa García-Milá Lloveras ⁽³⁾	117,729	—	51,507	12,877	—	—	182,113
Henri Philippe Reichstul	176,594	176,594	—	—	—	—	353,188
M ^a del Carmen Ganyet i Cirera ⁽⁴⁾	176,594	—	88,297	22,074	12,877	—	299,842
Ignacio Martín San Vicente ⁽⁵⁾	176,594	176,594	—	—	9,198	—	362,386
María Teresa Ballester Fornés	176,594	—	88,297	—	22,074	—	286,965
Ángel Duráñez Adeva ⁽⁶⁾	73,581	—	36,790	9,198	9,198	—	128,767
Manuel Manrique Cecilia	176,594	176,594	—	—	—	—	353,188
Luis Carlos Croissier Batista ⁽⁷⁾	73,581	—	36,790	—	—	18,395	128,766
Rene Dahan	176,594	176,594	—	—	—	—	353,188
José Manuel Loureda Mantiñán ⁽⁸⁾	176,594	—	—	9,198	22,074	44,149	252,015
Mariano Marzo Carpio ⁽⁹⁾	176,594	—	—	22,074	12,877	44,149	255,694
Isabel Torremocha Ferrezuelo ⁽¹⁰⁾	176,594	—	88,297	—	—	25,753	290,644
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 approved by the Board of Directors, and at the proposal of the Remuneration Committee, the amount due annually in 2019 came to: (i) €176,594 million for membership of the Board of Directors; (ii) €176,594 million for membership of the Delegate Committee; (iii) €88,297 million for membership of the Audit and Control Committee; (iv) €44,148 million for membership of the Sustainability Committee; (v) €22,074 million for membership of the Appointments Committee; and (vi) €22,074 million 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 shareholders at the Annual General 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 gross per year. In addition, remuneration in kind and payments on account/withholdings linked to remuneration in kind totaled €0.419 million.

⁽²⁾ Ms. Estefanía was appointed Director of the Company and member of the Appointments Committee and Sustainability Committee on May 31, 2019.

⁽³⁾ Ms. García-Milá was appointed Director of the Company and member of the Audit and Control Committee and Appointments Committee on May 31, 2019.

- (4) Ms. Ganyet was appointed member of the Remuneration Committee on May 31, 2019 and Chairman of the Committee on June 26, 2019.
 (5) Mr. Martín ceased to be a member of the Remuneration Committee on May 31, 2019.
 (6) Mr. Durández ended his term of office as Director and member of the Audit and Control, Appointments and Remuneration Committees on May 31, 2019.
 (7) Mr. Croissier ended his term of office as Director and member of the Audit and Control Committee and Sustainability Committee on May 31, 2019.
 (8) Mr. Loureda ceased to be a member of the Appointments Committee on May 31, 2019.
 (9) Mr. Marzo was appointed member of the Remuneration Committee on May 31, 2019.
 (10) Ms. Torremocha was appointed member of the Sustainability Commission on May 31, 2019.

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 on remuneration for membership of the managing bodies, in this section.
- No Group company, joint arrangement or associates 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 Secretary Director, 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 2019, compensation to Directors for the performance of executive duties was as follows:

<i>€ Million</i>	Josu Jon Imaz San Miguel	Luis Suárez de Lezo Mantilla
Fixed monetary remuneration	1.200	0.983
Variable remuneration and in kind ⁽¹⁾	2.020	6.980

⁽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 sixth cycle of the Share Purchase Plan for the Beneficiaries of the Long-Term Incentive Plans, as detailed in section 29.3. In the case of Mr. Suárez de Lezo, given the termination of his executive functions, it also includes the settlement corresponding thereto for the Long-Term Incentive plans in which he participated until December 31, 2019 (2016-2019 LIP, 2017-2020 LIP, 2018-2021 LIP and 2019-2022 LIP) in accordance with the general terms and conditions of these plans, the settlement of the units consolidated in the Share Purchase Plans for the Beneficiaries of the Long-Term Incentive Plan in which they participated and the settlement of the amount accumulated on their behalf in the "Long-Service Bonus" Investment Fund.

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 investees

In 2019 the members of the Parent's Board of Directors did not receive any amount for membership to the governing bodies of other Group companies, joint arrangements or associates.

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

The cost in 2019 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:

	<i>€ Million</i>
Josu Jon Imaz San Miguel	0.254
Luis Suárez de Lezo Mantilla	0.197

e) Share Purchase Plan for Beneficiaries of the Long-Term Incentive Plans

On June 30, 2019, the vesting period concluded for the sixth cycle of the share purchase plan for beneficiaries of long-term incentive plans (see Note 29.4.i). Upon vesting, Josu Jon Imaz became entitled to the receipt of 3,550 shares (before withholdings), valued at a price of €14.02 per share.

30.2) Indemnity payments to Board members

In 2019, the compensation received by the General Secretary Director, due to the termination of his contract and his executive functions and the non-competition agreement, amounts to €11.3 million⁵⁵.

30.3) Other transactions with directors

In 2019, 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.

The Chief Executive Officer signed up for the 2017-2020, 2018-2021 and 2019-2022 cycles of the Share Purchase Plan for beneficiaries of the long-term incentive plans, as detailed in Note 29.

In 2019, 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 Spanish Companies Act, in that fiscal year resolutions of the Board and of the Appointments Committee regarding related-party transactions, ratification, re-election and continuity of Directors and on appointment to positions on the Board and its committees were adopted in the absence of the Director 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 2019, a total of 9 persons formed the Executive Committee. The term "*key management personnel*", made 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 2019 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 2019 by executive officers who formed part of the Executive Committee is as follows:

	<i>€ Million</i>
Wages	5.403
Allowances	0.079
Variable remuneration ⁽¹⁾	3.884
Remuneration in kind ⁽²⁾	0.594
Executive welfare plan	1.119

⁽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 12,584 additional shares (before withholdings) at the end of the vesting period for the sixth cycle of the Share Purchase Plan for Beneficiaries of the Long-Term Incentive Plans, valued at €14.02 per share, representing an equivalent amount of €176,448 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 €0.174 million.

⁵⁵ For further information, see "B. The Repsol Corporate Governance System, 5. Remuneration of Directors and Senior Management" in the Annual Corporate Governance Report.

c) Advances and loans granted

At December 31, 2019, the Parent had granted loans to members of its key management personnel amounting to €0.331 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 2019, no amount was paid to the Company's key management personnel as compensation for termination benefits and non-competition agreement.

30.6) Other transactions with key management personnel

In 2019, 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, key management personnel signed up for the 2017-2020, 2018-2021 and 2019-2022 cycles of the Share Purchase Plan for Beneficiaries of the Long-term Incentive Plans, as detailed in Note 27.

30.7) Civil liability insurance

In 2019, the Group took out a civil liability policy for Board members, the key management personnel referred to in Note 30.4.a), and the other executives and people executing such functions, for a total premium of €1.9 million. The policy also covers different Group companies under certain circumstances and conditions.

(31) CLIMATE CHANGE AND ENVIRONMENTAL INFORMATION

The Board of Directors of Repsol, S.A. has reviewed its role in the fight against climate change and in December published a new strategic approach in which it undertakes to become a company with **net zero emissions by 2050**, establishing interim objectives to gradually reduce its carbon intensity indicator.

The Group's risk policy, approved by the Board of Directors, establishes that risk management is integrated into the business processes, and that risks are identified, assessed and mitigated in order to maintain them at levels tolerated by the Company. The risks arising from climate change, both physical and so-called transitional, are managed in the same way as the other risks to which the Group is exposed, except for the fact that their emerging nature makes them the subject of more detailed examination in the long term. The Group's risk profile, both in the short and in the medium and long term, is available to the Group's executive and governing bodies for decision-making purposes.

For further 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 6.4 "Environment" of the Consolidated Management Report.

31.1) CO₂ emission allowances

Accounting policies -CO₂ emission allowances

Emission allowances are recognized as an intangible asset and are initially recognized at acquisition cost. Those allowances free of charge under the emissions trading system for the 2013-2020 period, 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 CO₂ 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 CO₂ emissions released during the year, recognizing a provision calculated based on the tons of CO₂ emitted, measured at: (i) their carrying amount in the case of the allowances that the Group has at year end; and (ii) the closing list price in the case of allowances that it does not yet have at year end.

When the emissions allowances for the tons of CO₂ 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 17).

In Europe, the regulation concerning the CO₂ allowances market, the EU Emissions Trading System (EU-ETS) Directive entered Phase III on January 1, 2013. This phase, which ends in 2020, marks the end of the free allocation of CO₂ emission allowances to activities related to electricity generation, while they have been significantly reduced in others. The 2014 update to the EU-ETS Directive confirmed that refining activity in Europe was one of the sectors exposed to carbon leakage and has therefore continued benefiting from the free allocation of CO₂ allowances, partially covering its deficits.

The movements in provisions recognized in respect of CO₂ emission allowances (see Note 15) used in 2019 and 2018 is as follows:

	€ Million	
	2019	2018
Opening balance for the year	113	69
Contributions charged to results ⁽¹⁾	325	114
Reclassifications and other movements ⁽²⁾	(113)	(70)
Balance at year end	325	113

⁽¹⁾ Corresponds to the expense incurred to acquire the allowances needed to cover the Group's CO₂ emissions.

⁽²⁾ In 2019 and 2018, corresponds to the derecognition of allowances used to cover emissions made in 2018 and 2017, respectively (see Note 12).

In 2019 and 2018, the Group companies recognized emission allowances allocated free of charge under the Spanish National Allocation Plan equivalent to 8 million tons of CO₂, initially measured at €201 million and €63 million, respectively (see Note 12).

The net cost of carbon management amounted to €132 million in 2019 and €44 million in 2018. The increase is mainly explained by the significant increase in the price of CO₂ in 2019 (€24.8/tn compared to €15.9/tn in 2018) corresponding to the CO₂ emitted by industrial complexes in Spain not covered by free emission allowances, as well as the inclusion of the electricity generation businesses acquired in 2018.

31.2) Environmental investment, expenses and provisions⁵⁶

Environmental investments in 2019 amounted to €180 million (€111 million classified as 'work in progress' at December 31). Of note are those aimed at improving the minimization of emissions into the atmosphere, increasing energy saving and efficiency, managing and optimizing water consumption, improving contingency systems and spill prevention systems.

In 2019, of note are the investment at the La Coruña refinery to reduce atmospheric emissions by improving energy integration and replacing compressor turbines in the fluid catalytic cracking unit, as well as the investment in the Petronor and Puertollano refineries in the atmospheric distillation units to improve their energy efficiency.

Environmental expenses, which are recognized under "*Procurements*" and "*Other operating expenses*", excluding the expenses for the allowances necessary to cover CO₂ emissions (see previous section), amounted to €94 million and €83 million in 2019 and 2018, respectively. In 2019, of note are the actions carried out for the protection of the atmosphere in the *Downstream* industrial facilities amounting to €26 million (€27 million in 2018); water management amounting to €19 million (€17 million in 2018); and waste management amounting to €17 million (€18 million in 2018).

Provisions for environmental actions⁵⁷ at December 31, 2019 amount to €99 million, with no significant provisions recognized during the year. In addition, the Group has recognized field dismantling provisions for its hydrocarbon exploration and production assets (see Note 15).

The corporate insurance policies cover, subject to terms and conditions, civil liability for pollution on land and at sea and certain liabilities vis-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.

(32) FURTHER BREAKDOWNS

32.1) Staff⁵⁸

The Repsol Group employed a total of 24,634 people at December 31, 2019, geographically distributed as follows: Spain (17,112 employees), North America (1,166 employees), South America (3,905 employees), Europe, Africa and Brazil (1,830 employees), Asia and Russia (620 employees) and Oceania (1 employee). Average headcount in 2019 was 24,891 employees (24,691 employees in 2018).

Below is a breakdown of the Group's total staff⁵⁹ distributed by professional category and gender at year-end 2019 and 2018:

	2019		2018	
	Men	Women	Men	Women
Executives	208	55	217	56
Technical Managers	1,694	738	1,752	746
Technicians	7,262	4,678	7,051	4,621
Manual workers and junior personnel	6,266	3,733	6,405	3,658
Total⁽¹⁾	15,430	9,204	15,425	9,081

The Repsol Group employed a total of 630 differently-abled people at December 31, 2019 (2.56% of its workforce).

In Spain, in 2019, 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 2,47% of the total in Spain, namely 467 direct hires.

⁵⁶ Items identified as of 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).

⁵⁷ 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 "*Other provisions*" in the table reconciling the movement in provisions in Note 15.

⁵⁸ For further information on the workforce and human resource management policies, see section 6.2 of the Consolidated Management Report.

⁵⁹ 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.

32.2) Fees paid to auditors

The 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)⁶⁰, as well as the fees for those provided by other audit firms, are shown below:

€ Million	Main auditor		Other auditors	
	2019	2018	2019	2018
Audit and related services:	7.8	7.3		
Audit services	7.1	6.6		
Other professional services related to the audit	0.7	0.7		
Tax services	—	—		
Other services	—	0.2		
Total⁽¹⁾	7.8	7.5	—	—

⁽¹⁾ The fees approved in 2019 by PriceWaterhouseCoopers Auditores, S.L for audit and related services amounted to €4.4 million and €0.6 million, respectively.

"Audit services" includes the fees relating to the audit of the separate and consolidated financial statements of Repsol, S.A. and of the companies forming part of its Group, the limited reviews of the Group's interim consolidated financial statements, and the review of the information relating to the Group's Internal Financial Reporting Control System, whose work allows evidence to be obtained for the audit.

"Other related services" includes, mainly, verifications and certifications for partners and official bodies, reports for the issuance of bonds and other marketable securities (comfort letters), as well as the verification of the non-financial information of the consolidated management report.

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 applicable 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 €72 million in 2019 and €75 million in 2018, respectively. The capitalized expenses corresponding to development activities amounted to €28 million in 2019.

(33) SUBSEQUENT EVENTS

There have been no significant subsequent events at year-end that may affect the present consolidated Financial Statements.

⁶⁰ The shareholders at Repsol's Annual General 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.

(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, 2019

Name	Parent company	Country	Corporate purpose	Method of conso. ⁽¹⁾	December 2019				
					Control Int. ⁽²⁾	Total Group Interest	Equity ⁽³⁾	Share Capital ⁽³⁾	€ Million
UPSTREAM									
Agri Development, B.V. ⁽¹⁶⁾	Repsol Sinopec Brasil, B.V.	Netherlands	Platform for production of crude oil and natural gas	E.M.(J.V.)	10.00	6.00	—	—	
Akakus Oil Operations, B.V.	Repsol Exploración Murzuq, S.A.	Netherlands	Oil and gas exploration and production	E.M.	49.00	49.00	—	—	
ASB Geo	Repsol Exploración, S.A.	Russia	Oil and gas exploration and production	E.M.(J.V.)	50.01	50.01	2	—	
BP Trinidad & Tobago, Llc. ⁽¹⁶⁾	BPRY Caribbean Ventures, Llc.	United States	Oil and gas exploration and production	E.M.(J.V.)	100.00	30.00	—	—	
BPRY Caribbean Ventures, Llc. ⁽¹⁵⁾	Repsol Exploración S.A.	United States	Oil and gas exploration and production	E.M.(J.V.)	30.00	30.00	1,786	2,780	
Cardón IV, S.A.	Repsol Exploración, S.A.	Venezuela	Oil and gas exploration and production	E.M.(J.V.)	50.00	50.00	(892)	4	
CSJC Eurotek - Yugra	Repsol Exploración Karabashsky, B.V.	Russia	Oil and gas exploration and production	E.M.(J.V.)	70.78	70.78	64	—	
Dubai Marine Areas, Ltd. ⁽⁶⁾	Repsol Exploración S.A.	United Kingdom	Oil and gas exploration and production	E.M.(J.V.)	50.00	50.00	2	—	
Equion Energia Ltd.	Talisman Colombia Holdco Ltd.	United Kingdom	Oil and gas exploration and production	E.M.(J.V.)	49.00	49.00	611	—	
FEHI Holding S.a.r.l.	TE Holding S.a.r.l.	Luxembourg	Portfolio company	F.C.	100.00	100.00	3,117	199	
Foreland Oil Ltd. ⁽⁹⁾	Rift Oil, Ltd.	British Virgin Islands	Oil and gas exploration and production	F.C.	100.00	100.00	(10)	255	
Fortuna Resources (Sunda) Ltd. ⁽⁹⁾	Talisman UK (South East Sumatra) Ltd.	British Virgin Islands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	53	—	
Guará, B.V. ⁽¹⁶⁾	Repsol Sinopec Brasil, B.V.	Netherlands	Platform for production of crude oil and natural gas	E.M.	25.00	15.00	—	—	
MC Alrep, Llc.	AR Oil & Gaz, B.V.	Russia	Management services for JV	E.M.(J.V.)	100.00	49.00	1	—	
Lapa Oil & Gas, B.V. ⁽¹⁶⁾	Repsol Sinopec Brasil, B.V.	Netherlands	Platform for production of crude oil and natural gas	E.M.	25.00	15.00	—	—	
Occidental de Colombia LLC	Repsol International Finance, B.V.	United States	Portfolio company	E.M.(J.V.)	25.00	25.00	143	94	
Paladin Resources Ltd.	TE Holding S.a.r.l.	United Kingdom	Portfolio company	F.C.	100.00	100.00	30	73	
Petrocarabobo, S.A.	Repsol Exploración S.A.	Venezuela	Oil and gas exploration and production	E.M.(J.V.)	11.00	11.00	129	552	
Petroquirquire, S.A. Emp. Mixta	Repsol Exploración S.A.	Venezuela	Oil and gas exploration and production.	E.M.(J.V.)	40.00	40.00	(1,049)	232	
Quirquire Gas, S.A. Emp. Mixta	Repsol Venezuela, S.A.	Venezuela	Oil and gas exploration and production.	E.M.(J.V.)	60.00	60.00	—	—	
Repsol Alberta Shale Partnership	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production	F.C.	100.00	100.00	472	1,489	
Repsol Angola 22, B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	(1)	351	
Repsol Angola 35, B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	121	
Repsol Angola 37, B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	5	257	
Repsol Angostura, Ltd.	Repsol Exploración S.A.	Trinidad and Tobago	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	(1)	36	
Repsol Aruba, B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	1	22	
Repsol Bulgaria, B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	128	
Repsol Bulgaria Khan Kubrat, S.A.	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	24	—	
Repsol Canada Energy Partnership	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production	F.C.	100.00	100.00	744	1,362	
Repsol Ductos Colombia, S.A.S.	Talisman Colombia Holdco Ltd.	Colombia	Oil and gas exploration and production	F.C.	100.00	100.00	83	3	
Repsol E&P Bolivia, S.A.	Repsol Bolivia, S.A.	Bolivia	Oil and gas exploration and production	F.C.	100.00	100.00	732	135	
Repsol E&P Eurasia, LLC.	Repsol Exploración S.A.	Russia	Oil and gas exploration and production	F.C.	99.99	99.99	5	6	
Repsol E&P USA, Inc.	Repsol USA Holdings Corporation	United States	Oil and gas exploration and production	F.C.	100.00	100.00	2,860	2,927	
Repsol E&P USA Holdings, Inc.	Repsol Oil & Gas Holdings USA, Inc.	United States	Oil and gas exploration and production	F.C.	100.00	100.00	2,939	1,685	
Repsol Ecuador, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	76	6	
Repsol Energy North America Corporation	Repsol USA Holdings Corporation	United States	Marketing of GNL	F.C.	100.00	100.00	(646)	255	
Repsol Exploración 17, B.V. ⁽¹⁴⁾	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	—	1	

Name	Parent company	Country	Corporate purpose	Method of conso. ⁽¹⁾	December 2019			
					Control Int. ⁽²⁾	Total Group Interest	€ Million	
							Equity ⁽³⁾	Share Capital ⁽³⁾
Repsol Exploración 405A, S.A. ⁽¹⁷⁾	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	—	—
Repsol Exploración Aitoloakarnania, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	7	—
Repsol Exploración Argelia, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	231	5
Repsol Exploración Aru, S.A. ⁽⁵⁾	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	—	—
Repsol Exploración Atlas, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	—	—
Repsol Exploración Caribe, S.L.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	—
Repsol Exploración Cendrawasih I, B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	27
Repsol Exploración Cendrawasih III, B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	4
Repsol Exploración Cendrawasih IV, B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	6
Repsol Exploración Colombia, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	68	2
Repsol Exploración East Bula, B.V. ⁽⁶⁾	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	—	4
Repsol Exploración Gharb, S.A. ⁽¹⁴⁾	Repsol Exploración S.A.	Spain	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	7	—
Repsol Exploración Guinea, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	—
Repsol Exploración Guyana, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	8	—
Repsol Exploración Ioannina, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	39	—
Repsol Exploración Irlanda, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	14	—
Repsol Exploración Jamaica, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	—	—
Repsol Exploración Karabashsky, B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	137	131
Repsol Exploración Kazakhstan, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	7	—
Repsol Exploración Mexico, S.A. de C.V.	Repsol Exploración S.A.	Mexico	Oil and gas exploration and production	F.C.	100.00	100.00	120	136
Repsol Exploración Murzuq, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	453	9
Repsol Exploración Peru, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	320	12
Repsol Exploración Seram, B.V. ⁽⁶⁾	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	—	7
Repsol Exploración South East Jambi B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	2	—
Repsol Exploración South Sakakemang, S.L. ⁽¹⁸⁾	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	2	2
Repsol Exploración Tanfit, S.L.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	7	3
Repsol Exploración Tobago, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	5	—
Repsol Exploración W. Papua IV S.L. ⁽⁵⁾	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	—	—
Repsol Exploración, S.A.	Repsol S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	5,595	27
Repsol Exploration Australia, Pty, Ltd. ⁽⁶⁾	Repsol Exploración S.A.	Australia	Oil and gas exploration and production	F.C.	100.00	100.00	—	—
Repsol Exploration Namibia Pty, Ltd.	Repsol Exploración S.A.	Namibia	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	2	—
Repsol Exploração Brasil, Ltda.	Repsol Exploración, S.A.	Brazil	Oil and gas exploration and production	F.C.	100.00	100.00	56	59
Repsol Greece Ionian, S.L. ⁽⁵⁾	Repsol Exploración, S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	1	—
Repsol Groundbirch Partnership	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production	F.C.	100.00	100.00	2	231
Repsol Investigaciones Petrolíferas, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	407	212
Repsol Libreville, S.A. avec A.G.	Repsol Exploración S.A.	Gabon	Oil and gas exploration and production	F.C.	100.00	100.00	(12)	68
Repsol LNG Holdings, S.A.	Repsol Exploración S.A.	Spain	Hydrocarbon marketing	F.C.	100.00	100.00	17	2
Repsol Louisiana Corporation ⁽⁶⁾	Repsol USA Holdings Corporation	United States	Oil and gas exploration and production	F.C.	100.00	100.00	16	92
Repsol Norge, AS	Repsol Exploración S.A.	Norway	Oil and gas exploration and production	F.C.	100.00	100.00	329	—
Repsol OCP de Ecuador, S.A.	Repsol Ecuador, S.A.	Spain	Operation of an oil pipeline for the transport of	F.C.	100.00	99.99	69	—
Repsol Offshore E & P USA, Inc.	Repsol USA Holdings Corporation	United States	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	11	29

Name	Parent company	Country	Corporate purpose	Method of conso. ⁽¹⁾	December 2019			
					Control Int. ⁽²⁾	Total Group Interest	€ Million	
							Equity ⁽³⁾	Share Capital ⁽³⁾
Repsol Oil & Gas Australia (JPDA 06-105) Pty Ltd.	Paladin Resources Ltd.	Australia	Oil and gas exploration and production	F.C.	100.00	100.00	2	146
Repsol Oil & Gas Australasia Pty Ltd.	Talisman International Holdings, B.V.	Australia	Shared services company	F.C.	100.00	100.00	—	67
Repsol Oil & Gas Canada, Inc. ⁽¹⁰⁾	Repsol Energy Resources Canada Inc.	Canada	Oil and gas exploration and production	F.C.	100.00	100.00	9,738	6,122
Repsol Oil&Gas Gulf of Mexico LLC ⁽⁵⁾	Repsol E&P USA Holdings, Inc.	United States	Oil and gas exploration and production	F.C.	100.00	100.00	—	—
Repsol Oil & Gas Holdings USA Inc.	FEHI Holding S.a.r.l.	United States	Oil and gas exploration and production	F.C.	100.00	100.00	4,443	1,916
Repsol Oil & Gas Malaysia (PM3) Ltd.	Fortuna International Petroleum Corporation	Barbados	Oil and gas exploration and production	F.C.	100.00	100.00	40	10
Repsol Oil & Gas Malaysia Ltd.	Fortuna International Petroleum Corporation	Barbados	Oil and gas exploration and production	F.C.	100.00	100.00	307	—
Repsol Oil & Gas Niugini Kimu Alpha Pty Ltd.	Repsol Oil & Gas Niugini Ltd.	Australia	Oil and gas exploration and production	F.C.	100.00	100.00	—	6
Repsol Oil & Gas Niugini Kimu Beta Ltd.	Repsol Oil & Gas Niugini Ltd.	Papua New Guinea	Oil and gas exploration and production	F.C.	100.00	100.00	—	14
Repsol Oil & Gas Niugini Ltd.	Repsol Oil & Gas Papua Pty, Ltd.	Papua New Guinea	Oil and gas exploration and production	F.C.	100.00	100.00	16	338
Repsol Oil & Gas Niugini Pty Ltd.	Talisman International Holdings, B.V.	Australia	Oil and gas exploration and production	F.C.	100.00	100.00	324	607
Repsol Oil & Gas Papua Pty Ltd.	Repsol Oil & Gas Niugini Pty Ltd.	Australia	Oil and gas exploration and production	F.C.	100.00	100.00	319	320
Repsol Oil & Gas USA LLC.	Repsol E&P USA Holdings Inc.	United States	Oil and gas exploration and production	F.C.	100.00	100.00	109	1,802
Repsol Oil & Gas Vietnam 07/03 Pty Ltd	Repsol Exploración, S.A.	Australia	Oil and gas exploration and production	F.C.	100.00	100.00	13	—
Repsol Oriente Medio, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	42	—
Repsol Services Mexico, S.A. de C.V.	Repsol Downstream Internacional, S.A.	Mexico	Oil and gas exploration and production	F.C.	100.00	100.00	8	8
Repsol Servicios Colombia, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	4	—
Repsol Sinopec Brasil, S.A. ⁽¹⁵⁾	Repsol S.A.	Brazil	Hydrocarbon operations and marketing	E.M.(J.V.)	60.01	60.01	7,262	7,191
Repsol Sinopec Resources UK Ltd ⁽¹⁵⁾	Talisman Colombia Holdco Ltd.	United Kingdom	Oil and gas exploration and production	E.M.(J.V.)	51.00	51.00	1,711	4,395
Repsol Suroriente Ecuador, S.A.	Repsol Exploración S.A.	Spain	Oil and gas exploration and production	F.C.	100.00	100.00	1	2
Repsol U.K., Ltd.	Repsol Exploración S.A.	United Kingdom	Oil and gas exploration and production	F.C.	100.00	100.00	2	7
Repsol USA Holdings Corporation	Repsol Exploración S.A.	United States	Oil and gas exploration and production	F.C.	100.00	100.00	3,026	3,116
Repsol Venezuela, S.A.	Repsol Exploración Venezuela, B.V.	Venezuela	Oil and gas exploration and production	F.C.	100.00	100.00	147	714
Saneco	AR Oil & Gaz, B.V.	Russia	Oil and gas exploration and production	E.M.(J.V.)	100.00	49.00	36	—
SC Repsol Baicoi, S.R.L.	Repsol Exploración S.A.	Romania	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	8	54
SC Repsol Pitesti, S.R.L.	Repsol Exploración S.A.	Romania	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	8
SC Repsol Targoviste, S.R.L.	Repsol Exploración S.A.	Romania	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	4	48
SC Repsol Targu Jiu, S.R.L.	Repsol Exploración S.A.	Romania	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	1	5
Talisman (Algeria) B.V.	Repsol Exploración, S.A.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	89	—
Talisman (Asia) Ltd.	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	(143)	8
Talisman (Block K 39) B.V.	Repsol Exploración, S.A.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	—	—
Talisman (Block K 9) B.V.	Talisman Global Holdings, B.V.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	—
Repsol Colombia Oil & Gas Ltd. ⁽²⁵⁾	Repsol Exploración, S.A.	Canada	Oil and gas exploration and production	F.C.	100.00	100.00	505	790
Talisman (Corridor) Ltd. ⁽¹³⁾	Fortuna International (Barbados), Inc	Barbados	Oil and gas exploration and production	F.C.	100.00	100.00	969	42
Talisman (Jambi Merang) Ltd.	Talisman International Holdings, B.V.	United Kingdom	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	47	72
Talisman (Sageri) Ltd.	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	(85)	—
Talisman (Sumatra) Ltd.	Repsol Oil & Gas Canada Inc.	Canada	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	—
Talisman (Vietnam 133 &134) Ltd.	Repsol Exploración S.A.	Canada	Oil and gas exploration and production	F.C.	100.00	100.00	1	32
Talisman (Vietnam 15-2/01) Ltd.	Repsol Exploración S.A.	Canada	Oil and gas exploration and production	F.C.	100.00	100.00	169	321
Talisman Andaman B.V.	Talisman International Holdings, B.V.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	81	—

Name	Parent company	Country	Corporate purpose	Method of conso. ⁽¹⁾	December 2019			
					Control Int. ⁽²⁾	Total Group Interest	€ Million	
							Equity ⁽³⁾	Share Capital ⁽³⁾
Talisman Colombia Holdco Ltd.	Repsol Exploración S.A.	United Kingdom	Portfolio company	F.C.	100.00	100.00	1,186	1,899
Talisman Banyumas B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	—
Talisman East Jabung B.V.	Talisman International Holdings, B.V.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	(2)	—
Repsol Perpetual Norge AS ⁽²⁶⁾	Talisman Perpetual (Norway) Ltd.	Norway	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	1
Repsol Corridor B.V. ⁽²⁷⁾	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	—
Talisman Resources (Bahamas) Ltd ⁽⁸⁾	Paladin Resources Ltd.	Bahamas	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	7	—
Talisman Resources (North West Java) Ltd.	Talisman UK (South East Sumatra) Ltd.	United Kingdom	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	34	—
Talisman Sakakemang B.V.	Talisman International Holdings, B.V.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	94	—
Talisman South Sageri B.V.	Talisman International Holdings, B.V.	Netherlands	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	—	—
Talisman Transgasindo Ltd. ⁽¹³⁾	Fortuna International (Barbados), Inc.	Barbados	Portfolio company	F.C.	100.00	100.00	(26)	26
Talisman UK (South East Sumatra) Ltd.	Paladin Resources, Ltd.	United Kingdom	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	51	—
Talisman Vietnam Ltd.	Fortuna International Petroleum Corporation	Barbados	Oil and gas exploration and production	F.C.	100.00	100.00	18	—
Talisman Vietnam 07/03 B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	216	—
Talisman Vietnam 07/03-CRD Corporation LLC	Talisman International Holdings, B.V.	United States	Oil and gas exploration and production	F.C.	100.00	100.00	178	46
Talisman Vietnam 135-136 B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	146	—
Talisman Vietnam 146-147 B.V.	Repsol Exploración S.A.	Netherlands	Oil and gas exploration and production	F.C.	100.00	100.00	—	—
TNO (Tafnefteotdacha)	AR Oil & Gaz, B.V.	Russia	Oil and gas exploration and production	E.M.(J.V.)	99.57	48.79	209	—
Transportadora Sulbrasileira de Gas, S.A.	Tucunaré Empreendimentos e Participações, Ltda.	Brazil	Gas pipeline construction and operation	E.M.(J.V.)	25.00	25.00	—	15
Transworld Petroleum (U.K.)	Repsol Sinopec North Sea Ltd.	United Kingdom	Oil and gas exploration and production	E.M.(J.V.)	100.00	51.00	—	—
Triad Oil Manitoba Ltd.	Repsol Oil & Gas Canada, Inc.	Canada	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	5	—
YPFB Andina, S.A. ⁽¹⁵⁾	Repsol Bolivia, S.A.	Bolivia	Oil and gas exploration and production	E.M.(J.V.)	48.33	48.33	927	157
YPFB Transierra, S.A. ⁽¹⁶⁾	YPFB Andina, S.A.	Bolivia	Transport of oil and gas by pipeline	E.M.	44.50	21.51	—	—
504744 Alberta Ltd.	Repsol Oil & Gas Canada, Inc.	Canada	Oil and gas exploration and production ⁽¹¹⁾	F.C.	100.00	100.00	(7)	—
7308051 Canada Ltd	Repsol Oil & Gas Canada, Inc.	Canada	Oil and gas exploration and production	F.C.	100.00	100.00	107	292
8441251 Canada Ltd.	Repsol Oil & Gas Canada, Inc.	Canada	Oil and gas exploration and production	F.C.	100.00	100.00	13	15
8787352 Canada Ltd.	Repsol Oil & Gas Canada, Inc.	Canada	Oil and gas exploration and production	F.C.	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	F.C.	100.00	100.00	1	—
DOWNSTREAM								
Abastecimentos e Serviços de Aviação, Lda.	Repsol Portuguesa, S.A.	Portugal	Marketing of oil products	E.M.	50.00	50.00	—	—
Agrícola Comercial del Valle de Santo Domingo, S.A. ⁽⁵⁾	Repsol Downstream Internacional, S.A.	Mexico	Production and distribution of lubricants	E.M.(J.V.)	20.00	20.00	1	—
Alectoris Energía Sostenible 1, S.L. ⁽⁵⁾	Repsol Electricidad y Gas, S.A. ⁽²³⁾	Spain	Wind power project	F.C.	100.00	100.00	12	—
Alectoris Energía Sostenible 3, S.L. ⁽⁵⁾	Repsol Electricidad y Gas, S.A. ⁽²³⁾	Spain	Wind power project	F.C.	100.00	100.00	5	—
Ampere Power Energy, S.L. ⁽⁵⁾	Repsol Electricidad y Gas, S.A. ⁽²³⁾	Spain	Production and sale of storage batteries	E.M.	7.89	7.89	5	—
Arco Energía 1, S.L.U. ⁽⁵⁾	Repsol Renovables, S.L.U.	Spain	Sun power project	F.C.	100.00	100.00	5	1
Arco Energía 2, S.L.U. ⁽⁵⁾	Repsol Renovables, S.L.U.	Spain	Sun power project	F.C.	100.00	100.00	—	—
Arco Energía 3, S.L.U. ⁽⁵⁾	Repsol Renovables, S.L.U.	Spain	Sun power project	F.C.	100.00	100.00	—	—
Arco Energía 4, S.L.U. ⁽⁵⁾	Repsol Renovables, S.L.U.	Spain	Sun power project	F.C.	100.00	100.00	—	—
Arco Energía 5, S.L.U. ⁽⁵⁾	Repsol Renovables, S.L.U.	Spain	Sun power project	F.C.	100.00	100.00	—	—
Air Miles Spain, S.A. ⁽¹⁴⁾	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Travel Club Program. Loyalty service	E.M.	26.67	25.78	—	—
Arteche y García, S.L. ⁽¹⁴⁾	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Installation and operation of service stations	F.C.	100.00	96.68	—	—

Name	Parent company	Country	Corporate purpose	Method of conso. ⁽¹⁾	December 2019			
					Control Int. ⁽²⁾	Total Group Interest	€ Million	
							Equity ⁽³⁾	Share Capital ⁽³⁾
Asfaltos Españoles, S.A.	Repsol Petróleo, S.A.	Spain	Asphalts	⁽⁴⁾	50.00	49.99	35	9
Autoservicio Sargento, S.A. de C.V. ⁽⁵⁾	Repsol Downstream Internacional, S.A.	Mexico	Installation and operation of service stations	E.M.(J.V.)	50.00	50.00	1	—
Bardahl de Mexico, S.A. de C.V.	Repsol Downstream Internacional, S.A.	Mexico	Production and distribution of lubricants	E.M.(J.V.)	40.00	40.00	64	—
Begas Motor, S.L. ⁽⁵⁾	Repsol Energy Ventures, S.A.	Spain	Production and sale of electric vehicles and	E.M.	27.93	27.93	2	1
Belmont Technology Inc. ⁽⁵⁾	Repsol Energy Ventures, S.A.	Spain	Software for geoscience and reservoir engineering.	E.M.	9.87	9.87	1	5
Benzirep-Vall, S.L.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Installation and operation of service stations	F.C.	100.00	96.68	—	—
Bios Avanzados Tratados del Mediterráneo, S.L ⁽⁵⁾	Repsol Petróleo, S.A.	Spain	Distribution and marketing of oil products	F.C.	100.00	100.00	—	—
Caiageste - Gestao de Areas de Serviço, Lda.	GESPOST	Portugal	Operation and management of service stations	E.M.	50.00	50.00	—	—
Campsa Estaciones de Servicio, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Operation and management of service stations	F.C.	100.00	96.68	188	8
Carburants i Derivats, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Andorra	Distribution of oil derivative products	E.M.	33.25	32.15	2	—
Cl Repsol Aviación Colombia, S.A.S.	Repsol Downstream Internacional, S.A.	Colombia	Distribution and marketing of oil products	F.C.	100.00	100.00	—	—
Cogeneración Gequisa, S.A. ⁽¹⁴⁾	General Química	Spain	Production of electricity and steam	E.M.	39.00	19.50	6	2
Combustibles Sureños, S.A. de C.V. ⁽⁵⁾	Repsol Downstream Internacional, S.A.	Mexico	Production and distribution of lubricants	E.M.(J.V.)	50.00	50.00	1	—
Compañía Anónima de Revisiones y Servicios, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Installation and operation of service stations	F.C.	95.00	91.85	3	1
Compañía Auxiliar Remolcadores y Buques Especiales, S.A.	Repsol Petróleo, S.A.	Spain	Provision of maritime services	F.C.	100.00	99.19	4	—
Desarrollo Eólico Las Majas VII, S.L. ⁽⁵⁾	Repsol Renovables, S.L.U. ⁽²⁴⁾	Spain	Wind power project	F.C.	100.00	100.00	—	—
Distribuidora Andalucía Oriental, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Fuel marketing	E.M.(J.V.)	50.00	48.34	2	1
Distribuidora de Petróleos, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Fuel marketing	F.C.	85.00	82.18	—	—
Dynasol Altamira, S.A. de C.V. ⁽¹⁴⁾	Dynasol Elastómeros, S.A. de C.V.	Mexico	Service provisions	E.M.(J.V.)	100.00	50.00	2	—
Dynasol China, S.A. de C.V. ⁽¹⁴⁾	Dynasol Gestión Mexico, S.A.P.I. de C.V.	Mexico	Service provisions	E.M.(J.V.)	99.99	49.99	5	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	E.M.(J.V.)	100.00	50.00	138	30
Dynasol Elastómeros, S.A.U. ⁽¹⁴⁾	Dynasol Gestión, S.L.	Spain	Production and marketing of chemical products	E.M.(J.V.)	100.00	50.00	120	17
Dynasol Gestión Mexico, S.A.P.I. de C.V. ⁽¹⁴⁾	Repsol Química, S.A.	Mexico	Portfolio and shared services company	E.M.	50.00	50.00	258	219
Dynasol Gestión, S.L.	Repsol Química, S.A.	Spain	Portfolio and shared services company	E.M.	50.00	50.00	256	42
Dynasol, Llc. ⁽¹⁴⁾	Dynasol Gestión, S.L.	United States	Marketing of petrochemical products	E.M.(J.V.)	100.00	50.00	21	9
Endomexicana Renta y Servicios, S.A. de C.V.	Repsol Downstream Internacional, S.A.	Mexico	Production and distribution of lubricants	E.M.(J.V.)	40.00	40.00	(1)	—
Energy Express S.L.U. ⁽¹⁴⁾	Societat Catalana de Petrolis, S.A.	Spain	Operation and management of service stations	F.C.	100.00	91.89	5	1
Estación de Servicio Bahía Asunción, S.A. de C.V. ⁽⁵⁾	Repsol Downstream Internacional, S.A.	Mexico	Production and distribution of lubricants	E.M.(J.V.)	50.00	50.00	1	—
Estación de Servicio Barajas, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Installation and operation of service stations	F.C.	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⁾	F.C.	100.00	96.68	—	—
Estación de Servicio Montsia, S.L.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Installation and operation of service stations	E.M.(J.V.)	50.00	48.34	—	—
Ezzing Renewable Energies S.L.	Repsol Energy Ventures S.A.	Spain	Development of solar power projects	E.M.	22.22	22.22	1	—
Finboot Ltd. ⁽⁵⁾	Repsol Energy Ventures, S.A.	United Kingdom	Blockchain technology for energy, retail and automotive	E.M.	8.34	8.34	1	—
Fuerzas Energéticas del Sur de Europa XI, S.L. ⁽⁵⁾	Repsol Renovables, S.L.U. ⁽²⁴⁾	Spain	Wind power project	F.C.	100.00	100.00	—	—
Fuerzas Energéticas del Sur de Europa XII, S.L. ⁽⁵⁾	Repsol Renovables, S.L.U. ⁽²⁴⁾	Spain	Wind power project	F.C.	100.00	100.00	—	—
Fuerzas Energéticas del Sur de Europa V, S.L. ⁽⁵⁾	Repsol Renovables, S.L.U. ⁽²⁴⁾	Spain	Wind power project	F.C.	100.00	100.00	—	—
Fuerzas Energéticas del Sur de Europa VI, S.L. ⁽⁵⁾	Repsol Renovables, S.L.U. ⁽²⁴⁾	Spain	Wind power project	F.C.	100.00	100.00	—	—
Gas Natural West África S.L.	Repsol LNG Holding, S.A.	Spain	Oil and gas exploration and production ⁽¹¹⁾	E.M.(J.V.)	100.00	72.06	1	—
Generación Eólica El Vedado, S.L. ⁽⁵⁾	Repsol Renovables, S.L.U. ⁽²⁴⁾	Spain	Wind power project	F.C.	100.00	100.00	—	—

Name	Parent company	Country	Corporate purpose	Method of conso. ⁽¹⁾	December 2019			
					Control Int. ⁽²⁾	Total Group Interest	€ Million	
							Equity ⁽³⁾	Share Capital ⁽³⁾
General Química, S.A.U. ⁽¹⁴⁾	Dynasol Gestión, S.L.	Spain	Manufacture and sale of petrochemical products	E.M.(J.V.)	100.00	50.00	76	6
Gestão e Admin. de Postos de Abastecimento, Unipessoal, Lda. GESPOST	Repsol Portuguesa, S.A.	Portugal	Marketing of oil products	F.C.	100.00	100.00	6	2
Gestión de Puntos de Venta GESPEVESA, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Service stations management	E.M.(J.V.)	50.00	48.34	54	39
Grupo Repsol del Peru, S.A.C.	Repsol Peru B.V.	Peru	Shared services company	F.C.	100.00	100.00	2	—
Gutsa Servicios, S.A. de C.V. ⁽⁵⁾	Repsol Downstream Internacional, S.A.	Mexico	Service stations management	E.M.	50.00	50.00	—	—
Iberian Lube Base Oil Company, S.A.	Repsol Petróleo, S.A.	Spain	Development and production of lubricant base oils	⁽⁴⁾	30.00	29.99	232	180
Iberen Renovables, S.A. ⁽⁵⁾	Repsol Renovables, S.L.U. ⁽²⁴⁾	Spain	Wind power project	F.C.	100.00	100.00	4	4
Ibil, Gestor de Carga de Vehículo Eléctrico, S.A.	Repsol Electricidad y Gas, S.A. ⁽²³⁾	Spain	Operation of electric vehicle charging points	E.M.(J.V.)	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 oil cloths	E.M.	99.99	49.99	—	—
Insa Altamira, S.A. de C.V. ⁽¹⁴⁾	Dynasol Gestión Mexico, S.A.P.I. de C.V.	Mexico	Supply of permanent staff	E.M.(J.V.)	99.99	49.99	2	—
Insa Gpro (Nanjing), Synthetic Rubber CO., Ltd. ⁽¹⁴⁾	Dynasol China, S.A. de C.V.	China	Production, development, sale of synthetic rubber	E.M.(J.V.)	50.00	24.99	6	1
Klikin Deals Spain, S.L.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Customer and oil product marketing management	E.M.	70.00	67.67	2	1
Liaoning North Dynasol Synthetic Rubber Co., Ltd. ⁽¹⁴⁾	Dynasol Gestión, S.L.	China	Production, development, sale of synthetic rubber	E.M.(J.V.)	50.00	25.00	25	95
Nanogap Sub n-m Powder S.A.	Repsol Energy Ventures S.A.	Spain	Development of nanoparticles and nanofibers	E.M.	12.62	12.62	5	3
OGCI Climate Investments, Llp.	Repsol Energy Ventures S.A.	United Kingdom	Technology Development	E.M.	9.09	9.09	103	148
Palmira Market, S.A. de C.V. ⁽⁵⁾	Repsol Downstream Internacional, S.A.	Mexico	Management of supermarkets and stores	E.M.(J.V.)	50.00	50.00	1	—
Petróleos del Norte, S.A.	Repsol S.A.	Spain	Construction and operation of an oil refinery	F.C.	85.98	85.98	1,360	121
Petronor Innovación, S.L.	Petróleos del Norte, S.A.	Spain	Research activities	F.C.	100.00	85.98	—	—
Polidux, S.A.	Repsol Química, S.A.	Spain	Manufacture and sale of petrochemical products	F.C.	100.00	100.00	19	17
Principle Power (Europe), Ltd. ⁽¹⁴⁾	Principle Power, Inc.	United Kingdom	Electricity production	E.M.(J.V.)	100.00	20.57	17	—
Principle Power Portugal Unipessoal, Lda. ⁽¹⁴⁾	Principle Power, Inc.	Portugal	Electricity production	E.M.(J.V.)	100.00	20.57	17	—
Principle Power, Inc.	Repsol Energy Ventures S.A.	United States	Holding company	E.M.	20.57	20.57	15	37
PT Pacific Lubritama Indonesia ⁽⁵⁾	United Oil Comany Pte. Ltd	Indonesia	Production and distribution of lubricants	E.M.	95.00	38.00	—	—
Recreus Industries S.L.	Repsol Energy Ventures S.A.	Spain	Distribution of oil derivative products	E.M.	16.67	16.67	1	—
Refinería La Pampilla, S.A.A.	Repsol Peru B.V.	Peru	Hydrocarbon refining and marketing	F.C.	82.39	82.39	607	661
Régisiti Comercializadora Regulada, S.L.U. ⁽²⁰⁾	Repsol Electricidad y Gas,SA ⁽²³⁾⁽²⁸⁾	Spain	Marketing of electricity	F.C.	100.00	100.00	3	1
Renovacyl, S.A. ⁽⁵⁾	Iberen Renovables, S.A.	Spain	Wind power project	F.C.	100.00	100.00	—	1
Repsol Butano, S.A.	Repsol S.A.	Spain	Marketing of LGP	F.C.	100.00	100.00	293	59
Repsol Canada, Ltd. General Partner	Repsol Exploración S.A.	Canada	Regasification of LNG	F.C.	100.00	100.00	1	2
Repsol Chemie Deutschland, GmbH	Repsol Química, S.A.	Germany	Marketing of chemical products	F.C.	100.00	100.00	2	—
Repsol Chile, S.A.	Repsol S.A.	Chile	Portfolio company	F.C.	100.00	100.00	2	2
Repsol Comercial de Productos Petrolíferos, S.A.	Repsol Petróleo, S.A.	Spain	Marketing of oil products	F.C.	99.79	96.68	1,159	335
Repsol Comercial, S.A.C.	Refinería La Pampilla S.A.A.	Peru	Marketing of fuel	F.C.	100.00	92.42	86	75
Repsol Comercializadora de Electricidad y Gas, S.L.U. ⁽²¹⁾	Repsol Electricidad y Gas,SA ⁽²³⁾⁽²⁸⁾	Spain	Marketing of electricity	F.C.	100.00	100.00	96	1
Repsol Directo, Lda.	Repsol Portuguesa, S.A.	Portugal	Distribution and marketing of oil products	F.C.	100.00	100.00	3	2
Repsol Directo, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Distribution and marketing of oil products	F.C.	100.00	96.68	4	—
Repsol Downstream Mexico, S.A. de C.V	Repsol Downstream Internacional, S.A.	Mexico	Production and distribution of lubricants	F.C.	100.00	99.97	26	64
Relkia Distribuidora de Electricidad, S.L. ⁽²²⁾	Repsol Petróleo, S.A.	Spain	Distribution and supply of electricity	F.C.	100.00	99.97	10	—
Repsol Energy Perú, S.A.C. ⁽¹²⁾	Repsol Comercial, S.A.C.	Peru	Sale of solid, liquid and gaseous fuels and related products ⁽¹¹⁾	F.C.	100.00	92.42	2	1

Name	Parent company	Country	Corporate purpose	Method of conso. ⁽¹⁾	December 2019			
					Control Int. ⁽²⁾	Total Group Interest	€ Million	
							Equity ⁽³⁾	Share Capital ⁽³⁾
Repsol Energy Ventures, S.A.	Repsol Technology and Ventures, S.L.U.	Spain	Development of new energy products	F.C.	100.00	100.00	33	2
Repsol Exploration Advanced Services, AG	Repsol Exploración S.A.	Switzerland	Human resources service provider	F.C.	100.00	100.00	1	—
Repsol Gas Portugal, Unipessoal, LDA	Repsol Butano, S.A.	Portugal	Marketing of LGP	F.C.	100.00	100.00	27	3
Repsol Generación Eléctrica S.L.U. ⁽¹⁹⁾	Repsol Electricidad y Gas, S.A. ⁽²³⁾	Spain	Generation of electricity	F.C.	100.00	100.00	853	523
Repsol Italia, SpA	Repsol S.A.	Italy	Marketing of oil products	F.C.	100.00	100.00	(8)	2
Repsol Lubricantes y Especialidades, S.A.	Repsol Petróleo, S.A.	Spain	Production and marketing of oil derivatives	F.C.	100.00	99.97	126	5
Repsol Lubrificantes e Especialidades Brasil Participações, Ltda.	Repsol Lubricantes y Especialidades, S.A.	Brazil	Production and marketing of lubricants	F.C.	100.00	100.00	—	3
Repsol Mar de Cortés, S.A. de C.V. ⁽⁵⁾	Repsol Downstream Internacional, S.A.	Mexico	Production and marketing of lubricants	E.M.(J.V.)	50.00	50.00	16	1
Repsol Mar de Cortés Estaciones de Servicio, S.A. de C.V. ⁽⁵⁾	Repsol Downstream Internacional, S.A.	Mexico	Production and marketing of lubricants	E.M.(J.V.)	50.00	50.00	1	—
Repsol Marketing, S.A.C.	Repsol Peru B.V.	Peru	Fuel and special products marketing	F.C.	100.00	100.00	20	3
Repsol Marketing France, S.A.S.U.	Repsol Downstream Internacional, S.A.	France	Marketing of oil products.	F.C.	100.00	100.00	—	—
Repsol Maroc, S.A. ⁽⁶⁾	Repsol Butano, S.A.	Morocco	Marketing of LGP	E.M.	99.96	99.96	—	1
Repsol Electricidad y Gas, S.A. ⁽²³⁾	Repsol S.A.	Spain	Production, distribution and sale of biofuels	F.C.	100.00	100.00	1,242	1
Repsol Peru, B.V.	Repsol S.A.	The Netherlands	Portfolio company	F.C.	100.00	100.00	391	345
Repsol Petróleo, S.A.	Repsol S.A.	Spain	Import of products and operation of refineries	F.C.	99.97	99.97	2,750	218
Repsol Polímeros, Unipessoal, LDA	Repsol Química, S.A.	Portugal	Manufacture and sale of petrochemical products	F.C.	100.00	100.00	265	62
Repsol Portuguesa, Lda	Repsol S.A.	Portugal	Distribution and marketing of oil products	F.C.	100.00	100.00	204	118
Repsol Química, S.A.	Repsol S.A.	Spain	Manufacture and sale of petrochemical products	F.C.	100.00	100.00	1,139	60
Repsol Renovables, S.L.U. ⁽⁵⁾	Repsol Electricidad y Gas, S.A. ⁽²³⁾	Spain	Development of new energy projects	F.C.	100.00	100.00	84	—
Repsol St. John LNG, S.L.	Repsol LNG Holding, S.A.	Spain	Sector studies	F.C.	100.00	100.00	1	—
Repsol Trading Peru, S.A.C.	Repsol Trading, S.A.	Peru	Trading and transport	F.C.	100.00	100.00	6	9
Repsol Trading Singapore Pte., Ltd.	Repsol Trading, S.A.	Singapore	Trading and transport	F.C.	100.00	100.00	(31)	—
Repsol Trading USA Corporation	Repsol USA Holdings Corporation	United States	Trading and transport	F.C.	100.00	100.00	(147)	—
Repsol Trading, S.A.	Repsol S.A.	Spain	Supply, Marketing, Trading and Transport	F.C.	100.00	100.00	823	—
Rocsole OY	Repsol Energy Ventures S.A.	Finland	Technology development	E.M.	12.50	12.50	1	5
Saint John LNG Development Company, Ltd.	Repsol St. John LNG, S.L.	Canada	Liquefaction plant investment project ⁽¹¹⁾	F.C.	100.00	100.00	—	3
Servicios de Seguridad Mancomunados, S.A.	Repsol Petróleo, S.A.	Spain	Safety	F.C.	100.00	99.98	1	—
Servicios Logísticos Combustibles de Aviación, S.L.	Repsol Lubricantes y Especialidades, S.A.	Spain	Transport of aviation oil products	E.M.(J.V.)	50.00	49.29	24	4
Sociedade Abastecedora de Aeronaves, Lda.	Repsol Portuguesa, S.A.	Portugal	Marketing of oil products	E.M.	25.00	25.00	—	—
Societat Catalana de Petrolis, S.A. (PETROCAT)	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Distribution and marketing of oil products	F.C.	94.94	91.89	(2)	6
Solgas Distribuidora de Gas, S.L.	Repsol Butano, S.A.	Spain	Marketing of LGP	F.C.	100.00	100.00	1	1
Solred, S.A.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Management of payment methods at service stations	F.C.	100.00	96.68	55	25
Sorbwater Technology, A.S.	Repsol Energy Ventures S.A.	Norway	Water treatment technology management in E&P	E.M.	30.78	30.78	—	9
Terminales Canarias, S.L.	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	Supply and distribution of oil products	E.M.(J.V.)	50.00	48.34	25	20
Tramperase, S.L. ⁽⁵⁾	Repsol Renovables, S.L.U. ⁽²⁴⁾	Spain	Development of solar power projects	F.C.	100.00	100.00	—	—
United Oil Company Pte. Ltd ⁽⁵⁾	Repsol Downstream Internacional, S.A.	Singapore	Production and distribution of lubricants	E.M.	40.00	40.00	—	—
Valdesolar Hive, S.L.	Repsol Renovables, S.L.U. ⁽²⁴⁾	Spain	Development of solar power projects	F.C.	100.00	100.00	5	—
WIB Advance Mobility, S.L. ⁽⁵⁾	Repsol Comercial de Productos Petrolíferos, S.A.	Spain	City car sharing rentals	E.M.(J.V.)	50.00	48.34	2	—
Windplus, S.A.	Repsol Renovables, S.L.U. ⁽²⁴⁾	Portugal	Technology development for wind generation	E.M.	20.60	19.70	(1)	1
CORPORATION								
Albatros, S.à.r.l.	Repsol S.A.	Luxembourg	Portfolio company	F.C.	100.00	100.00	223	—

Name	Parent company	Country	Corporate purpose	Method of conso. ⁽¹⁾	December 2019		Equity ⁽³⁾	Share Capital ⁽³⁾
					Control Int. ⁽²⁾	Total Group Interest		
					%	€ Million		
AR Oil & Gaz, B.V.	Repsol Exploración S.A.	The Netherlands	Portfolio company	E.M.(J.V.)	49.00	49.00	503	—
Edwards Gas Services LLC	Repsol Oil & Gas USA LLC.	United States	Portfolio company	F.C.	100.00	100.00	28	46
Fortuna International (Barbados) Inc. ⁽¹³⁾	Talisman International (Luxembourg), S.a.r.l.	Barbados	Portfolio company	F.C.	100.00	100.00	40	68
Fortuna International Petroleum Corporation	Repsol Exploración, S.A.	Barbados	Portfolio company	F.C.	100.00	100.00	514	403
Gaviota RE, S.A. ⁽⁷⁾	Albatros, S.a.r.l.	Luxembourg	Insurance and reinsurance	F.C.	100.00	100.00	305	1
Greenstone Assurance, Ltd.	Gaviota RE, S.A.	Bermuda	Insurance and reinsurance ("run-off" company) ⁽¹¹⁾	F.C.	100.00	100.00	3	3
Oleoducto de Crudos Pesados, Ltd.	Repsol OCP de Ecuador, S.A.	Cayman Islands	Portfolio company	E.M.	29.66	29.66	188	89
Oleum Insurance Company Ltd.	Repsol Oil & Gas Canada Inc.	Barbados	Insurance and reinsurance ("run-off" company) ⁽¹¹⁾	F.C.	100.00	100.00	1	—
Repsol Bolivia, S.A.	Repsol S.A.	Bolivia	Service provisions	F.C.	100.00	100.00	530	237
Repsol Downstream Internacional, S.A.	Repsol S.A.	Spain	Portfolio company	F.C.	100.00	100.00	325	—
Repsol Gestión de Divisa, S.L.	Repsol S.A.	Spain	Financial	F.C.	100.00	100.00	4,311	—
Repsol International Finance, B.V.	Repsol S.A.	The Netherlands	Financing and holding of shares	F.C.	100.00	100.00	714	317
Repsol Oil & Gas RTS Sdn.Bhd.	Repsol Exploración, S.A.	Malaysia	Shared services company	F.C.	100.00	100.00	2	19
Repsol Oil & Gas SEA Pte. Ltd.	Repsol Exploración, S.A.	Singapore	Shared services company	F.C.	100.00	100.00	12	5
Repsol Services Company	Repsol USA Holdings Corporation	United States	Service provisions	F.C.	100.00	100.00	31	39
Repsol Sinopec Brasil, B.V. ⁽¹⁶⁾	Repsol Sinopec Brasil, S.A.	The Netherlands	Portfolio company	E.M.(J.V.)	100.00	60.01	—	—
Repsol Technology and Ventures, S.L.U. ⁽⁵⁾	Repsol S.A.	Spain	Shared services company	F.C.	100.00	100.00	—	—
Repsol Tesorería y Gestión Financiera, S.A.	Repsol S.A.	Spain	Financial	F.C.	100.00	100.00	237	—
Rift Oil Ltd.	Talisman International Holdings, B.V.	United Kingdom	Portfolio company ⁽¹¹⁾	F.C.	100.00	100.00	143	149
Talisman International (Luxembourg), S.a.r.l.	Repsol Oil & Gas Canada Inc.	Luxembourg	Portfolio company	F.C.	100.00	100.00	1,266	68
Talisman International Holdings B.V.	Repsol Exploración, S.A.	The Netherlands	Portfolio company	F.C.	100.00	100.00	230	870
Talisman Perpetual (Norway) Ltd.	TE Holding S.a.r.l.	United Kingdom	Portfolio company ⁽¹¹⁾	F.C.	100.00	100.00	—	1
TE Holding S.ar.l.	Repsol Oil & Gas Canada, Inc.	Luxembourg	Portfolio and finance company	F.C.	100.00	100.00	4,026	4,131

⁽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 interest 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 translated at the closing exchange rate. Amounts have been rounded (less than half a million has been rounded down to zero).

⁽⁴⁾ Interests in joint operations (see Appendix Ic) which are structured through a company and this vehicle does not limit its rights to the assets or obligations for the liabilities related to the arrangement.

⁽⁵⁾ Companies incorporated into the Repsol Group in 2019 (see Appendix Ib).

⁽⁶⁾ Company in the process of liquidation.

⁽⁷⁾ This company holds a non-controlling interest in Oil Insurance, Ltd (5.54%), domiciled in Bermudas.

⁽⁸⁾ This company, legally incorporated in the Bahamas, is registered for tax purposes in the United Kingdom.

⁽⁹⁾ These companies, legally incorporated in the British Virgin Islands, are registered for tax purposes in the United Kingdom.

⁽¹⁰⁾ This company is the parent company for Repsol Groundbitch Partnership, registered in the United States.

⁽¹¹⁾ Inactive company.

⁽¹²⁾ This company was formerly known as Puma Energy Perú, S.A.C.

⁽¹³⁾ These companies, legally incorporated in Barbados, are registered for tax purposes in the Netherlands.

⁽¹⁴⁾ Share Capital and Equity data correspond to 2018.

⁽¹⁵⁾ Equity relates to the value of the consolidated subgroup.

⁽¹⁶⁾ Equity value included in its parent.

⁽¹⁷⁾ This company was formerly known as Repsol Exploración Boughezoul, S.A.

⁽¹⁸⁾ This company was formerly known as Repsol Jambi Merang, S.L.

⁽¹⁹⁾ This company was formerly known as Viesgo Generación, S.L.

⁽²⁰⁾ This company was formerly known as Viesgo Comercializadora de Referencia, S.L.U.

⁽²¹⁾ This company was formerly known as Viesgo Energía, S.L.U.

⁽²²⁾ This company was formerly known as Repsol Eléctrica de Distribución, S.L. (RED)

⁽²³⁾ This company was formerly known as Repsol Nuevas Energías, S.A. The company name was changed in September 2019.

⁽²⁴⁾ Change from the Repsol Electricity and Gas Matrix to the Repsol Renewables Matrix. The change in the matrix took place in November 2019.

⁽²⁵⁾ This company was formerly known as Talisman (Colombia) Oil & Gas Ltd.

⁽²⁶⁾ This company was formerly known as Talisman Energy Investments Norge AS.

⁽²⁷⁾ This company was formerly known as Talisman Java B.V.

⁽²⁸⁾ Change of the parent of Repsol Generación Eléctrica, S.L.U. to Repsol Electricidad y Gas, S.A. The change of the parent took place in December 2019.

APPENDIX IB: MAIN CHANGES IN THE SCOPE OF CONSOLIDATION

For the year ended December 31, 2019

a) Business combinations, other acquisitions and acquisitions of interest in subsidiaries, joint ventures and/or associates:

Name	Country	Parent company	Item	Date	12.31.2019		
					Method of consolidation ⁽¹⁾	% voting rights acquired	% total voting rights in entity following acquisition ⁽²⁾
Agrícola Comercial Valle de Santo Domingo, S.A	Mexico	Repsol Downstream Internacional, S.A	Acquisition	January-19	E.M. (N.C.)	20.00%	20.00%
Autoservicio Sargento, S.A. de C.V.	Mexico	Repsol Downstream Internacional, S.A	Acquisition	January-19	E.M. (N.C.)	50.00%	50.00%
Combustibles Sureños, S.A. de C.V.	Mexico	Repsol Downstream Internacional, S.A	Acquisition	January-19	E.M. (N.C.)	50.00%	50.00%
Estación de Servicio Bahía Asunción, S.A. de C.V.	Mexico	Repsol Downstream Internacional, S.A	Acquisition	January-19	E.M. (N.C.)	50.00%	50.00%
Gutsa Servicios, S.A. de C.V.	Mexico	Repsol Downstream Internacional, S.A	Acquisition	January-19	E.M. (N.C.)	50.00%	50.00%
Palmira Market, S.A. de C.V.	Mexico	Repsol Downstream Internacional, S.A	Acquisition	January-19	E.M. (N.C.)	50.00%	50.00%
Repsol Mar de Cortés Estaciones de Servicio, S.A. de C.V.	Mexico	Repsol Downstream Internacional, S.A	Acquisition	January-19	E.M. (N.C.)	50.00%	50.00%
Repsol Mar de Cortés, S.A. de C.V.	Mexico	Repsol Downstream Internacional, S.A	Acquisition	January-19	E.M. (N.C.)	50.00%	50.00%
Sorbwater Technology, A.S.	Norway	Repsol Energy Ventures, S.A.	Increase in interest	January-19	E.M.	9.35%	20.64%
Ampere Power Energy, S.L.	Spain	Repsol Energy Ventures, S.A.	Acquisition	February-19	E.M.	7.89%	7.89%
Begas Motor, S.L.	Spain	Repsol Energy Ventures, S.A.	Acquisition	February-19	E.M.	36.19%	36.19%
Refinería La Pampilla, S.A.A.	Peru	Repsol Peru B.V.	Increase in interest	March-19	F.C.	10.04%	92.42%
Alectoris Energía Sostenible 1, S.L.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Alectoris Energía Sostenible 3, S.L.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Arco Energía 1, S.L.U.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Arco Energía 2, S.L.U.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Arco Energía 3, S.L.U.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Arco Energía 4, S.L.U.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Arco Energía 5, S.L.U.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Desarrollo Eólico Las Majas VII, S.L.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Fuerzas Energéticas del Sur de Europa V, S.L.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Fuerzas Energéticas del Sur de Europa VI, S.L.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Fuerzas Energéticas del Sur de Europa XI, S.L.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Fuerzas Energéticas del Sur de Europa XII, S.L.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Generación Eólica El Vedado, S.L.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Iberen Renovables, S.A.	Spain	Repsol Renovables, S.L.U. ⁽⁴⁾	Acquisition	June-19	F.C.	100.00%	100.00%
Renovacyl, S.A.	Spain	Iberen Renovables, S.A.	Acquisition	June-19	F.C.	100.00%	100.00%
Repsol Greece Ionian, S.L.	Spain	Repsol Exploración, S.A.	Incorporation	June-19	F.C.	100.00%	100.00%
Bios Avanzados Tratados del Mediterráneo, S.L.	Spain	Repsol Petróleo, S.A.	Incorporation	July-19	F.C.	100.00%	100.00%
Finboot Ltd.	UK	Repsol Energy Ventures, S.A.	Acquisition	July-19	E.M.	8.34%	8.34%
Repsol Exploración Aru, S.L.	Spain	Repsol Exploración, S.A.	Incorporation	July-19	F.C.	100.00%	100.00%
Repsol Exploración West Papúa IV, S.L.	Spain	Repsol Exploración, S.A.	Incorporation	July-19	F.C.	100.00%	100.00%
Principle Power Inc.	USA	Repsol Energy Ventures, S.A.	Increase in interest	July-19	E.M.	0.05%	23.03%
Belmont Technology Inc.	Spain	Repsol Energy Ventures, S.A.	Incorporation	August-19	E.M.	11.18%	11.18%
Repsol Renovables, S.L.U.	Spain	Repsol Electricidad y Gas, S.A. ⁽³⁾	Incorporation	September-19	F.C.	100.00%	100.00%
Repsol Oil&Gas Gulf of Mexico LLC	USA	Repsol E&P USA Holdings, Inc.	Acquisition	November-19	F.C.	100.00%	100.00%
United Oil Company Pte. Ltd	Singapore	Repsol Downstream Internacional, S.A	Acquisition	November-19	E.M.	40.00%	40.00%
PT Pacific Lubritama Indonesia	Indonesia	United Oil Company Pte. Ltd	Acquisition	November-19	E.M.	95.00%	95.00%
Nanogap Sub n-m Powder S.A.	Spain	Repsol Energy Ventures S.A.	Increase in interest	December-19	E.M.	3.84%	12.62%
Repsol Technology and Ventures, S.L.U	Spain	Repsol, S.A.	Incorporation	December-19	F.C.	100.00%	100.00%
Tramperase, S.L.	Spain	Repsol Renovables, S.L.U	Acquisition	December-19	F.C.	100.00%	100.00%
Sorbwater Technology, A.S.	Norway	Repsol Energy Ventures, S.A.	Increase in interest	December-19	E.M.	10.14%	30.78%
Edwards Gas Services LLC	USA	Repsol Oil & Gas USA LLC.	Increase in interest	December-19	F.C.	63.00%	100.00%

⁽¹⁾ Method of consolidation:

F.C.: Full consolidation

E.M.: Equity method. Joint Ventures are identified as "JV".

⁽²⁾ Corresponds to the percentage of equity in the acquired company.

⁽³⁾ Company formerly known as Repsol Nuevas Energías, S.A. The name was changed on September 2019.

⁽⁴⁾ Change from the Repsol Electricity and Gas Matrix to the Repsol Renewables Matrix. The change in the matrix took place in November 2019.

b) Reduction in interest in subsidiaries, joint ventures, and/or associates and other similar transactions:

Name	Country	Parent company	Item	Date	12.31.2019			
					Method of consolidation ⁽¹⁾	% voting rights disposed or derecognized	% total voting rights in entity following disposal	Profit/(Loss) (€ Million)
Repsol Energy Canada, Ltd. ⁽²⁾	Canada	Repsol Exploración, S.A.	Absorption	January-19	F.C.	100.00%	0.00%	
TEGSI (UK), Ltd.	United Kingdom	TE Holding, S.a.r.l.	Liquidation	January-19	F.C.	100.00%	0.00%	
Talisman South Mandar, B.V.	Netherlands	Talisman International Holdings, B.V.	Liquidation	February-19	F.C.	100.00%	0.00%	
Talisman Sadang, B.V.	Netherlands	Talisman International Holdings, B.V.	Liquidation	February-19	F.C.	100.00%	0.00%	
Gastream Mexico, S.A. de C.V.	Mexico	Repsol, S.A.	Liquidation	February-19	F.C.	100.00%	0.00%	
Repsol Exploración Cendrawasih II, B.V.	Netherlands	Repsol Exploración S.A.	Liquidation	April-19	F.C.	100.00%	0.00%	
Begas Motor, S.L.	Spain	Repsol Energy Ventures, S.A.	Decrease in interest	April-19	E.M.	8.26%	27.93%	
Repsol Exploración Liberia, B.V.	Netherlands	Repsol Exploración, S.A.	Liquidation	June-19	F.C.	100.00%	0.00%	
Repsol Exploración Liberia LB-10, B.V.	Netherlands	Repsol Exploración, S.A.	Liquidation	June-19	F.C.	100.00%	0.00%	
CSJC Eurotek - Yugra	Russia	Repsol Exploración Karabashsky, B.V.	Decrease in interest	August-19	E.M. (N.C.)	0.35%	71.16%	1
TV 05-2/10 Holding B.V.	Netherlands	Talisman International Holdings, B.V.	Liquidation	August-19	F.C.	100.00%	0.00%	
Talisman (Block K 44), B.V.	Iraq	Repsol Exploración, S.A.	Liquidation	September-19	F.C.	100.00%	0.00%	
Repsol Company of Portugal, Ltd. ⁽³⁾	Portugal	Repsol, S.A.	Absorption	September-19	F.C.	100.00%	0.00%	
Ampere Power Energy, S.L.	Spain	Repsol Energy Ventures, S.A.	Decrease in interest	November-19	E.M.	0.71%	7.18%	
CSJC Eurotek - Yugra	Russia	Repsol Exploración Karabashsky, B.V.	Decrease in interest	December-19	E.M. (N.C.)	0.39%	70.78%	1
Belmont Technology Inc., S.L.	Spain	Repsol Energy Ventures, S.A.	Decrease in interest	December-19	E.M.	1.31%	9.87%	
Principle Power Inc.	United States	Repsol Energy Ventures, S.A.	Decrease in interest	December-19	E.M.	2.46%	20.57%	
Saint John Gas Marketing Company	United States	Repsol St. John LNG, S.L.	Liquidation	December-19	F.C.	100.00%	0.00%	
Talisman (Pasangkayu) Ltd	Canada	Repsol Oil & Gas Canada Inc.	Liquidation	December-19	F.C.	100.00%	0.00%	
Talisman (Vietnam 46/02) Ltd	Canada	Repsol Oil & Gas Canada Inc.	Liquidation	December-19	F.C.	100.00%	0.00%	
Repsol E&P Canada ,Ltd.	Canada	Repsol Exploración S.A.	Liquidation	December-19	F.C.	100.00%	0.00%	

⁽¹⁾ Method of consolidation:

F.C.: Full consolidation

E.M.: Equity method. Joint Ventures are identified as "JV".

⁽²⁾ Company absorbed by Repsol Oil&Gas Canada

⁽³⁾ Company absorbed by Repsol Portuguesa, S.A.

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	12.31.2018		
					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.	Incorporation	March-18	E.M.(J.V.)	50.00%	50.00%
Repsol Jambi Merang, S.L.	Spain	Repsol Exploración, S.A.	Incorporation	April-18	F.C.	100.00%	100.00%
Repsol Exploración Jamaica, S.A.	Spain	Repsol Exploración, S.A.	Incorporation	July-18	F.C.	100.00%	100.00%
Valdesolar Hive, S.L.	Spain	Repsol Nuevas Energías, S.A.	Acquisition	July-18	F.C.	100.00%	100.00%
Repsol Bulgaria Khan Kubrat, S.A.	Spain	Repsol Exploración, S.A.	Incorporation	September-18	F.C.	100.00%	100.00%
Bardahl de Mexico, S.A. de C.V.	Mexico	Repsol Downstream Internacional, S.A.	Acquisition	November-18	E.M.(J.V.)	40.00%	40.00%
Endomexicana Renta y Servicios, S.A. de C.V.	Mexico	Repsol Downstream Internacional, S.A.	Acquisition	November-18	E.M.(J.V.)	40.00%	40.00%
Viesgo Generación S.L.U.	Spain	Repsol Nuevas Energías, S.A.	Acquisition	November-18	F.C.	100.00%	100.00%
Viesgo Comercializadora de Referencia S.L.U.	Spain	Viesgo Generación S.L.	Acquisition	November-18	F.C.	100.00%	100.00%
Viesgo Energía, S.L.U.	Spain	Viesgo Generación S.L.	Acquisition	November-18	F.C.	100.00%	100.00%
CI Repsol Aviación Colombia, S.A.S.	Colombia	Repsol Downstream Internacional, S.A.	Incorporation	November-18	F.C.	100.00%	100.00%
Repsol Marketing France, S.A.S.U.	France	Repsol Downstream Internacional, S.A.	Incorporation	November-18	F.C.	100.00%	100.00%
Puma Energy Peru, S.A.C.	Peru	Repsol Comercial, S.A.C.	Acquisition	November-18	F.C.	100.00%	100.00%
Ezzing Renewable Energies S.L.	Spain	Repsol Energy Ventures S.A.	Acquisition	December-18	E.M.	22.22%	22.22%
Nanogap Sub n-m Powder S.A.	Spain	Repsol Energy Ventures S.A.	Acquisition	December-18	E.M.	8.78%	8.78%
Recreus Industries S.L.	Spain	Repsol Energy Ventures S.A.	Acquisition	December-18	E.M.	16.67%	16.67%
ASB Geo	Russia	Repsol Exploración, S.A.	Acquisition	December-18	E.M.(J.V.)	50.01%	50.01%

⁽¹⁾ Method of consolidation:

F.C.: Full consolidation

E.M.: 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:

									12.31.2018		
Name	Country	Parent company	Item	Date	Method of consolidation ⁽¹⁾	% voting rights disposed or derecognized	% total voting rights in entity following disposal	Profit/(Loss) (€ Million)			
Repsol Oil & Gas Canada Inc.	Canada	Repsol Energy Resources Canada Inc.	Amalgamation ⁽²⁾	January-18	F.C.	100.00%	0.00%				
Rocsole OY	Finland	Repsol Energy Ventures, S.A.	Decrease in interest	February-18	E.M.	0.66%	12.50%				
Asfalnor, S.A.	Spain	Petróleos del Norte, S.A.	Liquidation	March-18	F.C.	100.00%	0.00%				
OGCI Climate Investments, Llp.	United Kingdom	Repsol Energy Ventures S.A.	Decrease in interest	April-18	E.M.	1.79%	12.50%				
Repsol Venezuela Gas, S.A.	Venezuela	Repsol Venezuela, S.A.	Absorption	May-18	F.C.	100.00%	0.00%				
Gas Natural SDG, S.A.	Spain	Repsol, S.A.	Sale	May-18	E.M.	20.07%	0.00%		344		
AESA - Construcciones y Servicios, S.A. - Bolivia	Bolivia	Repsol Bolivia, S.A.	Absorption	May-18	F.C.	100.00%	0.00%				
Repsol GLP de Bolivia, S.A.	Bolivia	Repsol Bolivia, S.A.	Absorption	May-18	F.C.	100.00%	0.00%				
Talisman Sierra Leone, B.V.	Netherlands	Talisman International Holdings, B.V.	Liquidation	May-18	F.C.	100.00%	0.00%				
Talisman Vietnam 05-2/10, B.V.	Netherlands	TV 05-2/10 Holding, B.V.	Liquidation	May-18	F.C.	100.00%	0.00%				
CSJC Eurotek - Yugra	Russia	Repsol Exploración Karabashsky, B.V.	Decrease in interest	June-18	E.M.(J.V.)	1.28%	72.33%		⁽³⁾		
Repsol Netherlands Finance, B.V.	Netherlands	Repsol International Finance, B.V.	Liquidation	June-18	F.C.	100.00%	0.00%				
Talisman Finance (UK) Limited	United Kingdom	TEGSI (UK) Ltd.	Liquidation	September-18	F.C.	100.00%	0.00%				
TE Finance S.a.r.l	Luxembourg	TE Holding S.a.r.l.	Absorption	November-18	F.C.	100.00%	0.00%				
Repsol Canada Inversiones, S.A.	Spain	Repsol Exploración, S.A.	Absorption	November-18	F.C.	100.00%	0.00%				
Talisman Energy Tangguh, B.V.	Netherlands	Talisman International Holdings, B.V.	Absorption	November-18	F.C.	100.00%	0.00%				
OGCI Climate Investments, Llp.	United Kingdom	Repsol Energy Ventures S.A.	Decrease in interest	November-18	E.M.	3.41%	9.09%				
Principle Power, Inc.	United States	Repsol Energy Ventures, S.A.	Decrease in interest	December-18	E.M.	1.24%	22.98%				
Repsol Exploración Venezuela, B.V.	Netherlands	Repsol Exploración S.A.	Liquidation	December-18	F.C.	100.00%	0.00%				
CSJC Eurotek - Yugra	Russia	Repsol Exploración Karabashsky, B.V.	Decrease in interest	December-18	E.M.(J.V.)	0.82%	71.51%				
Sociedade Açoreana de Armazenagem, S.A. ⁽³⁾	Portugal	Repsol Gas Portugal, S.A.	Sale	December-18	E.M.	25.07%	0.00%				
Spelta Produtos Petrolíferos Sociedade Unipessoal, Ltda. ⁽³⁾	Portugal	Repsol Gas Portugal, S.A.	Sale	December-18	F.C.	100.00%	0.00%				
Servicios y Operaciones de Peru S.A.C	Peru	Repsol Peru B.V.	Liquidation	December-18	F.C.	100.00%	0.00%				

⁽¹⁾ Method of consolidation:

F.C.: Full consolidation

E.M.: Equity method. Joint Ventures are identified as "JV".

⁽²⁾ Effective as of January 1, 2018, Repsol Oil & Gas Canada Inc. (ROGCI) and Repsol Energy Resources Canada Inc. were 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 profit from the sale was €21 million.

APPENDIX IC: JOINT OPERATIONS OF THE REPSOL GROUP AT DECEMBER 31, 2019

The Repsol Group's main Joint Operations (see Note 3) are shown below (including those in which the Group is involved through a joint arrangement)⁶¹:

Name	Interest ⁽¹⁾	Operator	Activity
Algeria			
El Merk (EMK) Field Unit Agt	9.10%	Groupement Berkin	Development/Production
Greater MLN	35.00%	Pertamina	Development/Production
Menzel Ledjimet 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
Tin Fouye Tabenkort	22.62%	Groupement TFT	Development/Production
Australia			
JPDA 06-105 PSC	25.00%	ENI	Development/Production
Bolivia			
Arroyo Negro (Sara Boomerang III)	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
Carohuaicho 8B	24.17%	YPF B Andina, S.A	Exploration
Carohuaicho 8C	24.17%	YPFB Chaco	Exploration
Carohuaicho 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	37.50%	Repsol	Development/Production
Iniguazu	37.50%	Repsol	Exploration
La Peña - Tundy	48.33%	YPF B Andina, S.A	Development/Production
Los Penocos (Sara Boomerang III)	48.33%	YPF B Andina, S.A	Development/Production
Los Sauces (Grigotá)	48.33%	YPF B Andina, S.A	Development/Production
Margarita-Huacaya	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
San Antonio-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%	Equinor	Development/Production
BM-S-51 (S-M-619)	12.00%	Petrobras	Exploration
BM-S-50 (S-M-623) Sagitario	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			

⁶¹ 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	Interest ⁽¹⁾	Operator	Activity
1_21 Han Asparuh	30.00%	Total	Exploration
1-14 Khan Kubrat	20.00%	Shell	Exploration
Canada ⁽²⁾			
Chauvin Alberta	63.00%	Repsol	Development/Production
Chauvin Saskatchewan	92.00%	Repsol	Development/Production
Edson	79.00%	Repsol	Development/Production
Groundbirch Saturn No Montney Rights	35.00%	Others	Development/Production
Misc. Alberta	54.00%	Repsol	Exploration
Misc. British Columbia	88.00%	Repsol	Exploration
Misc. Saskatchewan	74.00%	Repsol	Exploration
Northwest Territories	4.00%	Others	Exploration
Nunavut	2.00%	Others	Exploration
Wild River Region	56.00%	Repsol	Development/Production
Yukon	2.00%	Others	Exploration
Colombia			
CPO-9 Akacias Production Area	45.00%	Ecopetrol	Development/Production
Caguan 5	50.00%	Frontera Energy	Exploration
Caguan 6	40.00%	Frontera Energy	Exploration
Catleya	50.00%	Repsol	Exploration
Chipirón	8.75%	Ecopetrol	Development/Production
COL-4	50.01%	Repsol	Exploration
CPE-8	50.00%	Repsol	Exploration
CPO-9 - Exploration Area	45.00%	Ecopetrol	Exploration/Production
Cravo Norte	5.63%	Oxycol	Development/Production
Gua Off 1	50.00%	Repsol	Exploration
Mundo Nuevo	30.00%	Equion	Exploration
Piedemonte	22.05%	Equion	Development/Production
RC-12	50.00%	Repsol	Exploration
Cosecha	17.50%	Oxycol	Development/Production
Rondón	6.25%	Oxycol	Development/Production
Tayrona	20.00%	Petrobras	Exploration
Ecuador			
Block 16	35.00%	Repsol	Service Contract
Tivacuno	35.00%	Repsol	Service Contract
Spain			
Albatros	82.00%	Repsol	Development/Production
Angula	53.85%	Repsol	Development/Production
Boquerón	61.95%	Repsol	Development/Production
Casablanca - Montanazo Unificado	68.67%	Repsol	Development/Production
Casablanca No Unificado	67.35%	Repsol	Development/Production
Montanazo D	72.44%	Repsol	Development/Production
Rodaballo	65.42%	Repsol	Development/Production
United States ⁽²⁾			
<u>Alaska</u>			
North Slope Horseshoe project (49 blocks)	49.00%	Oil Search	Exploration
North Slope Grizzly project (36 blocks)	49.00%	Oil Search	Exploration
North Slope Pikka	25.00%	Oil Search	Exploration
North Slope Exploration 25%	25.00%	Oil Search	Exploration
North Slope Exploration 37,24% (136 blocks)	37.24%	Oil Search	Exploration
North Slope Exploration 49% (79 blocks)	49.00%	Oil Search	Exploration
North Slope Development	49.00%	Oil Search	Development/Production
<u>Gulf of Mexico</u>			
Alaminos Canyon Blacktip project (4 blocks)	8.50%	Shell	Exploration
Garden Banks Blacktail project (4 blocks)	50.00%	Repsol	Exploration
Green Canyon - Shenzi (6 blocks)	28.00%	BHP	Development/Production

Name	Interest ⁽¹⁾	Operator	Activity
Green Canyon Dragon	40.00%	Murphy	Exploration
Keathley Canyon Leon (4 blocks)	50.00%	Llog	Exploration
Keathley Canyon Buckskin (6 blocks)	22.50%	Llog	Development/Production
Keathley Canyon Moccasin	30.00%	Llog	Exploration
Walker Ridge Monument project (6 blocks)	20.00%	Equinor	Exploration
Walker Ridge Mollerusa (4 blocks)	60.00%	Repsol	Exploration
Marcellus			
Marcellus New York (*) Exploration Unconventional	99.81%	Repsol	Exploration
Marcellus New York	86.66%	Repsol	Development/Production
Marcellus Pennsylvania	83.33%	Repsol	Development/Production
Greece			
Aitolokarnania	60.00%	Repsol	Exploration
Ioannina	60.00%	Repsol	Exploration
Ionian Block	50.00%	Repsol	Exploration
Guyana			
Kanuku	37.50%	Repsol	Exploration
Indonesia			
Andaman III	51.00%	Repsol	Exploration
Corridor PSC	36.00%	Conoco	Development/Production
East Jabung	51.00%	Repsol	Exploration
South Sakakemang	80.00%	Repsol	Exploration
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
Malasia			
PM-03 CAA	35.00%	Repsol	Development/Production
PM-305	60.00%	Repsol	Development/Production
PM-314	60.00%	Repsol	Development/Production
2012 Kinabalu Oil Fields	60.00%	Repsol	Development/Production
Morocco			
Tanfit	37.50%	Repsol	Exploration
Mexico			
Bloque 10	40.00%	Repsol	Exploration
Bloque 11	60.00%	Repsol	Exploration
Bloque 14	50.00%	Repsol	Exploration
Bloque 29	30.00%	Repsol	Exploration
Norway			
PL 019 F	61.00%	Repsol	Development/Production
PL 019 G	61.00%	Repsol	Development/Production
PL 019B	61.00%	Repsol	Development/Production
PL 025	15.00%	Equinor	Development/Production
PL 038C	70.00%	Repsol	Development/Production
PL 052	27.00%	Equinor	Development/Production
PL 053B	33.84%	Wintershall DEA	Development/Production
PL 055	33.84%	Wintershall DEA	Development/Production
PL 055B	33.84%	Wintershall DEA	Development/Production
PL 055D	33.84%	Wintershall DEA	Development/Production
PL 092 Mikkel	7.65%	Equinor	Development/Production

Name	Interest ⁽¹⁾	Operator	Activity
PL 1024	70.00%	Repsol	Exploration
PL 120	11.00%	Equinor	Development/Production
PL 120 CS	11.00%	Equinor	Development/Production
PL 121 Mikkell	7.65%	Equinor	Development/Production
PL 185	33.84%	Wintershall DEA	Development/Production
PL 187	15.00%	Equinor	Exploration
PL 316	55.00%	Repsol	Development/Production
PL 316B	55.00%	Repsol	Development/Production
PL 528	6.00%	Centrica R. Norge	Exploration
PL 528B	6.00%	Centrica R. Norge	Exploration
PL 847	20.00%	Wintershall DEA	Exploration
PL 847B	20.00%	Wintershall DEA	Exploration
PL 909	70.00%	Repsol	Exploration
PL 910	61.11%	Repsol	Exploration
PL 913	50.00%	OMV	Exploration
PL 913 B	50.00%	OMV	Exploration
PL 972	40.00%	Repsol	Exploration
PL 976	30.00%	Lundin	Exploration
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 40	60.00%	Repsol	Exploration
Peru			
Bloque 56	10.00%	Pluspetrol	Development/Production
Bloque 57	53.84%	Repsol	Development/Production
Bloque 88	10.00%	Pluspetrol	Development/Production
Iraq			
Topkhana	80.00%	Repsol	Development/Production
United Kingdom			
P534 (98/06a-Wareham)	2.55%	Perenco	Development/Production
P534 (98/06a-Wych Farm UOA)	2.53%	Perenco	Development/Production
PL089 (SZ/8, 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%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P020 (22/18n)	30.08%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P073 (30/18_E)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P111 (30/3a Blane Field)	30.75%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P111 (30/3a Upper)	15.55%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P116 (30/16n)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P185 (30/11b)_Developm.	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P219 (16/13a)	16.07%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P220 (15/17n-F2- Piper+ rest of Block)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P237 (15/16a)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P240 (16/22a- non Arundel Area)	18.86%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P241 (21/1c)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P241/P244 (21/1c/21/2a- Cretaceous Area West)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P244 (21/2a)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P249 (14/19n - Residual -Claymore)_Dev&Explo	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P249 (14/19n_F1- Claymore)	47.16%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P249 (14/19n_F2- Scapa/Claymore)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P250 (14/19s- F1)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production

Name	Interest ⁽¹⁾	Operator	Activity
P250 (14/19s- Rest of Block)_Develop	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P256 (30/16s)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P263 (14/18a)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P266 (30/17b)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P291 (22/17s)	30.08%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P291 (22/22a)	30.08%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P291 (22/23a)	30.08%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P292 (22/18a)	30.08%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P295 (30/16a)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P295 (30/16b)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P295 (30/16c)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P295 (30/16t)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P297 (13/28a)_Devel.	35.28%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P307 (13/29a)_Devel.	35.28%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P324 (14/20b)	25.50%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P324 (14/20b-Claymore Extension)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P324 (14/20b-f1+f2)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P324 (15/16b)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P324 (15/23a)_Developm.	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P344 (16/21b Rest of Block)	30.60%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P344 (16/21c*- Rest of block excluding Stirling)	30.60%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P729 (13/29b - Blake Ext Non Skate_Devel.)	40.80%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P729 (13/29b - Ross Unitised Field UUOA interests)	35.28%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P810 (13/24b Blake Area)	34.53%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P810 (13/24b-Rest of Block)_dev&explo	35.28%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P973 (13/28c)	35.28%	Repsol Sinopec Resources UK, Ltd.	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%	Repsol Sinopec Resources UK, Ltd.	Exploration
P079 (30/13a)	31.88%	Repsol Sinopec Resources UK, Ltd.	Exploration
P101 (13/24a)	34.53%	Repsol Sinopec Resources UK, Ltd.	Exploration
P185 (30/11b)	30.60%	Repsol Sinopec Resources UK, Ltd.	Exploration
P185 (30/12b)	30.60%	Repsol Sinopec Resources UK, Ltd.	Exploration
P250 (14/19a)	51.00%	Repsol Sinopec Resources UK, Ltd.	Exploration
P297 (13/28a)	33.06%	Repsol Sinopec Resources UK, Ltd.	Exploration
P307 (13/29a)	36.55%	Repsol Sinopec Resources UK, Ltd.	Exploration
P324 (15/23a)	51.00%	Repsol Sinopec Resources UK, Ltd.	Exploration
P593 (20/05c)	51.00%	Repsol Sinopec Resources UK, Ltd.	Development/Production
P983 (13/23b)	25.50%	Repsol Sinopec Resources UK, Ltd.	Exploration
P534 (98/07a)	2.55%	Perenco	Exploration
P225 (16/27a- Contract Area 3)	13.50%	JX Nippon	Exploration
P225 (16/27a- Contract Area 3 Andrew Field Area)	5.03%	BP	Development/Production
Russia			
Alkanovskoe	49.00%	AROG	Development/Production
Avgustovskoe	49.00%	AROG	Development/Production
Bazhkovskoe	49.00%	AROG	Development/Production
Borshevskoe	49.00%	AROG	Development/Production
Karabashskiy 1	70.78%	Eurotek Yugra	Exploration
Karabashskiy 2	70.78%	Eurotek Yugra	Exploration
Karabashskiy 3	70.78%	Eurotek Yugra	Exploration
Karabashskiy 9	70.78%	Eurotek Yugra	Exploration
Kileyskiy	70.78%	Eurotek Yugra	Exploration
Kochevnskoe	49.00%	AROG	Development/Production
Kovalevskoe	49.00%	AROG	Development/Production
Kulturenskoe	49.00%	AROG	Development/Production
North-Borshevskoe	49.00%	AROG	Development/Production
Novo-Kievskoe	49.00%	AROG	Development/Production
Penzenskoe	49.00%	AROG	Development/Production

Name	Interest ⁽¹⁾	Operator	Activity
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
Sverdlovsky 4	70.78%	Eurotek Yugra	Exploration
West-Avgustovskoe	49.00%	AROG	Development/Production
West-Kochevnskoe	49.00%	AROG	Development/Production
Elginskoe (Development)	48.79%	AROG	Development/Production
Elginskoe (Exploration)	48.79%	AROG	Exploration
Cheremushkiy	49.00%	AROG	Exploration
East-Kulturnenskiy	49.00%	AROG	Exploration
West-Borshevskoe	48.79%	AROG	Development/Production
Karabashkiy 10	50.01%	ASB Geo	Exploration
Novenkoe	49.00%	AROG	Development/Production
Petrovskoe	49.00%	AROG	Development/Production
Pushkarihinskiy	49.00%	AROG	Exploration
Verblyuzhe	49.00%	AROG	Development/Production
Trinidad & Tobago			
5B Manakin	30.00%	BpTT	Development/Production
East Block	30.00%	BpTT	Development/Production
S.E.C.C. (IBIS)	10.80%	EOG	Development/Production
West Block	30.00%	BpTT	Development/Production
Venezuela			
Barua Motatan	40.00%	Petroquiriquire	Development/Production
Carabobo	11.00%	Petrocarabobo	Development/Production
Cardón IV Oeste	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
Vietnam			
Block 07/03 Cobia Area	51.75%	Repsol	Exploration
Block 07/03 CRD Area ⁽³⁾	51.75%	Repsol	Development/Production
Block 133 & 134	49.00%	Repsol	Exploration
Block 135 & 136 ⁽³⁾	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 GNL
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 interest in the joint arrangement.

⁽²⁾ Mining domain rights in Canada and the United States are articulated over a large number of Joint Operating Agreements (JOAs). They have been grouped by geographical areas and Repsol's interest.

⁽³⁾ Assets whose activity is suspended (see Note 21.3)

APPENDIX II: SEGMENT REPORTING AND RECONCILIATION WITH EU-IFRS FINANCIAL STATEMENTS⁶²

Income Statement figures

The reconciliation between adjusted net income and EU-IFRS net income at December 31, 2019 and 2018, is as follows:

Results	€ Million											
	ADJUSTMENTS											
	Adjusted net income		Reclassifications of joint ventures		Special items		Inventory effect		Total adjustments		Net income under EU-IFRS	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Operating income	3,661	4,396	(529)	(1,204)	(6,343)	(633)	(40)	(106)	(6,912)	(1,943)	(3,251)	2,453
Financial result	(390)	(462)	111	130	(22)	159	—	—	89	289	(301)	(173)
Net income from equity affiliates	22	15	324	965	5	72	—	1	329	1,038	351	1,053
Income before tax	3,293	3,949	(94)	(109)	(6,360)	(402)	(40)	(105)	(6,494)	(616)	(3,201)	3,333
Income tax	(1,227)	(1,569)	94	109	536	46	9	28	639	183	(588)	(1,386)
Income from continuing operations	2,066	2,380	—	—	(5,824)	(356)	(31)	(77)	(5,855)	(433)	(3,789)	1,947
Income attributed to minority interests	(24)	(28)	—	—	1	1	(4)	9	(3)	10	(27)	(18)
Net income from continuing operations	2,042	2,352	—	—	(5,823)	(355)	(35)	(68)	(5,858)	(423)	(3,816)	1,929
Net income from discontinued operations	—	—	—	—	—	412	—	—	—	412	—	412
TOTAL NET INCOME ATTRIBUTED TO THE PARENT	2,042	2,352	—	—	(5,823)	57	(35)	(68)	(5,858)	(11)	(3,816)	2,341

Segments	€ Million											
	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	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Upstream	6,904	7,699	1,969	2,514	(2,157)	(2,068)	(5,998)	(1,424)	29	22	(212)	(1,113)
Downstream	46,810	47,029	1,928	2,143	(1,047)	(790)	205	(55)	(2)	(6)	(639)	(425)
Corporate	(1,681)	(2,021)	(236)	(261)	(85)	(78)	(2)	—	(5)	(1)	169	43
Adjusted figures⁽¹⁾	52,033	52,707	3,661	4,396	(3,289)	(2,936)	(5,795)	(1,479)	22	15	(682)	(1,495)
Adjustments:												
Upstream	(2,220)	(2,517)	(6,885)	(1,651)	836	784	473	413	304	1,004	89	96
Downstream	(485)	(317)	17	(204)	19	12	—	—	26	35	5	13
Corporate	—	—	(44)	(88)	—	—	—	—	(1)	(1)	—	—
EU-IFRS FIGURES	49,328	49,873	(3,251)	2,453	(2,434)	(2,140)	(5,322)	(1,066)	351	1,053	(588)	(1,386)

⁽¹⁾ Figures drawn up according to the Group's reporting model described in Note 4.

⁽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:

Segments	€ Million					
	Customers		Inter-segment		Total	
	2019	2018	2019	2018	2019	2018
Upstream	5,270	5,699	1,634	2,000	6,904	7,699
Downstream	46,763	47,007	47	22	46,810	47,029
Corporate	1	1	—	—	1	1
(-) Adjustments and eliminations of operating income between segments	(1)	—	(1,681)	(2,022)	(1,682)	(2,022)
TOTAL	52,033	52,707	—	—	52,033	52,707

⁽³⁾ Including depreciation of failed exploratory drilling. For more information, see Note 20.

⁶² 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

Segments	€ Million							
	Non-current assets		Net operating investments ⁽²⁾		Capital employed ⁽³⁾		Investments accounted for using the equity method	
	2019	2018	2019	2018	2019	2018	2019	2018
Upstream	21,115	25,514	2,429	1,973	17,205	21,515	217	387
Downstream	12,814	11,118	1,376	1,831	14,078	11,338	42	21
Corporate	740	733	56	70	2,009	1,500	—	18
ADJUSTED FIGURES⁽¹⁾	34,669	37,365	3,861	3,874	33,292	34,353	259	426
Adjustments:								
Upstream	(6,593)	(6,422)	(499)	(365)	2,539	2,659	6,563	6,425
Downstream	(270)	(205)	(28)	(41)	44	64	414	341
Corporate	—	—	—	—	—	—	1	2
EU-IFRS FIGURES	27,806	30,738	3,334	3,468	35,875	37,076	7,237	7,194

⁽¹⁾ Figures drawn up according to the Group's reporting model described in Note 4.

⁽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.

Cash flow figures

The reconciliation of the cash flow from operations to free cash flow with the EU-IFRS Statement of Cash Flows at December 31, 2019 and 2018 is as follows:

	At December 31					
	Adjusted cash flow		Reclassification of joint ventures and others		EU-IFRS statement of cash flow	
	2019	2018	2019	2018	2019	2018
I. Cash flows from / (used in) operating activities (cash flow from operations)	5,837	5,428	(988)	(849)	4,849	4,579
II. Cash flows from / (used in) investing activities	(3,777)	(372)	(630)	(987)	(4,407)	(1,359)
Free cash flow (I+II)	2,060	5,056	(1,618)	(1,836)	442	3,220

APPENDIX III: REGULATORY FRAMEWORK

The activities of Repsol, S.A. and its subsidiaries are subject to extensive regulation, the key aspects of which are described below.

Spain

Basic legislation

Spain currently has 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 create a safe, cost-effective, economically-sustainable, and environmentally-friendly energy system.

Law 3/2013 of June 4, on the creation of the Spanish 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.

Royal Decree Law 1/2019, of January 11, proceeds with returning to the CNMC the competencies that were taken away in 2014, thus bringing the competencies of the CNMC into line with the requirements of EU law in relation to Directives 2009/72/CE and 2009/73/CE of the European Parliament and Council, of 13 July 2009, concerning common rules for the internal market in electricity and natural gas.

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 new development 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 oil products, or companies that hold title to said assets, which become strategic assets.

Principal operators and dominant operators

Under Royal Decree Law 5/2005, of March 11, the Spanish National Energy Commission (currently the CNMC) is required 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 holding 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.

Hydrocarbon exploration and production

Hydrocarbon fields and underground storage located in 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 operating hydrocarbon fields grants the owners exclusive rights to operate the field 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 sell the hydrocarbon

products they obtain.

Law 8/2015, regulating specific tax and non-tax measures related to hydrocarbon 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 a scheme for land owners to share in the profits derived from the related extraction activity.

Royal Decree Law 16/2017, establishing safety provisions for hydrocarbon research and operation in the marine environment, implemented by Royal Decree 1339/2018, of October 29, transposes Directive 2013/30/EU, of 12 June 2013 on safety of offshore oil and gas operations ("Offshore Directive") into Spanish law. The purpose of the Law is to establish minimum requirements that offshore hydrocarbon research and operations must meet to prevent major accidents, 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.

With regard to offshore activity, Law 41/2010, of December 29, on the protection of the marine environment, regulates marine strategies as planning instruments for the five marine districts into which the Spanish marine environment is divided. The authorization of any activity that requires carrying out works or installations in marine waters, their bed or their subsoil, or the placement or deposit of materials on the seabed, or discharges regulated in Title IV of the Law, must have a favorable report from the relevant Ministry regarding its compatibility with the marine strategy. Royal Decree 79/2019, of February 22, regulates and implements the procedure for processing this report and establishes the criteria for compatibility with the marine strategies, and is applicable in the case of the modification, renewal or extension of existing actions.

Oil products

The price of oil products is deregulated, with the exception of LPG (see specific information below).

In the retail side of the business, exclusive supply contracts for the distribution of motor fuels have a maximum term of one year, and they can be automatically rolled over for additional one-year periods at the sole discretion of the distributor, for a maximum of three years. 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 this market share shall no longer be measured in terms of points of sale but rather based on sales figures for the previous year, 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. This period has elapsed without the government having reviewed the above measure for the time being.

Finally, Law 8/2015 allows owners of oil product retailers to supply products to other retail distributors, simply by registering in advance with the excise tax registry.

Minimum stocks

Royal Decree 1766/2007, regulates the obligation to maintain a minimum stocks in the oil and natural gas sectors, the obligation to diversify the supply of oil and natural gas, and the activities of the Corporation of Strategic Reserves of Oil Products (CORES for its acronym in Spanish).

The obligation to maintain minimum stocks of oil products in Spain 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 must maintain stocks corresponding to 50 days of sales, while the remaining stocks are held by CORES on behalf of the various operators (strategic reserves) until the obligation established has been met.

Royal Decree Law 15/2013, of December 13, introduces an amendment to the Hydrocarbon Sector Law, indicating that via regulation, administrative procedures and obligations needed to ensure, on an ongoing basis, a minimum safety buffer equivalent to at least 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

Under certain circumstances, LPG prices are subject to retail price ceilings. The prices of bulk LPG and bottled LPG in cylinders with capacity of under 8 kg or over 20 kg are deregulated. Law 18/2014, of October 15, has had the effect of also deregulating the prices of containers with capacity of more than 8 kg or less than 20 kg with a tare weight of no more than 9 kg, with the exception 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 sold 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 kg and 20 kg 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 Balearic Islands, DISA in the Canary Islands and Atlas in Ceuta and Melilla.

On November 28, 2019, the Supreme Court handed down judgments dismissing two appeals for judicial review filed by Repsol Butano and Disa Gas against Ministerial Order IET/389/2015, of March 5, and indirectly against Articles 57 and 58 of Law 18/2014, of October 15, applied by the Order under appeal. This regulatory framework excludes LPG containers with a load equal to or greater than 8 kg and less than 20 kg, with a tare weight of more than 9 kg, from the deregulation introduced by Law 18/2014; it establishes an obligation for LPG wholesale operators with a greater market share in certain territories to supply residential homes and, lastly, it maintains the regulated price of containers with a tare weight of less than 9 kg for operators required to supply residential homes that do not have containers with a tare weight greater than that mentioned, in the corresponding territory. This framework particularly affects Repsol Butano, which is the majority operator on the mainland and the Balearic Islands, and whose fleet consists mainly of heavy containers with a tare weight of more than 9 kg.

Natural gas

Law 12/2007, of July 2, which amended the Hydrocarbon Sector Law, 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 approval of Electricity Sector Law 54/1997, of November 27, amended by Law 17/2007, of July 4, and later by Electricity Sector Law 24/2013, of December 26.

Production and sale activities continue to be deregulated, governed by competition, while transmission, distribution and the system's technical and financial management remain as regulated activities, characterized by access that requires administrative authorization, and their remuneration is established by regulations and 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 electricity 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 and now by Royal Decree 244/2019, of April 5, regulating the administrative, technical and economic conditions for self-consumption in Spain. This regulation supplements the regulatory framework promoted by Royal Decree Law 15/2018, the main measure of which was to repeal the so-called "sun tax", and represents a new energy panorama that is committed to a model based on distributed generation and renewable energies. Among the many new developments, the following are worth mentioning:

- Recognition of the figure of shared self-consumption, which provides the possibility that several users may benefit from the same generating facility.
- Simplification of bureaucratic procedures and deadlines for the legalization of facilities.
- Introduction of simplified compensation for generation surpluses. Self-consumed energy from renewable sources, combined heat and power systems or waste, as well as surplus energy released into the transmission and distribution network, will be exempt from all types of charges and fees.

Ministerial Order ETU/130/2017, of February 17, updated the remuneration parameters of standard facilities applicable to certain facilities producing electricity from renewable energy sources, combined heat and power systems and waste, in order to be applied to the regulatory half period commencing on January 1, 2017.

a. Remuneration system for 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, combined heat and power systems 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, combined heat and power systems 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 Ministerial 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 Ministerial Order IET/2212/2015, and the 2nd auction in 2017 through Royal Decree 650/2017 and Ministerial Order ETU/615/2017), similar to the 1st of that year and open to all technologies.

b. Remuneration system for marketing activity

The marketing activity is based on the principles of freedom of contract and choice of supplier by the customer. Marketing, as a deregulated 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 throughout the entire Spanish territory. The term last resort tariffs is reserved for two groups of consumers: the so-called vulnerable consumers (which also includes 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 small consumers 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 reseller. It also sets out the criteria for designating reference resellers 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 resellers to be included in the calculation of the voluntary price for small consumers. Ministerial Order ETU/1948/2016, of December 22, established the values of the marketing costs of the reference resellers to be included in the calculation of the voluntary price for small electricity consumers in the 2014-2018 period, 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 December 27, on fiscal measures for energy sustainability introduced by the IVPEE, commonly known as the green cent, the hydroelectric royalty, etc.
- Royal Decree Law 9/2013, of July 12, establishes a number of additional remuneration principles for the transmission and distribution of electricity, and establishes the concept of reasonable return in project return, which, before taxes, will be based 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 balance.
- 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 temporary 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% 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 revenue 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 25 October 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.

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

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 optimal 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 implemented 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.

The European Union, also a signatory of the Paris Agreement, has made a commitment to **climate neutrality by 2050**. To this end, in December 2019 the European Commission presented the European Green Deal, which constitutes the **new EU growth strategy**, and which aims to completely transform the European economy, highlighting the following proposals for 2020: (i) European climate law, (ii) increase in the EU's objectives for reducing greenhouse gas emissions by 2030, as part of the EU Emissions Trading System, and (iii) increase in renewable energies and energy efficiency, which will be reflected in the corresponding Directives. Directive 2018/2001, on the promotion of the use of energy from renewable sources, currently sets a target of 8.5% for the sale or consumption of biofuels in transport by 2020. In addition, there is a 7% restriction on the use of biofuel from food crops, which the use of waste, such as used cooking oil (UCO) or animal fats, essential to achieve compliance.

As far as Spain is concerned, the MITECO is currently preparing the "Energy and Climate Package", which includes the National Integrated Energy and Climate Plan (PNIEC) as well as the future Climate Change and Energy Transition Act, and a strategy for a fair transition. This Act and the PNIEC constitute a commitment by the government to comply with the objectives set out in the Paris Agreement and by the European Union, which Spain has already assumed.

The purpose of Royal Decree 639/2016, of December 9, is to minimize the dependence of the transport industry on oil, mitigate the environmental impact of transport, and establish threshold requirements for the creation of an infrastructure for alternative fuels, including charging stations for electric vehicles and natural gas and hydrogen refueling stations.

Finally, the MITECO has established energy policy guidelines for the CNMC through the enactment of Ministerial Order TEC/406/2019, of April 5, which establishes the energy policy guidelines that the CNMC must observe in the circulars that make up its regulatory plan for 2019 and that correspond to the natural gas and electricity sectors.

This order differentiates those guidelines that must be applied to each of the CNMC's circulars, however, in general, the purpose of all of these guidelines is to ensure consistency between the regulatory action of the regulatory authority and the priorities of the government's energy policy. These include, among others, guidelines aimed at optimal management of national resources, electricity savings and efficiency, the penetration of renewable energies and financial prudence.

For further information on the risks arising from climate change see section 6.1 of the 2019 Consolidated Management Report.

Bolivia

The 2009 Bolivian Constitution 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 for 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") and technical and economic regulations.

On May 1, 2006, Supreme Decree no. 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 various companies, including 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 hydrocarbon exploration and production in Bolivia. Furthermore, Law No. 817 of July 19, 2016 was enacted, supplementing Article 42 of Law No. 3,058, previously amended by Law No. 767, allowing YPFB to enforce addenda to operating contracts to extend their term.

Operating contracts

According to the Hydrocarbons Law and Article 362 of the Bolivian Constitution (CPE), any individual or group, national or foreign, public or private person may enter into one or more shared production, operation or association contracts with YPFB to carry out exploration and operation activities, for a period not to exceed forty (40) years. The CPE of 2009 and Law 767 limit the type of contract to oil service contracts, which have characteristics similar to the operating contracts of Law 3058.

An operating contract is a contract by which the holder will execute, with its own means and at its own risk, for and on behalf of YPFB, the operations corresponding to the exploration and operation activities within the area covered by the contract, under the remuneration system, in the case of entering into operation activities. YPFB will not make any investment and will not assume any risk or liability for the investments or results obtained in relation to the contract, and it is the exclusive responsibility of the holder to provide all capital, installations, equipment, materials, personnel, technology and other necessary items. YPFB remunerates the holder for the operating services in cash through the holder's remuneration. This payment will cover all operating and utility costs. YPFB will in turn pay the royalties, taxes and production shares plus the corresponding taxes. Once production has started in an oil contract, the holder is required to deliver all oil and gas produced to YPFB. The holder will be entitled to remuneration under the operating agreement for the total amount produced and delivered to YPFB.

Oil contracts and amendments thereto require authorization and approval by the Plurinational Legislative Assembly, in accordance with the Political Constitution of the State (Legislative Power).

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, effective as of May 2, 2007. In addition, the natural gas and liquid hydrocarbon delivery agreements establishing the terms and conditions governing the delivery of hydrocarbons by the holder were entered into on May 8, 2009.

Canada

Regulation of exploration and production activities

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 from Crown lands are established by government regulation and, in general, calculated as a percentage of gross production based on the productivity of the wells, geographical location, date on which the oil fields were discovered, recovery method and type and quality of substance produced. Occasionally, the provincial governments may offer incentive programs for exploration and development. Such programs seek to reduce the royalty rate or other fees or offer certain tax credits. Fees and royalties 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, transport 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 Regulator, the Saskatchewan Ministry of Economy and the Saskatchewan Ministry of the Environment, as well as federal regulatory bodies such as the Impact Assessment Agency of Canada and the Canada Energy Regulator.

Environmental and emissions regulations

Environment regulations from provincial and Canadian federal governments restrict and prohibit the release or emission of various substances that are considered harmful, such as sulfur dioxide, carbon dioxide and nitrous oxide. Regulations also impose conditions or prohibitions on 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 addition to the regulation and control of exploration and production activities, the provincial and Canadian federal governments have also enacted various forms of emissions regulations. In October 2019, the newly-elected Alberta government introduced the Technology Innovation and Emissions Reduction Implementation Act (TIER) to replace the Carbon Competitiveness Incentive Regulation (CCIR). The CCIR and TIER are similar in their approach, however the TIER moves from the CCIR's industry-based benchmarks to benchmarks based on the average past performance of the facilities. The TIER currently mandates a \$30 per ton price on carbon emissions.

The TIER regulations are intended to meet federally mandated carbon standards; however, the Canadian federal government has indicated an intent to review the TIER to determine if it meets federal standards.

The provincial government of Alberta has also committed to reducing methane emissions from oil and gas operations by 45% by 2025 through new emissions design standards for facilities, improved measurement and reporting and new regulated standards starting in 2020.

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 operation 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 Block 67.

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 safety 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 US 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, Pennsylvania and Texas. In the Alaska and Texas, exploration and production activities are regulated by the Alaska Department of Natural Resources and the Railroad Commission of Texas, respectively. 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 (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 interstate commerce 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 interstate commerce. 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 enacted 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 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 liquefied 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 operation of liquefied 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 operate 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 Ministry of Energy and Mineral Resources Regulation No. 8 of 2017, on Gross Split Production Sharing Contracts ("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

The Constitution includes the main bases of its legal framework governing the hydrocarbons market in Peru. The Constitution states that the government promotes private initiatives, recognizing the economic pluralism, and the state having a subsidiary role in terms of business concerns. The Constitution also establishes that private and public business activity must be treated equally under the law, and that 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, that pursue hydrocarbon activities are expressly subject to the laws of the Republic of Peru, renouncing the right to any diplomatic recourse.

The most important authorities with competence over Peruvian hydrocarbon 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 the Energy and 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, S.A. 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 Hydrocarbons Law (OHL), 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 objectives, the OHL created PERUPETRO, a state-owned limited company organized as a public corporation, 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 operation 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 OHL stipulates that any natural or legal persons, whether national or foreign, may install, operate, and maintain oil refineries, plants for processing natural gas and condensates, natural asphalt, greases, lubricants, and petrochemicals, subject to the norms specifically established by MINEM.

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 hydrocarbon fields, irrespective of their nature, located on national territory, offshore under the sea bed, 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.

The Hydrocarbons Organic Law (HOL) regulates all matters regarding the exploration, operation, refining, industrialization, transport, storage, sale and conservation of hydrocarbons, including related refined products and the works required to perform these activities. Pursuant to the HOL, 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 HOL 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 transport 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 23 occasions, with the most recent, Presidential Decree No. 4,090, published on January 5, 2020, in Extraordinary Official Gazette No. 6,501.

The National 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. On May 20, 2019, the National Constituent Assembly published a Constituent Decree in Official Gazette No. 41,636 by which it extended the operation of the National Constituent Assembly at least until December 31, 2020.

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, 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 is still ongoing in the mixed companies, and the results of this process have yet to be disclosed.

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 US persons and US residents from performing 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 legal 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 National 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 Extraordinary Official Journal No. 6,405 the so-called Exchange Agreement No. 1 ("the Exchange Agreement", pending regulation by BCV), 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 centralize, manage and regulate operations under the new Exchange Market System; iv) (a) all foreign currency purchase and sale transactions for the public and private sector will be performed at the exchange rate and the sale of foreign currency positions (auctions); (b) exchange transactions at the retail price; and (c) purchase and sale of securities in national currency; v) regulation of the exchange system applicable to the public oil sector.

On May 2, 2019, the Central Bank of Venezuela published Resolution No. 19-05-01 in Official Gazette No. 41,624, which authorized the so-called foreign exchange tables.

On November 19, 2019, the Presidency of the Republic published a decree instructing natural and legal persons, public and private, to register information and economic events expressed in accounting terms in sovereign cryptoassets, without prejudice to their registration in Bolívares.



REPSOL Group

2019
Integrated
Management Report

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



The Management Report

Repsol¹, in its commitment to transparency, has prepared a **Management Report** that integrates financial with non-financial information and aims to become the cornerstone of the Group's annual public reporting.

The report not only complies with applicable legal requirements² but is aligned with best practice and, in particular, with the recommendations of the "*International Integrated Reporting Framework*" of the *International Integrated Reporting Council (IIRC)* and the "*Guía para la Elaboración del Informe de Gestión de las Entidades Cotizadas*" of the CNMV, Spain's securities market regulator.

This **Management Report** faithfully presents Repsol Group's business, results and financial situation, together with a description of the main risks and uncertainties it faces. It also provides information on Sustainability (environment, climate change, social issues, etc), Security and Governance.

Preparation of information

The **financial information** included in this document, unless expressly indicated otherwise, was prepared in accordance with the Group's reporting model, which is described in Note 5 "*Segment reporting*" to the 2019 consolidated Financial Statements. Some of the financial indicators and ratios are classified as Alternative Performance Measures (APMs) in accordance with the *European Securities Markets Authority (ESMA) Guidelines*³.

The report should be read together with the 2019 Consolidated Financial Statements, which have been filed along with this Report with the CNMV (www.cnmv.es) and are also available at www.repsol.com.

The **information** relating to **Sustainability indicators** is presented in accordance with the Global Reporting Initiative (GRI), "Standard" version, using the "comprehensive" option. Appendix IV "GRI Index" contains a list of the Sustainability indicators, with references to the indicators that are included throughout the report, in other public reports or reported in Appendix III "Sustainability 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 has been completed following the basic principles governing the standard AA1000 2008 APS: inclusiveness, materiality and responsiveness, and 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, vision and principles of action:

Repsol's **mission** (its reason for being) is to supply energy to society efficiently and sustainably.

Our **vision** (where Repsol 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.

Repsol has set down **guiding principles** – "*Value Creation, Respect, Efficiency and Foresight*" – and **Company behaviors** – "*Results orientation, Accountability, Collaboration, Intrapreneurship and Inspiring leadership*" – to make our mission a reality and our vision an attainable challenge.

Further information available at www.repsol.com

1. Henceforth, the names "Repsol," "Repsol Group" or "the Company" are used interchangeably to refer to the company group consisting of Repsol, S.A. and its subsidiaries, associates and joint arrangements.

2. Among others, the Spanish Commercial Code, the Consolidated Text of the Spanish Companies Act (*Ley de Sociedades de Capital*) and Law 11/2018 of 28 December, which amends the Commercial Code, the Consolidated Text of the Companies Act and the Auditing Act as regards non-financial information and diversity, and transposes into Spanish law Directive 2014/95/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups.

3. Appendix I, "*Alternative Performance Measures*", sets out the reconciliation of the adjusted figures to those corresponding to IFRS-EU financial reporting.



Message from the CEO



We became the first company in the oil and gas industry to set a target of net zero emissions by 2050.

Dear Shareholder:

I would like to take the opportunity offered by this report to review the main achievements of 2019, a key year for Repsol. We have made progress in diversifying our activities and advancing the energy transition. Above all, we became the first company in the oil and gas industry to set a target of net zero emissions by 2050.

To achieve this, we are orienting the company's strategy towards reaching this target, aligning our business plans with the goals of the energy transition and strengthening our profile as a customer-focused multi-energy supplier. We have specific plans in place to gradually lower our carbon intensity over the coming decades: 10% by 2025, 20% by 2030 and 40% by 2040.

With the technological advances of today, we envisage that we can achieve, at least, a 70% net emissions reduction by 2050, and we are committed to applying the best technologies to raise this figure, including Carbon capture, utilization, and storage. If this should prove not to be enough, we shall offset emissions through reforestation and other natural climate solutions to achieve net zero emissions by 2050.

These emission reduction goals are the bedrock of the Strategic Plan 2021-2025, which will set our targets and guide our actions until the middle of this decade.

In line with this new strategic approach, in a context defined by new oil and gas market dynamics and public policies aimed at decarbonizing the economy, we have assumed a new hydrocarbon price scenario consistent with the climate objectives of the Paris Agreement. As a result, in the financial statements for 2019 we have adjusted the book value of some assets by 4,849 million euros. This has reduced the specific results for the year. Cash generation, however, is unaffected and rose by 8% in relation to 2018. Nor will the write-down affect the announced proposal to increase shareholder return to one euro per share, one of the most attractive dividends on the Spanish stock exchange and in our industry worldwide.

In the coming years, one of our priorities will continue to be the development of renewable energy. So, in 2019 we raised our target for low-emission electricity generation capacity for 2025 by 3,000 MW; the new target is 7,500 MW. At this moment, we have 2,952 MW capacity in operation and 1,185 MW under development.



In the coming years, one of our priorities will continue to be the development of renewable energy.

We have approved investments to take on further renewable projects with a total capacity of 1,474 MW. In 2019, we acquired four projects with a combined capacity of 921 MW. We also passed the one million electricity and gas customer mark, a 31% increase since the start of the business.

In 2019, we demonstrated our commitment to technology and new businesses that enables us to move forward in the energy transition, through projects such as the purchase of Ibil's electric vehicle charging network that allows us to have one of the biggest public charging networks in Spain. We also launched Solify, our new end-to-end photovoltaic solar self-consumption solution for individual clients and companies, offering 100% renewable energy. And we opened the first two ultra-fast charging points on the Iberian Peninsula, thus continuing to set the pace in energy for mobility.

In Upstream and Downstream, our priority has been profitable growth. In the Upstream segment, the highlight was the discovery in the Sakakemang block in Indonesia, one of the largest onshore discoveries in the world in 2019, with a volume of gas equivalent to Spain's entire consumption for two years. In Downstream, Lubricants continued its international expansion with the purchase of 40% of United Oil Company, which will produce and distribute Repsol products in Singapore, Indonesia, Malaysia, and Vietnam, thereby strengthening our presence in Southeast Asia, one of the world's largest markets.

For our plans to succeed, all our businesses must meet decarbonization targets. In Upstream, we will prioritize value creation over output growth, focusing on asset

portfolio enhancement, with shorter-cycle projects and faster monetization in regions with clear competitive advantages. We shall maintain a sensible balance between gas and oil in our reserves, two energy sources that, according to the International Energy Agency (IEA), will continue to be vital to society in the coming decades.

In our industrial businesses, the decarbonization strategy will help us maintain our refining and chemical assets among the most efficient and competitive in Europe. To continue optimizing our asset performance, we will carry on adopting new technological solutions that will enable us to achieve a 25% reduction in emissions from the Refining business by 2025, in addition to the 23% cut already obtained from 2010 to 2017.

The circular economy is at the heart of our strategy for both businesses. Our Refining area will double production of high-quality biofuels from vegetable oils (HVO), while our Chemicals business aims to achieve 20% recycled content in its polyolefins by 2030. At the same time, Refining will integrate renewable energies into its operations, producing green hydrogen and using electricity from renewable sources.

Naturally, Repsol will continue to be a leading player in sustainable mobility, providing a multi-energy offer that includes increasingly efficient gasoline and diesel and alternative fuels such as AutoGas, compressed natural gas and liquefied natural gas. We shall, of course, continue to deploy new electric charging points at our service stations: this is a business we intend to lead in all markets where we are present.

Our strategy is already earning recognition from investors worldwide. I would like to highlight the Transition Pathway Initiative (TPI), an association that brings together 60 of the largest international investors, and which has recognized us as the first of only two companies in the industry with a strategy consistent with the Paris Agreement.

It is also worth mentioning that the Climate Action 100+ initiative, a group of over 450 international investors managing more than 39 billion, late last year recognized the company's efforts in this area. And Standard & Poor's named Repsol among the companies in its industry with the most advanced sustainability strategy, with high praise for the diversification of our businesses and for our firm commitment to the Paris Agreement.

As you can see, the market is confident that we can achieve our goals. We are convinced that the time was right for setting ourselves more ambitious targets in the fight against climate change, and only by addressing the great challenges before us with strategic clarity can we turn them into opportunities. We are sure that this will strengthen our common project, making it more attractive, sustainable, and profitable.

Thank you for your trust.



Our strategy is already earning recognition from investors worldwide.

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1. Highlights of 2019

New strategic approach

- Target: decarbonization and creation of value
- Upstream: prioritize profitability and cash generation over volume
- Downstream: multi-energy portfolio, new low-carbon businesses

Growing shareholder returns

- Increase of 5% year-on-year
- Flexible dividend and share buy-back programs
- High acceptance of the flexible dividend, Dec-19 (83.5%)

2050 target:

net zero emissions by 2050

New strategic approach: climate change and energy transition

2019 marked the beginning of a new phase for Repsol after having been a pioneer in the sector, committing to **the fight against climate change** and the **energy transition** in line with the objectives of the Paris Summit and the United Nations' Sustainable Development Goals.

Repsol aims to be a zero emissions company in 2050 and, until then, progressively reduce its carbon intensity indicator (taking 2016 as the base year, 10% in 2025, 20% in 2030 and 40% in 2040).

Repsol will orient its strategy, investments and business plans towards achieving these objectives, ensuring the sustainability and value creation of its businesses, both in the long and short term, as part of the energy transition.

In Upstream, to preserve and optimize asset value, priority will be accorded to creating value over production growth, maintaining flexibility as a strategic vector, and focusing on the rotation and improvement of the asset portfolio and on cash generation.

In Downstream, projects associated with low-carbon electricity generation will be promoted, increasing their capacity target to 7,500 MW by 2025. In Refining, an additional 25% reduction in direct emissions will be undertaken by 2025 and biofuel production will double to 600,000 tons per year by 2030. In Chemicals, the Company is committed to efficiency in the industrial process and moving toward the circular economy, with the ambition of achieving 20% recycled content in all of its polyolefins by 2030. In Mobility, we shall further develop our strategy as a customer-centered multi-energy supplier, and progress will be made in the deployment of electric, autogas, compressed natural

gas and liquefied natural gas (LNG) recharge points at service stations.

The new Strategic Plan 2021-2025 will be published in the first half of 2020.

For more information, see Section 6.1. Climate Change and 2.4. Strategy.

Results

In a **context** of a slower economy and rising geopolitical uncertainty, the financial performance of our businesses reflects volatile and declining hydrocarbon prices and weaker industrial indicators.

Results

(Millions of euros)	2019	2018	Δ
Upstream	1,050	1,325	(21%)
Downstream	1,456	1,583	(8%)
Corporate and other	(464)	(556)	17%
Adjusted net income	2,042	2,352	(13%)
Inventory effect	(35)	(68)	49%
Specific results	(5,823)	57	-
Net result	(3,816)	2,341	-

Upstream results (1,050 million euros, 21% down on 2018) were hard hit by lower prices for crude oil and, especially, gas, only partly offset by lower costs.

Downstream results (1,456 million euros, 8% down on 2018) remain strong, albeit losing some ground year-on-year due to weaker Refining and Chemicals performance in Spain (owing to maintenance shutdowns and thinner margins) and Gas Wholesaling and Trading (gas prices in North America and Europe). These declines were partly offset by better results in other businesses, especially Trading, Mobility (service stations) and Electricity.

Results improved in the **Corporate** division due to lower corporate structure and borrowing costs.

7,500MW

low carbon generation capacity by 2025

Financial strength

- Businesses facing a tough market context
- Increased operating cash flow
- Healthy debt levels

Business growth

- Big discoveries in Indonesia and Alaska
- Improved Refining products (advanced biofuels, low-sulfur fuel)
- 1 million Electricity and Gas subscribers and over 1.4 million Waylet platform users

Hence **adjusted net income**, a measure designed to reflect ordinary business profit, came to 2,042 million euros, 13% down on 2018.

The **inventory effect**, which updates the value of inventories with changes over the period in crude oil and petroleum product prices, came to -35 million euros.

Specific results (-5,823 million euros) it's worth mentioning the extraordinary write-downs of Upstream assets, mainly in North America, as a result of the adoption of assumptions of lower that crude oil and gas prices, consistent with recent dynamics in the oil and gas markets and the new scenarios of energy transitions and public policies aimed at the decarbonization of the economy, as well as the provisions to cover litigious risks.

The Group's **net result** for 2019 was thus negative (-3,816 million euros), owing to write-downs not involving immediate cash outflows. This will not impact shareholder remuneration, rising 5% vs. last year.

Cash flows from operations (5,837 million euros) was up 8% year-on-year, enabling us to cover investment, debt service, shareholder returns and our share buy-back program. **Free cash flow** was 2,060 million euros, versus 5,056 million euros in 2018 (which included the proceeds of the sale of Naturgy, 3,816 million euros).

Net debt including leases came to (8,083) million euros, making for leverage of 24.3%. Net debt ex leases was 4,220 million euros, versus 3,439 million euros at year-end 2018, for a leverage ratio of 13.9%. **Available liquidity** at year-end stood at 7,667 million euros. We held 80.8 million **treasury shares**.

For further information, see section 4. Financial performance.

Shareholder return

The returns offered to shareholders in 2019, in the form of a scrip dividend ("*Repsol flexible dividend*") came to **€0.916 per share, 5% up on the previous year**.

To improve returns to shareholders, in 2019, bought-back shares were redeemed in a **capital reduction** to offset the dilutive effect of the bonus share issue formalized in 2019 under the "*Repsol Flexible Dividend*" program.

In addition, the Board of Directors has decided to submit for approval at the next Annual General Meeting a proposal for capital reduction equal to 5% of share capital at December 31, 2018.

At the end of 2019, the **share** price was similar to the price at the end of December 2018 (-1%), despite the drop in hydrocarbon prices.

For more information, see Appendix 4.4. Shareholder return.

€0.916
per share
shareholder
return in 2019

Business activities

In **Upstream**, against a backdrop of low crude oil and, in particular, gas prices, the businesses have prioritized the generation of value against the production volume, using cost reduction plans and the redefinition of asset operation plans that seek to reduce the break even. In addition, profitable growth has been pursued, to this end, special mention should be made of the discovery in Indonesia (*Sakakemang*), and in the United States (Alaska and the Gulf of Mexico), Malaysia and Norway, **the start of production** at *Buckskin* (Gulf of Mexico, USA) and *Angelin* (Trinidad and Tobago), the **acquisition** of productive assets (63% of *Eagle Ford* in the USA and 7.65% of *Mikkel* (Norway)), the extension of the production contract in *Corridor* (Indonesia) new **acreage** in Indonesia, Norway, Brazil (subject to ratification), the United States, Russia and Greece, and the agreement reached with Shell and Gazprom

↑ 8%
cash flow
from operations

Corporate governance

- Re-election of the Chairman and of the Chief Executive Officer
- Gradual replacement of Board members
- 33% of Board members are women

Sustainability and digitalization

- New Global Sustainability Plan
- Cut CO₂ emissions by 171 kt CO₂
- Over €150 mn invested in digitalization
- Enhanced process safety

Sakakemang
largest onshore discovery in the world in 2019

Neft for joint exploration in Siberia (Russia). For more information, see section 5.1. Upstream.

In **Downstream**, in the **Refining** business, a comprehensive maintenance and technological innovation program has been undertaken at the industrial facilities in Spain that will improve energy efficiency, the environmental impact and the feasibility of its operations, making it possible to harness the opportunities provided by the new fuel specifications (IMO). As a result of this, the production of advanced biofuels and fuels with a low sulfur content has been stepped up. In **Chemicals** shutdowns at plants have also been contemplated to make it possible to adapt their production to the product differentiation strategy, the reduction of CO₂ intensity and to focus on the circular economy.

In the **commercial businesses**, progress has been made with the definition of a multi-energy offer (growth in the marketing of electricity, more than one million clients, the development of an electrical mobility network, more than 230 public charging stations, including the first ultra-fast recharging stations in Spain and autogas stations), focusing on the client (improving the customer experience at service stations through new facility designs and the supply of premium, non-oil products, multi-product commercial plans, etc.) leveraged on digitalization (the Waylet payment platform now has more than 1.4 million clients) and that is committed to decarbonization (new renewable electricity generation projects with a capacity of 921 MW) and international expansion (Mobility in Mexico, LPG in France, Lubricants in Southeast Asia). For more information, see section 5.2. Downstream.

The **Digitalization** program has invested more than €150 million per year, with more than 190 digital cases in the portfolio, of which over 60 had a direct impact on sustainable development goals. For more information, see section 6.5. Technology development for decarbonization.

Governance and sustainability

In 2019, Antonio Brufau Niubó (Chairman) and Josu Jon Imaz San Miguel (Chief Executive Officer) were re-elected for the four-year term provided in the bylaws. The percentage of women on the Board reaches 33%, thus fulfilling the objective set in the Global Sustainability Plan.

A new **Global Sustainability Plan** was approved, defining ambitions and medium-term objectives (2025).

Improvement actions have been implemented at facilities, **preventing** CO₂e emissions of 171,000 tons.

The value proposal made to our **employees** in 2019 continues with the commitment to training (583 euros invested per employee) and promoting the equal representation (41.2%) of women in leadership positions.

With regard to **personnel accident rates**, the Total recordable injury rate (TRIR) dropped by 22% compared to the annual data for 2018. There were no fatalities among own personnel; however, a contractor employee based in Marcellus, USA, suffered a fatal accident. For more information, see section 6.3. Safe operation.

Repsol's **tax contribution** to the countries where it operates amounted to 13,052 million euros.

For more information, see section 2.5. Corporate governance and section 6. Sustainability.

GSP
Global Sustainability Plan

Throughout the document the Ambitions (a) and Objectives (2020 y 2025) of the Global Sustainability Plan [see Section 6] are identified with boxes like this one.

Key figures and indicators

Financial indicators ⁽¹⁾⁽²⁾	2019	2018	Performance of our businesses ⁽¹⁾	2019	2018
Income			Upstream		
EBITDA	7,161	7,513	Net proven reserves ⁽⁴⁾ (Mboe)	2,139	2,340
Results from operations	3,661	4,396	Proven reserve replacement ratio (%)	23	94
Adjusted net income	2,042	2,352	Net daily liquids production (kbb/d)	254	261
Net income	(3,816)	2,341	Net daily gas production (kboe/d)	455	454
Earnings-per-share (€/share)	(2.48)	1.38	Net daily hydrocarbon production (kboe/d)	709	715
ROACE (%)	(11.0)	6.7	Average crude oil price (\$/bbl)	57.3	63.9
ROACE with leases (%)	(9.7)	-	Average gas price (\$/kscf)	2.9	3.4
Investments	3,861	3,874	EBITDA	4,255	4,801
Cash			Adjusted net income	1,050	1,325
Cash flow from operations	5,837	5,428	Cash flows from operations	3,140	3,341
Free cash flow	2,060	5,056	Investments	2,429	1,973
Cash flow generated	(687)	2,706			
Debt and available capital			Downstream		
Net Debt (ND)	4,220	3,439	Refining capacity (kbb/d)	1,013	1,013
Net Debt (ND) (with leases)	8,083	-	Conversion rate in Spain (%)	63	63
ND/Capital employed (%)	14.3	10.0	Conversion utilization Spanish refining (%)	103	107
ND/Capital employed (with leases) (%)	24.3	-	Distillation utilization Spanish refining (%)	88	93
Debt interest/EBITDA (%)	3.1	3.8	Refining margin indicator in Spain (\$/bbl)	5.0	6.7
Capital employed	29,556	34,353	Service stations (number) ⁽⁵⁾	4,944	4,849
Capital employed (with leases)	33,292	-	Sales of oil products (kt)	49,932	51,766
Shareholder return			Sales of petrochemical products (kt)	2,787	2,610
Shareholder return (€/share)	0.916	0.873	LPG sales (kt)	1,253	1,330
			Installed capacity - low emissions (MW)	2,952	2,952
Sustainability indicators⁽³⁾	2019	2018	Electricity production (GWh)	6,308	-
People			EBITDA	3,057	2,859
Number of employees	25,228	25,288	Adjusted net income	1,456	1,583
New employees	3,800	3,810	Cash flow from operations	2,777	1,854
Total turnover rate (%)	21%	23%	Investments	1,376	1,831
Investment in training (€ million)	14.3	14.5			
Safety			Macroeconomic context	2019	2018
Process safety indicator (PSIR)	0.55	0.47	Brent (\$/bbl) average	64.2	71.3
Total recordable injury rate (TRIR)	1.24	1.59	WTI (\$/bbl) average	57.0	64.9
Environment			Henry Hub (\$/MBtu) average	2.6	3.1
Direct CO _{2e} emissions (Mt)	24.7	22.0	Electricity Pool - OMIE ⁽⁶⁾ (€/MWh)	47.7	57.3
Annual CO _{2e} emissions reduction (Mt)	0.171	0.310	Exchange rate (\$/€) average	1.12	1.18
No. of hydrocarbons spills > 1 bbl reaching the environment (t)	25	25	CO ₂ (€/Tn)	24.9	15.9
Taxes paid (€ million)	13,052	13,600			
Social			Stock market indicators	2019	2018
Voluntary social investment (€ million)	20.49	21.26	Share price at year-end (€/share)	13.93	14.08
			Average share price (€/share)	14.43	15.78
			Market capitalization at year-end (€ million)	21,277	21,506

(1) In millions of euros, where applicable.

(2) Further information in Section 4 and Appendix I, "Alternative Performance Measures".

(3) Figures and indicators calculated in accordance with the Group's management policies and guidelines, Further information in section 6.

(4) 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).

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

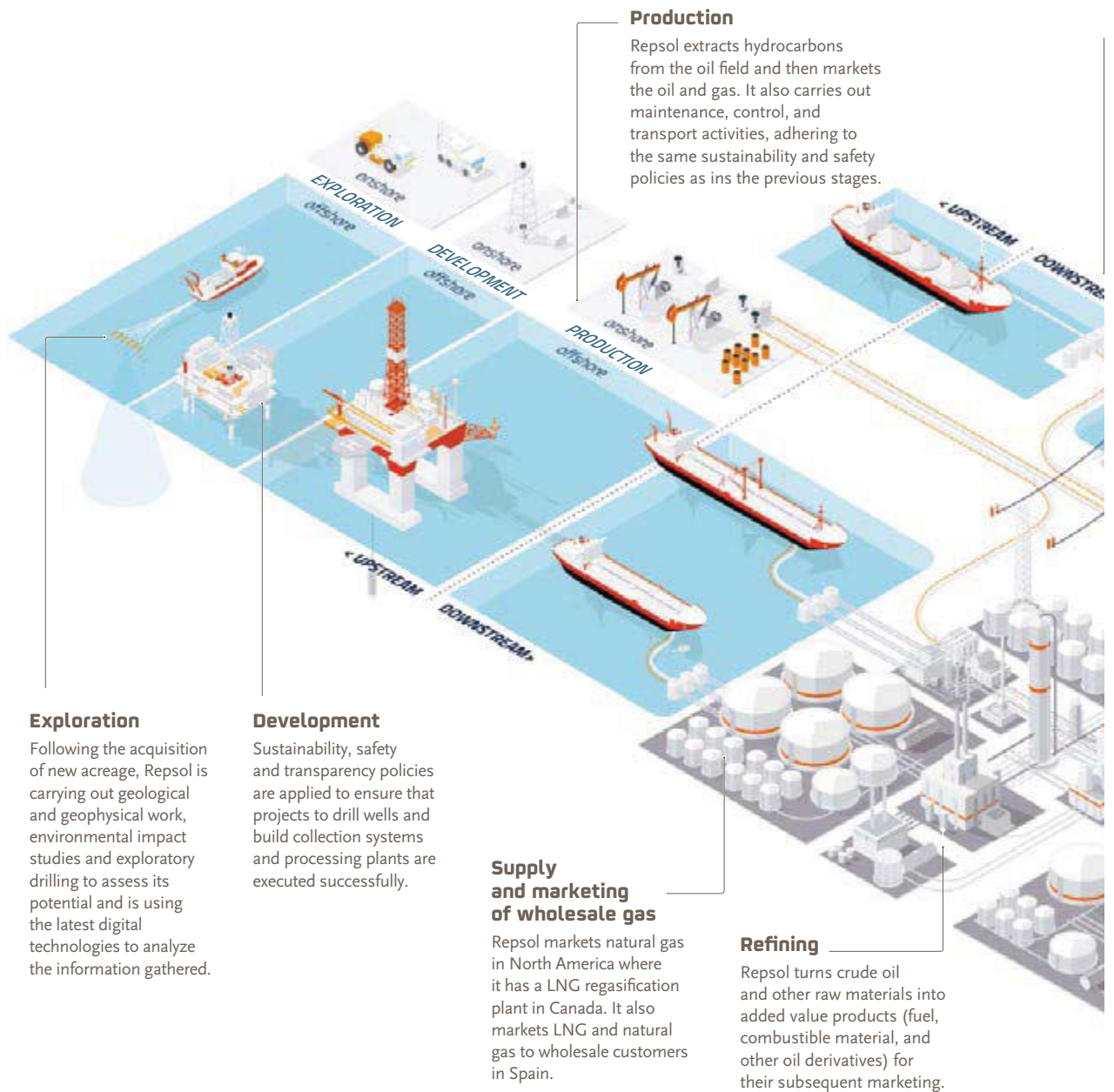
(6) Iberian Energy Market Operator.

2. Our company

2.1. Value chain and business segments

Repsol is a global multi-energy supplier that strives to evolve toward a low-emissions energy model. We produce more than 700,000 barrels of oil a day, operate one of Europe's most efficient systems of refining and chemicals and have a widespread network of close to 5,000 service stations in five countries. We are a major player in the Spanish electricity and gas market, with more than a million subscribers, and operate low-emission power generation assets. Repsol is also a leading operator in sustainable mobility, providing more efficient fuels and new solutions, such as electric charging and AutoGas.

Repsol's activities are structured into two business segments: Upstream (exploration, development and production of crude oil and gas reserves) and Downstream (refining and petrochemicals, crude oil and petroleum product trading and transport, marketing of petroleum, chemical and LPG products, marketing, transport and regasification of natural gas and liquefied natural gas (LNG), electricity generation and marketing of electricity and gas).



Upstream		Downstream	
Operating figures:	Sustainability indicators*:	Operating figures:	Sustainability indicators*:
2,139 Mbep [71% natural gas] Net proven reserves	3,544 [29% women] Number of employees	1,013 kbb/d Refining capacity	19,258 [36.9% women] Number of employees
23% 23% Reserve replacement ratio	11.05 Mt [Scope 1 + Scope 2] CO ₂ e emissions	39,620 kt Processed crude oil	14.23 Mt [Scope 1 + Scope 2] ECO ₂ e emissions
709 kbep/d [64% of gas] Net hydrocarbon production	1,915 kt Water withdrawn	3,354 service stations in Spain	55,636 kt Water withdrawn
179,516 km ² Net undeveloped acreage	1.50 TRIR	1,590 service stations in the rest of the world	1.19 TRIR
6,695 km ² Net developed acreage	0.77 PSIR	2,603 kt Basic Chemical capacity	0.42 PSIR
		2,952 MW Installed electricity generation capacity	230 Electric charging points
			745 Autogas points

Trading

We transport hydrocarbons to supply raw materials to Repsol refineries. Hydrocarbons can also be stored or sold on international markets.

For further information on business segments, see section 5. Our businesses in 2019.

Low-emissions electricity production

Repsol's current low-emissions generation portfolio is 2,952 MW (3 hydroelectric plants, 2 combined cycle plants, 3 cogeneration plants and an offshore wind farm) with a further 1,185 MW under development (wind, photovoltaic and solar projects).

Electricity and gas supply

Repsol supplied low-emissions gas and electricity to over one million customers in Spain, offering them cutting-edge digital solutions so they can optimize their household energy consumption.

LPG

Repsol processes and distributes liquefied petroleum gas (LPG) in Spain, Portugal and France in various formats: bottled, bulk, and AutoGas.

Mobility

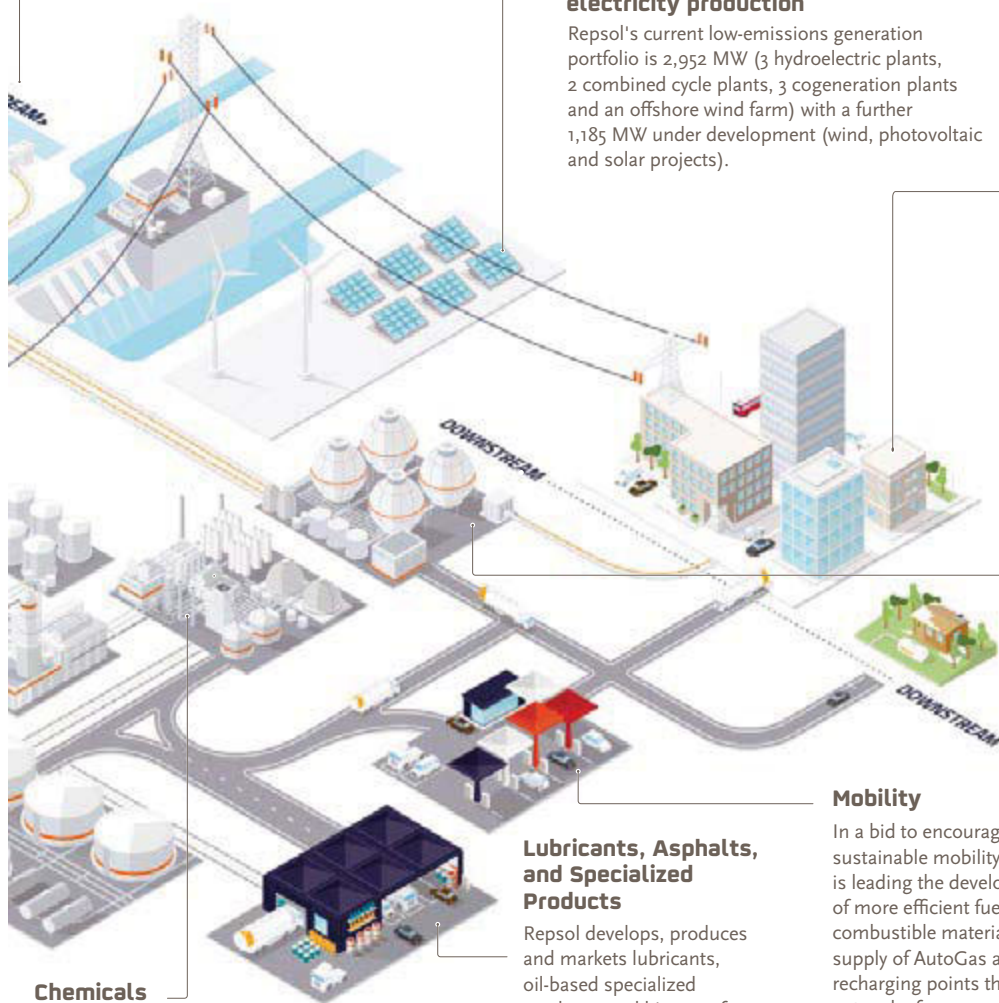
In a bid to encourage more sustainable mobility, Repsol is leading the development of more efficient fuels and combustible materials, the supply of AutoGas and electric recharging points through its network of over 230 points.

Lubricants, Asphalts, and Specialized Products

Repsol develops, produces and markets lubricants, oil-based specialized products, and bitumen for asphalts and operates in over 90 countries.

Chemicals

Repsol produces and markets a broad range of petrochemical products that are used to manufacture everyday items which improve people's lives.



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

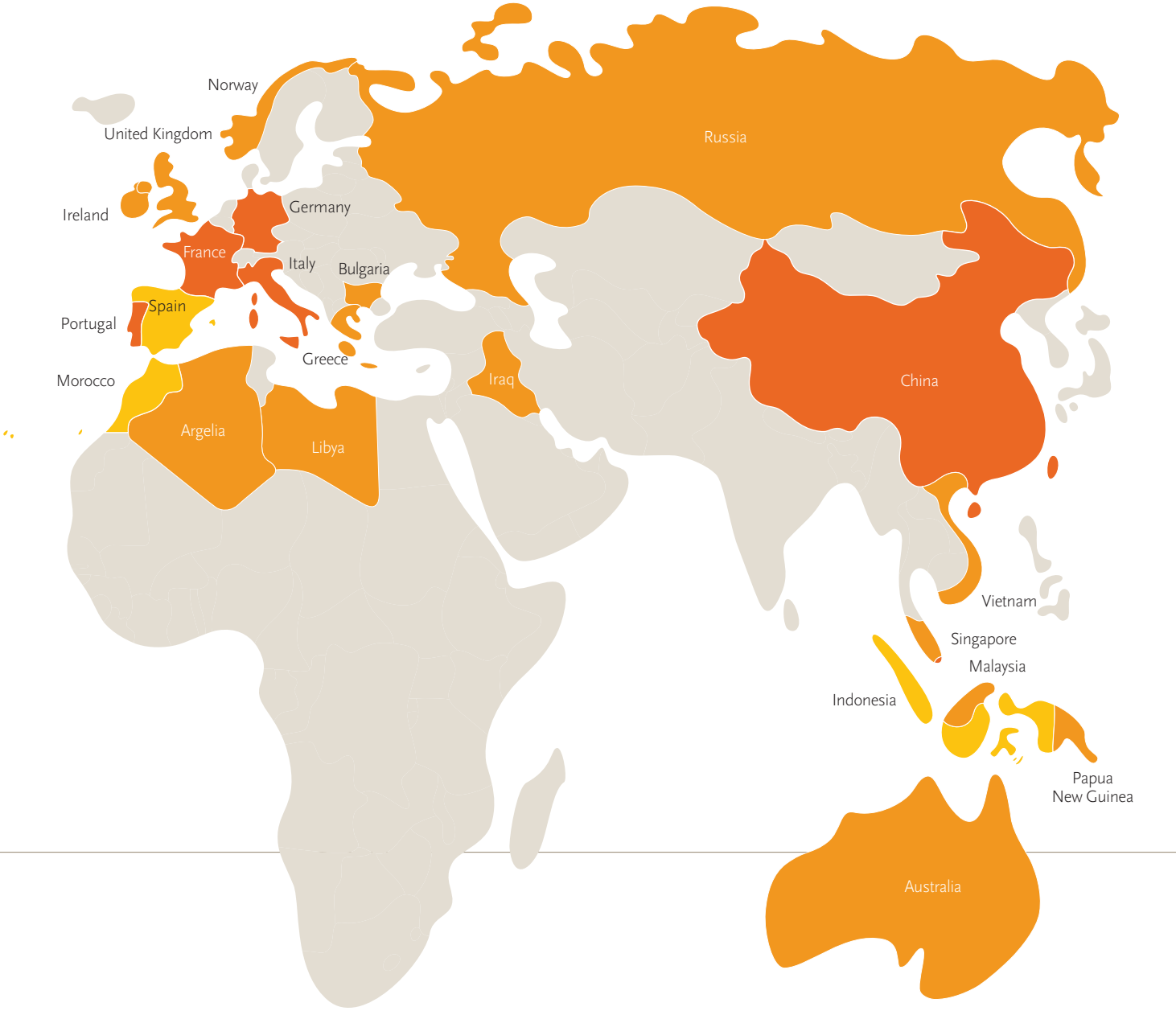
2.2. Repsol around the world¹



1. The data in this map reflect Repsol's worldwide presence at December 31, 2019, at activity level.

2. LAS: Lubricants, asphalt and specialty products

(👤) Operations where indigenous peoples are present or affected by activities



IRAQ

Upstream

IRELAND

Upstream

ITALY

Chemicals

LAS

Mobility

LIBYA

Upstream

MALAYSIA

Upstream

MORROCO

Upstream

LAS

MEXICO

Upstream

Chemicals

LAS

Mobility

NORWAY

Upstream

PAPUA

NEW GUINEA

Upstream



PERU

Upstream

LAS

Refining

Trading

Mobility

PORTUGAL

Chemicals

Electricity and gas

LAS

Mobility

LPG



RUSSIA

Upstream

SINGAPORE

LAS

Trading

SPAIN

Upstream

Chemicals

LAS

Refining

Trading

Wholesale gas trading

Electricity and gas

Mobility

LPG

TRINIDAD & TOBAGO

Upstream

UNITED KINGDOM

Upstream

UNITED STATES

Upstream

Chemicals

Trading

Wholesale gas trading

VENEZUELA

Upstream

VIETNAM

Upstream

Risk management

More information can be found in Annex II "Risks".

2.3. Risk

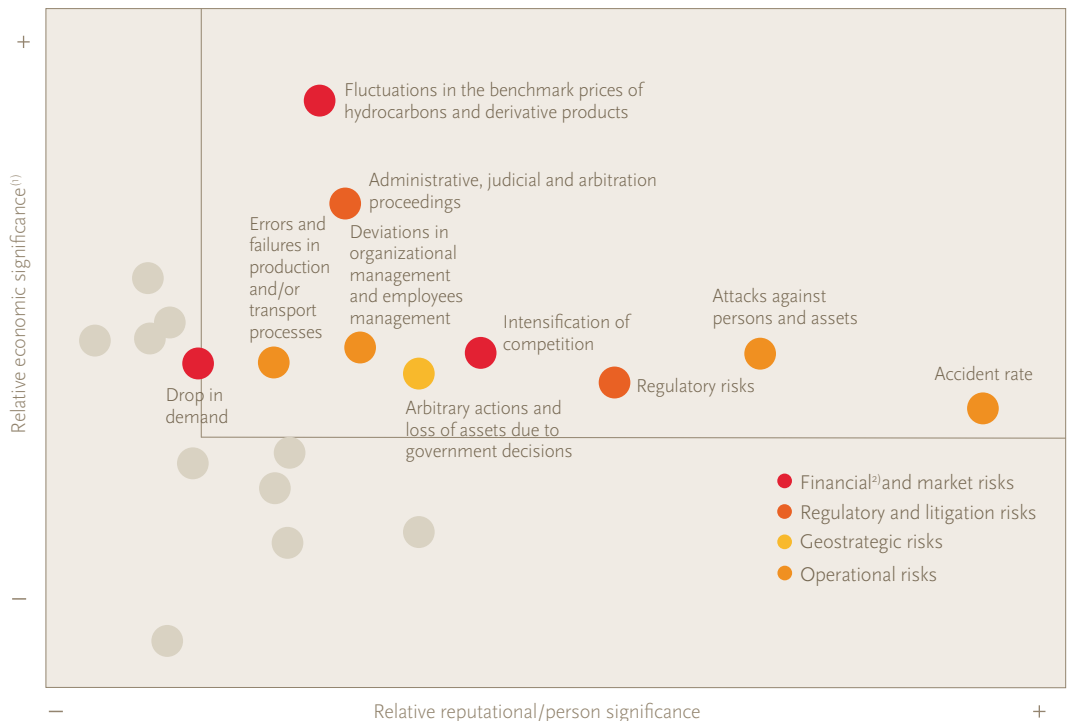
As a global integrated energy company, Repsol is exposed to risks that can affect its future performance. Such risks must be managed effectively in accordance with the established Risk Management Policy.

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

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

The Group's¹ main risks are identified below based on their importance in terms of finances, reputation and people taking into account a 5 year time horizon:

Main Risks



Note: The risks identified in the diagram are described in Appendix II "Risks".

(1) Relative economic 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 11 of the 2019 Consolidated Financial Statements.

Some of these risks are sensitive to the phenomenon of climate change and to the scenarios of transition to a low carbon economy, particularly those associated with regulation, future trends in demand, fluctuations in hydrocarbon and other commodity prices and the potential upswing in competition. Given the emerging nature of the **climate change risks** in the current energy context, and consistently with the commitments made, the

Group is extending the scope of the analysis of these risks according to a long-term time horizon. This risk map is regularly updated and the Sustainability Committee and the Audit and Control Committee are informed of the methodology used and the risk profile. For further information on emerging risks and climate change, see section 6.1 Climate change.

1. The Group has a methodology that, by applying common metrics, allows it to obtain an overview of the key risks, classify them according to their materiality, characterize them in an understandable and robust manner, quantify the potential economic, reputational and human impact that each business unit or corporate area may sustain, including Repsol as a whole, should it materialize, and identify, where appropriate, effective mitigation measures.

2.4. Strategy

Following the early achievement of the targets set out in the Strategic Plan 2016-2020, in June 2018 an update for the 2018-2020 horizon was published

("the Plan"). The Plan is geared towards growth and value creation in any scenario¹, and is based on **three pillars**:

Strategy:
Additional information is available at www.repsol.com

1	Improvement to shareholder returns	2	Profitable growth of our portfolio	3	Making progress in the energy transition
	<ul style="list-style-type: none"> Growth in the dividend per share of 8%⁽¹⁾ per year with full buy-back of shares. Payment of dividend covered in full to \$50/barrel. Improved dividend coverage by cash flows from operations. Long-term sustainable remuneration. 		<ul style="list-style-type: none"> Improvement of all metrics for the creation of value, in all price scenarios. Downstream, catalyst of growth without the need for large-scale investments in assets. Performance of Upstream and its asset portfolio improves. Strong portfolio of growth projects in both businesses. 		<ul style="list-style-type: none"> Development of new long-term opportunities. Driven by our competitive advantages. Reduction of the carbon footprint. Construction of new capacities.
Financial flexibility					

(1) Annualized compound growth rate

In 2019, the dividend was 5% higher than in 2018 and the capital reduction through the redemption of treasury shares was completed, aimed at offsetting the dilutive effect of the bonus share issues under the Repsol Flexible Dividend Program for 2019, in addition to proposed additional issues to be approved by stockholders at the Annual General Meeting (see section 4.4).

In November, coinciding with the Climate Summit held in Madrid, the Board of Directors reviewed the company's role in the fight against climate change and made progress in its commitment to lead the energy transition in the industry, in line with the objectives of the Paris Summit and the United Nations' Sustainable Development Goals of reducing the increase in the planet's temperature to less than two degrees Celsius with respect to pre-industrial levels.

Repsol will therefore focus its strategy on achieving its goal of being a company with net zero emissions by 2050, thus becoming the first in its industry to pursue this ambitious goal.

At the same time, it lays down a decarbonisation path by taking on a reduction in its carbon intensity indicator on the basis of the year 2016: of 10% in 2025, 20% in 2030 and 40% in 2040, to move towards net zero CO₂ emissions by 2050.

These targets (for further information, see section 6.1 Climate Change) will serve as a basis for the new Strategic Plan 2020-2025 to be presented in the first half of 2020, and will involve directing strategy, activity and investment towards new and more demanding business plans:

Upstream

To achieve these targets, Repsol will focus its asset portfolio on compliance with the Paris Agreement, which implies prioritising value creation over production growth, maintaining flexibility as the strategic vector of the business, while focusing on the rotation and improvement of the asset portfolio and on cash generation.

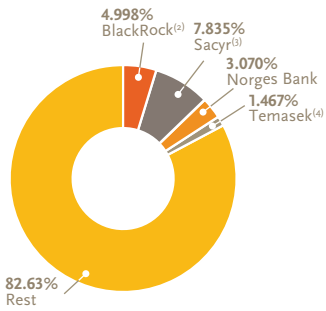
This approach translates into a strategy of balancing oil and gas reserves, with a vision of gas as the energy for the energy transition, also taking into account the active role that oil must play in a more decarbonized world. For the evaluation of exploration and production decisions, the company assumes an oil and gas price curve compatible with the Paris Agreement and the scenario of a two degree reduction from pre-industrial levels (see Notes 3 and 21 to the 2019 consolidated financial statements).

Downstream

The determination to move towards decarbonization is reflected in the momentum of **projects associated with the energy transition**. The Company increased by 3,000 MW its low carbon electricity generation capacity target, to 7,500 MW by 2025, and began its expansion into other markets to become a major international player in renewable energies.

1. A price of USD 50 per barrel of Brent crude is taken as a reference for the whole period.

Shareholder composition
% voting rights⁽¹⁾



1. % as of the date of authorization for issue, with the information provided by Iberclear, as well as that sent by shareholders to the Company and the CNMV.

2. BlackRock Inc. holds its stake through several entities under its control. The information about BlackRock Inc. is sourced from its own disclosure of December 10, 2019 to the CNMV, Spain's securities market regulator, on a share capital figure of 1,527,396,053 shares.

3. Sacyr, S.A. holds its stake through Sacyr Investments II, S.A., Sacyr Investments, S.A. and Sacyr Securities, S.A.

4. Temasek holds its stake through its subsidiary Chembra Investment PTE, Ltd.

On December 31, 2019, Repsol had 2,952 MW in operation and 1,185 MW under development, and the Board of Directors approved in December new investments to incorporate and build two photovoltaic projects and one wind project for a total of an additional 1,600 MW. With these projects, the low carbon generation portfolio exceeds 5,700 MW.

In the industrial businesses, it is raising its decarbonization target, with a special focus on **Refining**, with an additional 25% reduction in direct emissions by 2025. This reduction is in addition to the 23% cut in CO₂ emissions between 2010 and 2017.

Repsol will focus on the circular economy as a tool for the efficient use of resources, and will double the production of high quality biofuels from hydrogenated vegetable oils (HVO) to 600,000 tons per year by 2030, half of which will be produced by 2025 using waste.

Moreover, Repsol will integrate renewable energies into the Refining division's operations by producing green hydrogen and using electricity from renewable sources for its own industrial processes.

The Company's **Chemicals** business will also contribute decisively to a more decarbonized economy. Repsol is committed to efficient chemistry in its industrial process, guided by the circular economy, with the ambition of achieving 20% recycled content in all of its polyolefins by 2030.

Petrochemicals, present in most of our daily lives, will play a leading role in a less carbon-intensive scenario. Their benefits and uses include reducing the weight of materials and their contribution to

lower energy consumption in mobility, insulation of homes and buildings, which contributes to greater energy efficiency, improving food preservation conditions and offering more advanced products for healthcare and hospital uses. As a result, growing global demand for petrochemicals is expected to increase by 30% by 2030 and 40% by 2050.

In **Mobility**, we shall further develop our strategy as a multi-energy supplier focused on the customer, with an integrated value proposition, differentiated service and a commitment to digitalization to facilitate day-to-day management.

Progress will be made in the deployment of electric charging points, autogas, compressed natural gas and liquefied natural gas at service stations and we shall continue to supplement electric supply with high-value services aligned with decarbonization, such as renewable self-generation.

2.5. 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** adequately differentiates governance and management functions from oversight, control, and strategic definition functions.












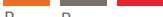









Additional information on the General Meeting of Shareholders and the composition, powers and functioning of the Board and its Committees, see sections B.2 and B.3 of the Annual Corporate Governance Report, respectively.

General Meeting of Shareholders



Composition of the Board of Directors and its committees

Board of Directors⁽¹⁾

 Josu Jon Imaz San Miguel Chief Executive Officer – Executive		 Antonio Brufau Niubó Chairman – Other Non-Executive			
 José Manuel Loureda Mantiñán Director – Proprietary Non-Executive (Sacyr S.A.)	Independent Non-Executive 53,33% Proprietary Non-Executive 20% Executive 6,67% Other Non-Executive 20%		 Manuel Manrique Cecilia Deputy Chairman – Proprietary Non-Executive (Sacyr S.A.)		
 Ignacio Martín San Vicente Director – Independent Non-Executive			 Maite Ballester Fornés Director – Independent Non-Executive		
 Henri Philippe Reichstul Director – Other Non-Executive			 Arantza Estefanía Larrañaga Director – Independent Non-Executive		
 Mariano Marzo Carpio Director – Independent Non-Executive			 Rene Dahan Director – Proprietary Non-Executive (Temasek)		
 J. Robinson West Director – Independent Non-Executive			 Carmina Ganyet i Cirera Director – Independent Non-Executive		
 Isabel Torremocha Ferrezuelo Director – Independent Non-Executive			 Teresa García-Milà Lloveras Director – Independent Non-Executive		
 Luis Suárez De Lezo Mantilla Director Secretary – Other Non-Executive					
 Delegate Committee	 Audit and Control Committee	 Appointments Committee	 Remuneration Committee	 Sustainability Committee	 Chairman of the Committee

1. Composition as of the date of authorization for issue of this document. For further information, see Section A.3 of the Annual Corporate Governance Report.

33%
of Board members are women

Changes to the Board in 2019

- On May 31, 2019, at the Annual General Meeting, the shareholders resolved to re-elect as Directors Antonio Brufau Niubó, Josu Jon Imaz San Miguel, José Manuel Loureda Mantiñán and John Robinson West, to ratify the appointment by co-option and re-election as Director of Henri Philippe Reichstul, and to appoint as Non-Executive Independent Directors Arantza Estefanía Larrañaga and María Teresa García-Milà Lloveras, for the four-year term stipulated in the bylaws, while reducing the number of Board members to fifteen.
- The Board of Directors also resolved to appoint Mariano Marzo Carpio as Lead Independent Director. In addition, effective December 31, 2019, when Luis Suárez de Lezo Mantilla concluded his functions as General Counsel, he was classified as a "Non-Executive Director", remaining as a member of the Board and its Delegate Committee, and as its Secretary.

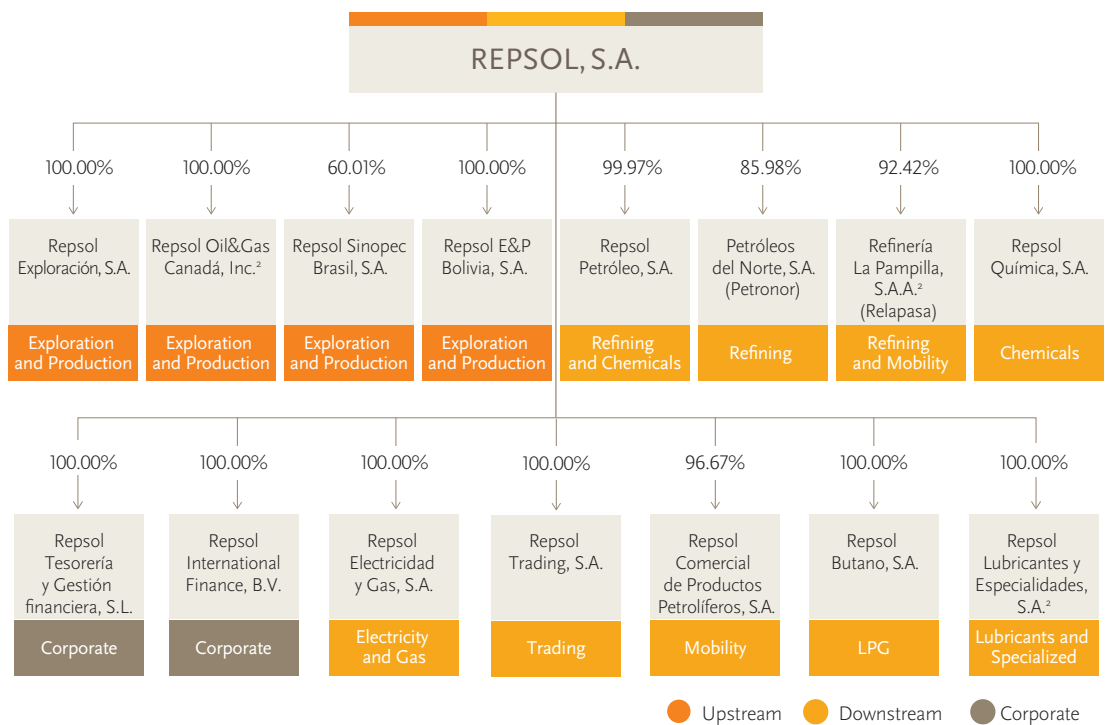
27%
Board members are nationals of countries other than Spain

Board Remuneration

Directors receive fixed remuneration for fulfilling their supervisory and decision-making duties. The calculation of this remuneration, except for that relating to the Chairman of the Board, is carried out by assigning points for membership of the Board or its Committees, and each point has a remuneration equivalence. This means that there is no gender difference. 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. For further information on the remuneration of the Board and Senior Management, see Note 30 to the 2019 Consolidated Financial Statements.

2.6. Corporate structure

The Repsol Group, whose parent company is Repsol, S.A., is made up of more than 300 companies incorporated in more than 40 countries¹. The **corporate structure** of the Repsol Group is shown below, in the form of the main companies making up the Group:



1. See Appendix I Section 6.7. of the consolidated Financial Statements.

2. Indirect participations.

3. Context

3.1. Macroeconomic context

Recent economic trends

The **world economy** has experienced a marked slowdown during 2018 and 2019. Although in 2018 as a whole global expansion was 3.6%, the year began at 4% and fell to 3.2% in the second half.

During 2019, activity has continued to weaken, with growth standing at around 2.9%, the slowest pace since the international financial crisis.

The economic slowdown is due to the confluence of several factors that have fed back into each other: a) the escalation of trade tensions between the United States and China, which put pressure on their bilateral trade, hurt confidence and raised uncertainty at the global level, slowing down investment decisions and, with it, international trade; b) a sharp slowdown in automobile production and sales (a sector that accounts for 5.7% of world output), in a context of regulatory uncertainty; c) a slackening of investment and imports from China beyond trade tensions, associated with regulatory changes to curb non-bank credit growth.

As a result, growth in the **advanced economies** slowed from 2.2% in 2018 to around 1.7% in 2019. The pace of expansion in the United States remains relatively strong, but has slowed in recent quarters (by around 2% on an annualised basis) as the momentum generated by the 2018 tax cut fades.

Meanwhile, growth in the **Euro Zone** remains weak, hampered by lower exports and the adjustment of the automotive sector, although activity seems to be stabilizing at quarter-on-quarter rates. For 2019 as a whole, growth is expected to be 1.2%, significantly lower than the 1.9% rate for 2018.

In **Spain**, economic growth has also slowed more than expected during 2019, especially in private-sector consumption and investment in construction. It is estimated that there will be growth of approximately 2% in 2019, versus 2.4% in 2018.

Growth in the **emerging economies** is estimated to have slowed from 4.5% in 2018 to 3.7% in 2019, affected by the fall in trade and the stability of commodity prices.

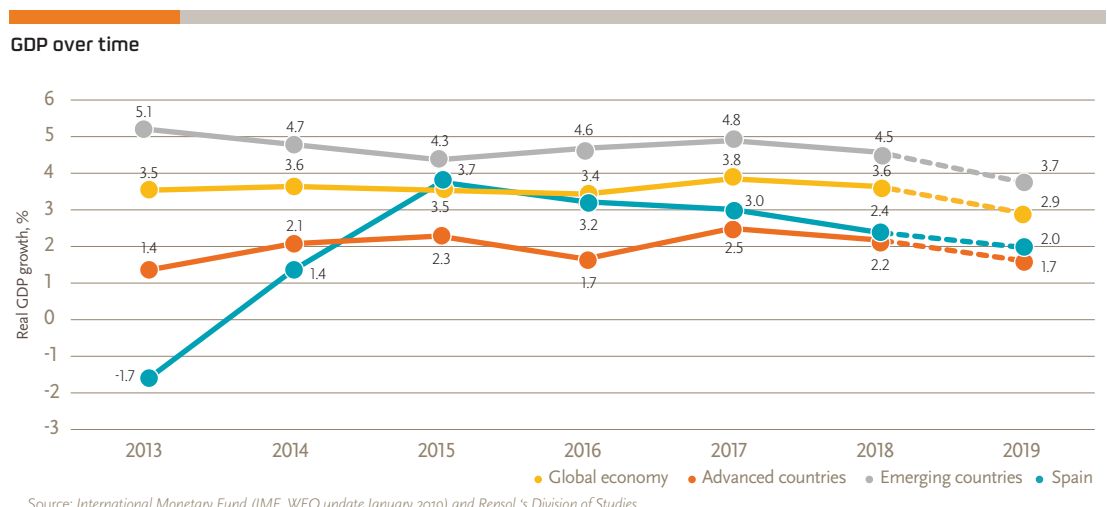
Evolution of the exchange rate

In the first months of 2019, the US dollar continued to trend upward. This trend, which began in April 2018, is explained by the fact that, as growth in the Eurozone began to disappoint and that of the United States remained high, the interest rate differential came to the fore. This dynamic was aggravated by the increase in political risk in Europe due to the Brexit negotiations and the fiscal dispute in Italy. The euro/dollar rate reached a level of 1.09 at the end of September 2019.

However, the trend seems to have changed since then, with EURUSD stabilizing at around 1.11 in recent months. The reasons for this change are: i) a recent worsening of macro and confidence data in the United States; ii) a slight reduction in global risks (partial rapprochement between China and the United States on trade, less likelihood of a hard Brexit), but a greater focus on political uncertainty in the United States in the face of the impeachment trial against President Trump.

Outlook

See section 7.1. of this document.

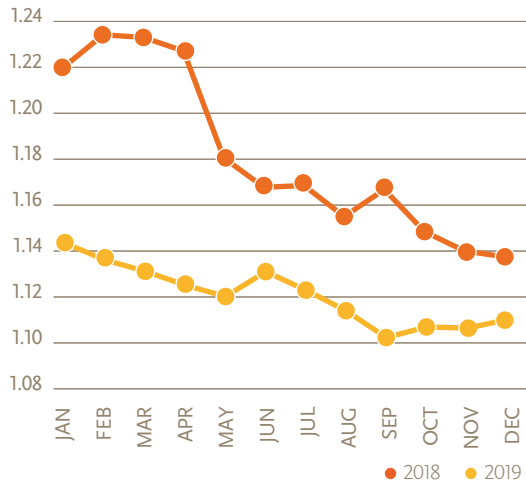


1.12 \$/€
average exchange rate 2019

64.2 \$/bbl

average Brent price in 2019

Changes in the EURUSD exchange rate (monthly averages)



Source: Bloomberg and Repsol's Division of Studies

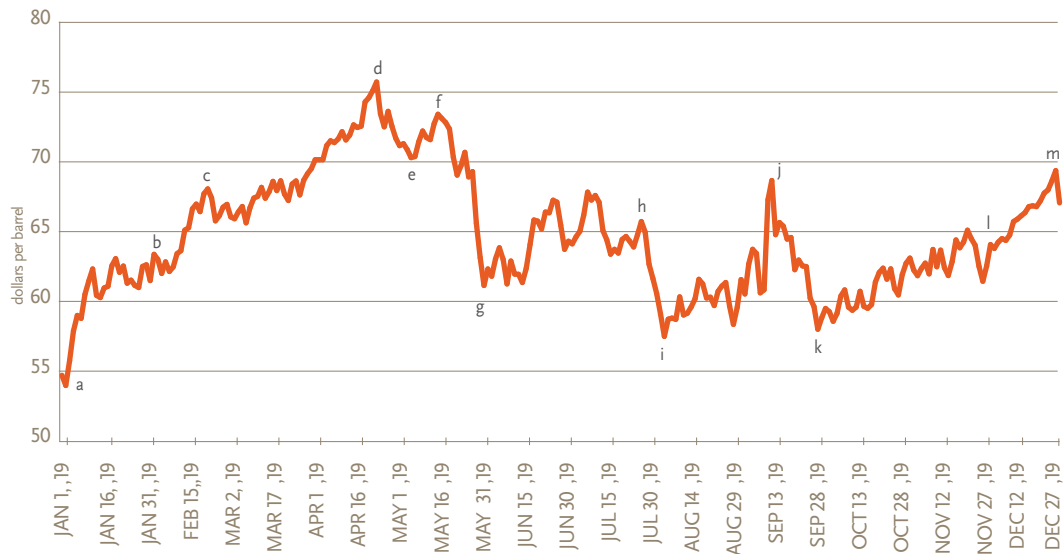
3.2. Energy landscape

Crude oil - Brent

In 2019, oil prices were highly volatile. Brent started the year at around USD 55/bbl and has now risen to over USD 75/bbl. In 2019, the average price of Brent crude was USD 64.2/bbl, representing a 10% decline from the 2018 average, while the West Texas Intermediate (WTI) crude price averaged USD 57.0/bbl, with the Brent-WTI differential standing at USD 7.2/bbl.

On the supply side, the upward trend in the price early in the year was triggered by the decision by OPEC and a group of non-OPEC exporting countries to cut production by 1.2 million barrels per day (-0.8 OPEC and -0.4 non-OPEC), effective from January 1, 2019. The commitment to production cuts was significant, driven by the de facto leaders: Saudi Arabia on the OPEC side and Russia on the non-OPEC side. During the meeting of OPEC+ (the name by which this group of countries is known) on 1 and 2 July, it was decided to extend the production cut agreement until March 2020. At the December

Main milestones marking the price of Brent crude oil



Source: Bloomberg and Repsol's Division of Studies

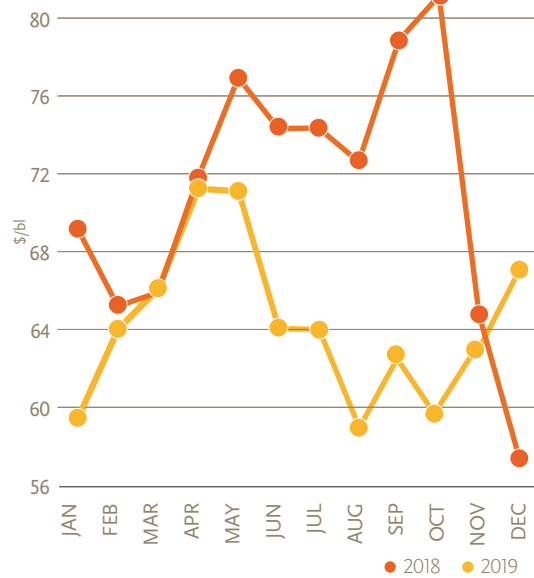
- a) Implementation of the agreement to scale back production amongst OPEC+ (-0.8 mb/d OPEC; -0.4 mb/d non-OPEC).
- b); c) Reduction in tensions in trade war between USA and China.
- d) (1) End of waivers on importing Iranian crude oil.
(2) Alleged call from D. Trump to OPEC demanding increase in crude oil production.
- e) USA increases tariffs on Chinese products from 10% to 25% worth US\$200 billion
- f) Attack on four US oil tankers off the coast of the United Arab Emirates. No deaths.
- g) (1) Heightening of tensions in trade war between USA and China.
(2) USA threatens an increase in tariffs on all goods from Mexico.
- h) The Federal Reserve reduces the interest rate to 2%-2.25%.
- i) USA announces a tariff of 10% on all Chinese assets worth US\$ 300 billion.
- j) Attack in Abqaiq and Khurais (Saudi Arabia).
- k) (1) Restoration of oil production lost in Saudi Arabia after the attacks.
(2) ISM's production index drops to lowest level since June 2009.
- l) OPEC+ meeting, December 5-6: the OPEC+ group committed to scaling back 500 kb/d (370 kb/d OPEC; 130 kb/d non-OPEC), in addition to the 1.2 mb/d already implemented. Saudi Arabia also committed to cutting back 167 kb/d under the new agreement and 322 kb/d under the old agreement, an extra 400 kb/d.
- m) US attacks General Qasem Soleimani.

↓ 10%

Brent crude in 2019

5-6 meeting, there was speculation that they will extend the agreement beyond March 2020 and/ or implement deeper production cuts than the 1.2Mbb/d currently committed to reducing global oil inventories and thus sustaining prices.

Brent crude price history



Source: Bloomberg and Repsol's Division of Studies

Another relevant factor in world oil supply is the progress of non-conventional crude oil production in the USA. According to the latest available data published by the International Energy Agency (IEA), production of crude oil and natural gas liquids would increase by 1.6Mbb/d in 2019 versus the previous year.

However, it is on the demand side that the greatest uncertainties lie. So far this year, most analysts, and especially the major official energy agencies, have revised downward their outlook for global demand growth in 2019. This review comes in response to the worsening economic outlook, particularly the decline in manufacturing confidence indices in the context of the US-China trade war. According to the latest IEA estimates, global oil demand will increase by 980 Kbb/d by 2019. This contrasts with annual growth estimates published in June for the 2019 average of 1.2 Mbb/d.

Natural Gas - Henry Hub

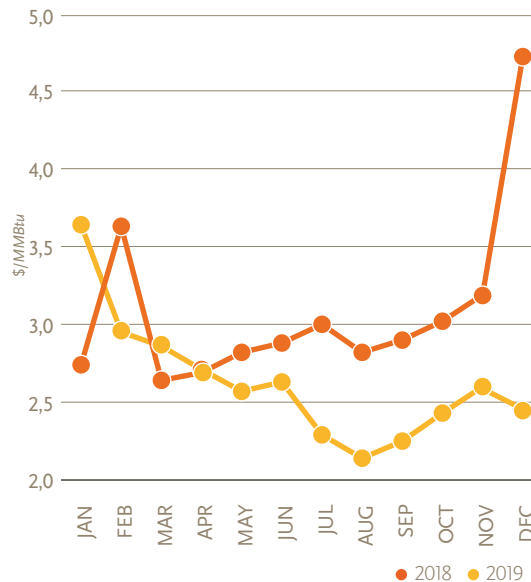
As to US natural gas, the average Henry Hub price was USD 2.6/MBtu, 16% lower than in 2018.

On the supply side, there was a significant increase in gas production associated with crude oil. The increase in oil output in the Permian Basin (Texas and New Mexico) has gas as a byproduct, which is saturating the US system and has placed inventories at peak levels for much of the year. Given this additional volume of associated gas, Permian gas is being sold even at a loss because of the need to evacuate it from the system, putting downward pressure on Henry Hub prices. This oversupply explains why the indicator has been trading all year long at levels well below 2018.

On the demand side, the slowdown in growth in China and (to a lesser extent) India directly impacted LNG trade by affecting imports from the United States. In the case of China, the slowdown in economic growth, combined with an unfavorable climate in the North for gas consumption and the halt in the switch from coal to gas for heating and power generation, hurt import demand and put downward pressure on prices.

As a result of the factors outlined above, the high level of inventories also exerted downward pressure on prices, which at the end of the year stood 16% below the level reached in 2018.

Henry Hub price history



Source: Bloomberg and Repsol's Division of Studies

2.6 \$/MBtu

Henry Hub in 2019

↓ 16%

Henry Hub in 2019

4. Financial performance and shareholder returns

—
€2,042M
 adjusted net
 income

4.0. Summary

Our performance in 2019 was hurt by a tough, volatile **context** shaped by a slower economy and rising geopolitical uncertainty, lower crude oil prices (Brent 64.2 vs. 71.3 in 2018) and lower gas prices (HH 2.6 vs. 3.1 in 2018, and sharp falls in other benchmark indices such as JKM and NBP), weaker industrial margins (the Refining margin indicator in Spain dropped from \$6.7/bbl in 2018 to \$5.0/bbl in 2019), while the international petrochemical margin index declined from €411/Tn to €376/Tn). On the other hand, the Company's metrics were boosted by a slight appreciation of the dollar against the euro (€/€ 1.12 vs. 1.18 in 2018).

Net adjusted income came to 2,042 million euros, 13% less than in 2018, chiefly due to worse performance in the Upstream segment (lower crude oil and gas prices), in Refining and Chemicals (maintenance shutdowns and thinner margins) and gas Marketing and Trading (prices). However, Trading, Mobility and Electricity showed stronger financial performance, while corporate expenses and borrowing costs also improved.

The **net result** of -3,816 million euros reflects the major write-downs in the closing quarter (-4,849 million euros) mainly of Upstream assets, as well as the impact of provisions to cover litigious risks.

Cash flow from operations (5,837 million euros) exceeded the 2018 figure by (+8%), and allows for covering net investment (3,777 million euros), payment of interest and dividends and share buy-backs. The year ended with **net debt** including leases of 8,083 million euros (4,220 million euros ex leases), making for a leverage ratio of 23.7% (13.9% ex leases).

—
€5,837M
 cash flows from
 operations

4.1. Results

Millions of euros	2019	2018	Δ
Upstream	1,050	1,325	(21%)
Downstream	1,456	1,583	(8%)
Corporate and other	(464)	(556)	17%
Adjusted net income	2,042	2,352	(13%)
Inventory effect	(35)	(68)	49%
Specific results	(5,823)	57	-
Net income	(3,816)	2,341	-

EBITDA came to 7,161 million euros, less than (-5%) the figure for the same period of 2018.

EBITDA (Millions of euros)	2019	2018	Δ
Upstream	4,255	4,801	(11%)
Downstream	3,057	2,859	7%
Corporate and other	(151)	(147)	(3%)
TOTAL	7,161	7,513	(5%)

Upstream

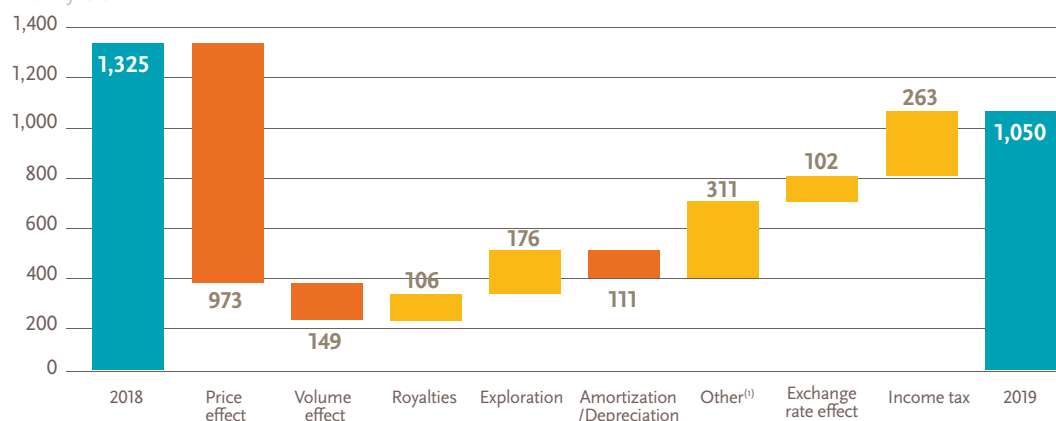
Average production (709 kbep/day, 1% in line with previous year), **exploration** activity (16 exploration wells and 8 delineation/appraisal wells, 9 showing positive results) and **production** activity (new wells connection in Marcellus, Duvernay and Akacias, start-up of Buckskin in the Gulf of Mexico; acquisition of Eagle Ford and Mikkil, inter alia) are discussed in section 5.1. Upstream.

Adjusted net income in the Upstream segment was 1,050 million euros, less than in 2018 (1,325 million euros), as explained in the following figure, due to:

- lower realization prices for crude oil (-11%) and, especially, gas (-15%), dragging down results in the United States, Peru, Norway, Brazil and Trinidad and Tobago;
- lower sales volume, chiefly due to lesser production as a result of safety shutdowns in Libya, maintenance in Brazil, Malaysia and Trinidad and Tobago, and weaker demand in Venezuela;

Change in Upstream adjusted net income

Millions of euros



(1) Includes, but is not limited to, costs associated with production and income from investees and non-controlling interests.

↑ 23%
Upstream investments

- lower taxes on production and hydrocarbon royalties in line with declining prices and volumes;
- lower exploration costs, mainly for dry wells in Bolivia, Norway, Guyana, Indonesia and Bulgaria, due to a more successful exploration campaign;
- higher amortization/depreciation costs as a result of the new accounting standard on leases (IFRS 16), which are now shown as license amortization charges rather than lease operating costs;
- lower "other" costs due to the impact of IFRS 16 on leases and reduced employee costs;
- lower income tax as a result of lower operating earnings (effective rate 48%, as in 2018); and
- positive effect of exchange rates, with the dollar strengthening against the euro

Upstream **EBITDA** was 4,255 million euros, 11% down year-on-year, hurt by **worse operating performance**, and partly offset by the effect of IFRS 16 Leases.

Investment in 2019 (2,429 million euros) rose 23% year-on-year, with a focus on production facilities and/or assets under development, mainly in the United States (including acquisition of 63% of Eagle Ford), Norway, Trinidad and Tobago and the United Kingdom.

Downstream

Adjusted net income in 2019 was 1,456 million euros, compared to 1,583 million euros for the same period of 2018.

As shown in the figure on the next page, the change was chiefly due to:

- Worse performance at **Refining Spain** due to smaller sales (maintenance shutdowns), thinner margins (worse differential between crude and light products) and higher overheads (amortization/depreciation of new investments, CO₂). **Refining Peru**, however, improved its performance owing to stronger margins in the local market on low-sulfur fuels production;
- **Trading** saw improved margins on crude, LPG, and biodiesel transactions and on fleet management;
- In **Chemicals**, the retreat in margins in the closing quarter was partly offset by bigger sales and fewer operational incidents;
- The **Commercial Businesses** performed similarly to last year. Improved results in Mobility (service stations in Spain, Portugal and Mexico) and Electricity and Lubricant (asphalts) were dragged down by underperformance in Gas Wholesaling and Trading (gas prices) and LPG (milder winter).

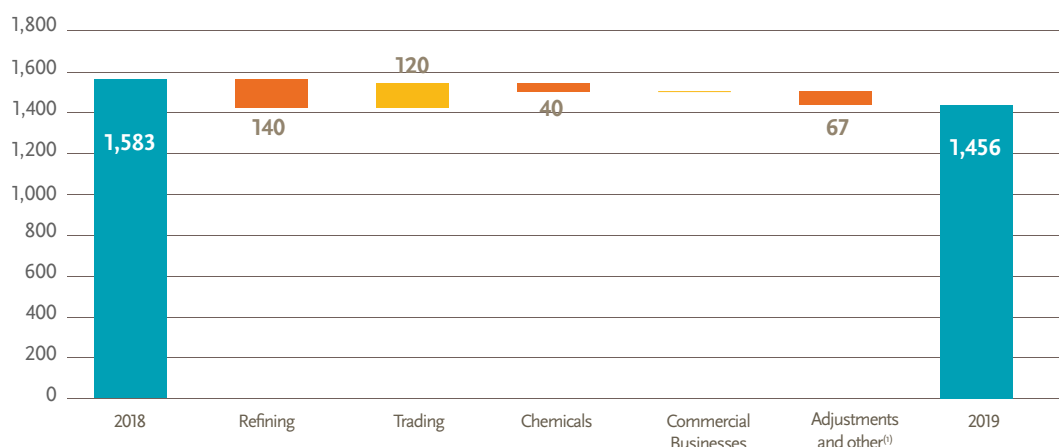
Downstream **EBITDA** came to 3,057 million euros (vs. 2,859 million euros in the same period of 2018).

↑ 7%
EBITDA Downstream

↑ €120M
Trading profit

Change in Downstream adjusted net income

Millions of euros



(1) Mainly the effect of negative consolidation adjustments to eliminate intra-Group transactions between different Downstream business units.

Investment was 1,376 million euros (vs. 1,831 million euros in 2018, which included 733 million euros for the acquisition of Viesgo), and allocated to energy efficiency, safety and environmental improvements. Additionally, investments by the international expansion in Mexico (Service Stations) and Southeast Asian (Lubricants) and renewable projects of the Electricity and Gas business.

Corporate division and other

Cumulative results for 2019 came to -464 million euros (-556 million euros in 2018). The Corporate division continues to lower corporate and structure costs, except as regards digitalization and technology initiatives. The financial result was better owing to lowered borrowing costs and more favorable foreign exchange positions, despite the uptick in financial expenses due to application of IFRS 16.

Net income and profitability

Adjusted net income, which was 2,042 million euros (vs. 2,352 million euros in 2018), must have the following effects added to it:

- **Inventory effect:** (-35 million euros) reflects changes in the price of crude and petroleum products in the period.
- **Specific results:** (-5,823 million euros) mainly reflects extraordinary write-downs (see following sub-section) and provisions, to cover litigious risks regarding ongoing Addax arbitration (-837 million euros) (see Note 15 of consolidated Financial Statements).

(Millions of euros)

Specific results	2019	2018 ⁽¹⁾
Specific results	49	83
Personnel restructuring	(64)	(55)
Impairment losses ⁽¹⁾	(4,867)	(684)
Provisions and other ⁽²⁾	(941)	301
Discontinued operations ⁽³⁾	-	412
TOTAL	(5,823)	57

(1) In 2019, includes the impairments recorded by the assumption of new price hypothesis and energy transition (see next section) and other impairments of little relevance.

(2) Includes provisions for credit risk, legal and tax litigation and extraordinary results due to exchange differences over financial and tax positions.

(3) In 2018, mainly included the gain on sale and share in profit of Naturgy Energy Group.

The Group's **net income** in 2019 was -3,816 million euros (2,341 million euros in 2018). The loss was due mainly to the large write-downs in the period.

Profitability indicators	2019	2018
Return on average capital employed (ROACE) (%)	(11.0)	6.7
Earnings/(loss) per share (€/share)	(2.48)	1.38

(1) Including impact of Leases regarding NIIF 16; -9,7%

Future return on capital employed will be driven up after the write-downs posted in the period.

↑ 16%
better financial result

Asset write-downs and impairments

Throughout the year 2019 it has been consolidating a new vision of the future dynamics of Oil&Gas markets, which can be summarized at weaker prices, marked by a demand without enough push to compensate for abundant supply, especially of gas; of the same. In this way, the expectations of a progressive decarbonization of the economy, driven by a growing social concern for the consequences of climate change and, about all, for the public policies announced for promote an energy transition that fosters renewable sources and low emissions of gases from greenhouse effect.

In this context, for the realization of the annual test of impairment of assets, Repsol has revised downwards expectations of future prices of oil and gas, the expected cost of emissions has increased of CO₂ and has reduced future estimates of consumption of hydrocarbon products, such as consequence of:

- New dynamics of oil markets and gas that have meant a downward pressure about crude oil prices and especially gas: global demand slowdown; structural increase in the production of gas in the US, especially for use of gas associated with shale oil, and new gas discoveries in other places of the world; global supply increase of LNG and less intense demand, especially in China.
- New public policies aimed at decarbonization of the economy and therefore to the fossil fuel use restriction and to the development of new alternative technologies, that drive the energy transition and suppose a decrease in expectations of medium and long hydrocarbon consumption term..

By assuming these new scenarios so realistic and responsible, Repsol may anticipate the consequences and seize the opportunities of the energy transition, guaranteeing sustainability and optimizing the value of their business and investments. This new orientation in business management will be done accordingly with the objective of zero net emissions in the year 2050 and the new strategic orientation (see section 2.4) aligned with the climate objectives of the Agreement of Paris and United Nations that pretend limit global warming below of the two degrees Celsius relative to levels preindustrial.

Without prejudice to the adaptation of the strategy from the Company to this new scenario guarantee creating business value, adoption for its annual deterioration test of the new hypothesis, especially

of lower future prices of gas, has implied the registration of sanitation extraordinary of the book value of some assets, whose detail by business segment is as follows:

<i>(Millions of euros)</i>	2019
Upstream	(6,164)
Production assets	(4,115)
Goodwill	(793)
Assets undergoing exploration or development ⁽¹⁾	(786)
Tax credits	(470)
Downstream	69
Gas & Trading North America	229
Tax credits	(104)
Other Downstream assets	(56)
TOTAL before tax	(6,095)
TOTAL after tax	(4,849)

(1) Excludes negative exploration results already amortized or covered by provisions in the ordinary course of business and recognized as exploration costs within adjusted net income for the Upstream segment.

The main impairments (before tax) in the Upstream segment were:

- Production assets (-4,115 million euros)

Impairments before tax	<i>(Millions of euros)</i>
North America	(3,572)
Southeast Asia	80
Latin America	(414)
Europe and North Africa	(209)
TOTAL	(4,115)

Impairments mostly concentrate in onshore assets in North America, which were hurt by the special conditions of the gas market in the United States and Canada.

- Exploration and development assets (-786 million euros) in Vietnam, Brazil, Papua New Guinea, Algeria, Russia and Indonesia.
- Goodwill (-793 million euros) arising from the Repsol Oil&Gas Canada Inc. business combination.
- Tax credits (-470 million euros) as a result of new price scenarios, mainly in North America, that make recovery less likely.

In the Downstream segment, 229 million euros of a pre-tax impairment was reversed (net of the onerous contracts provision) in the North America Gas & Trading business (mainly the Canaport regasification plant and the pipelines for gas transport in North America) in light of the forecast performance of gas volumes, prices and margins.

The absence of material impairments in the Downstream segment proves the quality of our

↑ **8%**
cash flow
from
operations

assets and our business models' ability to adapt to stringent new sustainable development scenarios.

For further information on impairments and write-downs in the period, see Note 21 of the 2019 consolidated Financial Statements.

4.2. Cash flows

Cash flows (Millions of euros)	2019	2018
EBITDA	7,161	7,513
Changes in working capital	(67)	(806)
Dividends received	66	20
Income tax refunded/(paid)	(1,047)	(845)
Other receipts/(payments)	(276)	(454)
I. Cash flow from operations	5,837	5,428
Payments for investments	(3,953)	(3,866)
Receipts from investments	176	3,494
II. Cash flow from investing activities	(3,777)	(372)
Free cash flow (I + II)	2,060	5,056
Dividends and other equity instruments	(396)	(297)
Net interest and leases	(508)	(458)
Treasury shares ⁽¹⁾	(1,843)	(1,595)
Cash generated	(687)	2,706

(1) Includes 820 million euros of buy-backs in addition to the 2019 buy-back round.

In 2019, **cash flow from operations** (5,837 million euros) was (+8%) on 2018. Lower EBITDA figures at business units were positively impacted by a lesser change in working capital, mainly in the Downstream segment (improved inventory working capital at the industrial businesses and Trading). Cash flow from operations was sufficient to cover investment, interest and dividend payments, and share buy-backs for the year.

Cash flow from investing activities (-3,777 million euros) reflects our investment in the new businesses operated by Repsol Electricidad y Gas, early investment in the Refining system to ensure maximum capacity is available in 2020 with the addition of IMO and international expansion in the Downstream segment (Mobility Mexico and Lubricants), and expenditure on production assets in the Upstream segment, mainly in North America (including acquisition of 63% of Eagle Ford), Norway and Trinidad and Tobago.

Therefore, after paying borrowing costs (-508 million euros), shareholder return (-396 million euros) and share buy-backs (-1,843 million euros, including 820 million euros additional to 2019 treasury share redemptions), **cash generated** came to -687 million euros.

Free cash flow in 2019 came to 2,060 million euros versus 5,056 million euros in 2018 (which included 3,816 million euros of proceeds of sale of our interest in Naturgy).

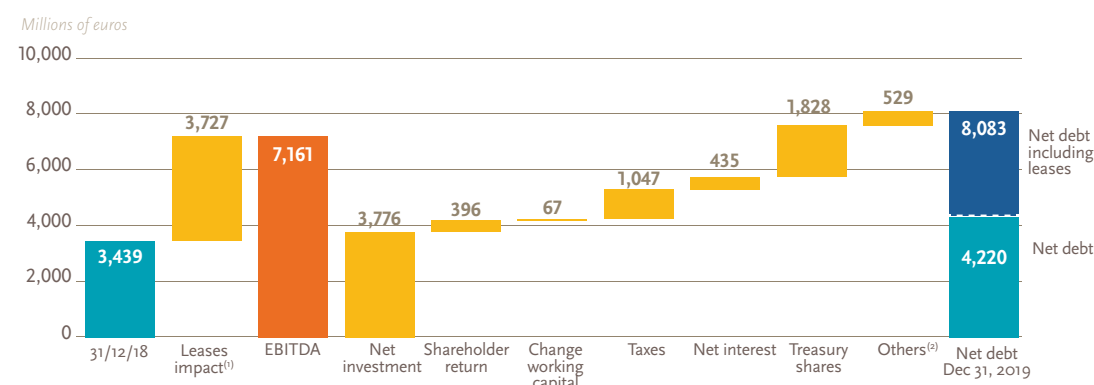
4.3. Financial position

In 2019, measures allowing for solid debt and leverage levels continued.

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.

The year saw the first application of IFRS 16, which led to changes in how the Group measures debt (for more information, see Note 3 to the 2019 consolidated Financial Statements and Appendix II to this Report).

Change in net debt



(1) Includes finance leases recognized under the previous standard (1,624 million euros) and leases recognized after application of IFRS 16 (2,103 million euros).
(2) Includes new leases signed in the period, other receipts/(payments) from operations and translation differences.

€2,060M
free cash flow

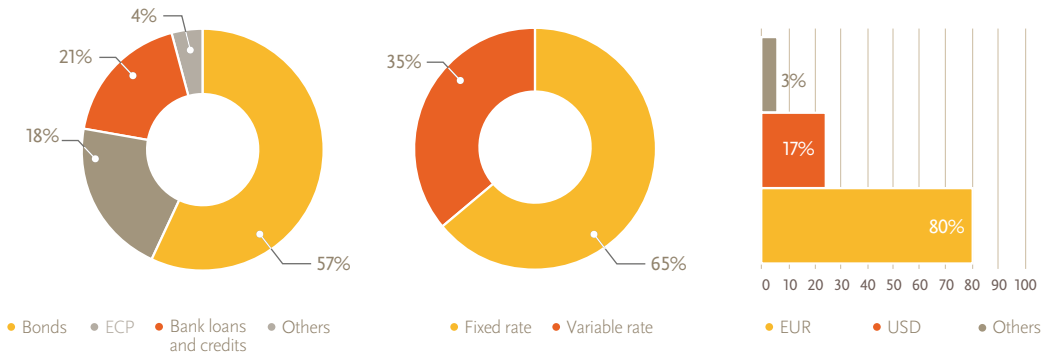
Indebtedness

Net debt at December 31, 2019 (4,220 million euros) and with leases (8,083 million euros) increased by 781 million and 917 million euros, respectively, with respect to 2018.

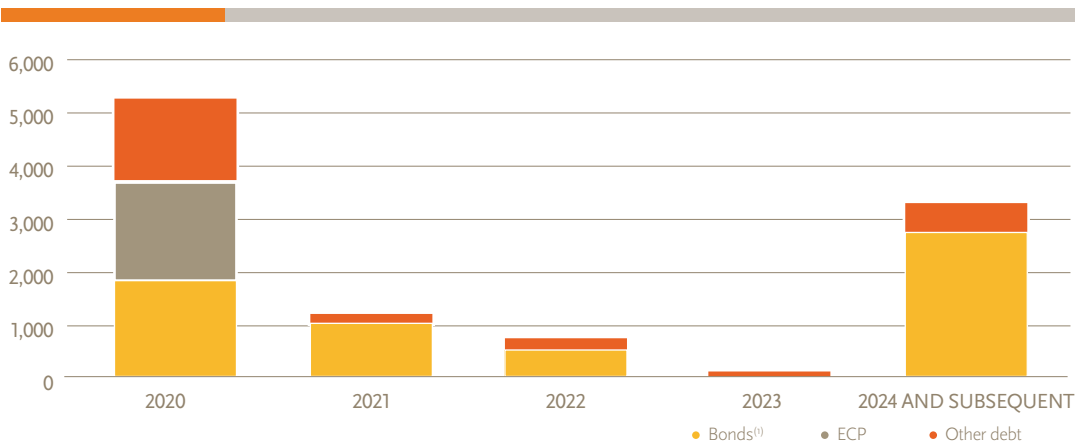
The **composition** and **maturity** of gross non-lease debt (EUR 10,459 million) at December 31, 2019 was as follows:

€4,220M
Net debt

Gross debt



The **maturity** dates for **gross debt** are as follows:



(1) Issues guaranteed by Repsol, S.A. and carried out within the EMTN and Universal Shelf Prospectus programs.

Main funding operations

The main transactions in 2019 were:

- In February, we redeemed at maturity a bond issued by Repsol International Finance, B.V. (RIF) in January 2012 under the European Medium Term Notes (EMTN) Issuance Program for a nominal amount of €1,000 million and a fixed annual coupon of 4.875%.
- In July, a bond issued by RIF in July 2016 for a nominal amount of €100 million, with a fixed annual coupon of 0.125%, was redeemed at maturity as part of the EMTN Program.

- In August, RIF issued bonds guaranteed by Repsol, S.A., as part of the EMTN Program, for an amount of €750 million, with a fixed annual coupon of 0.25% and maturing in August 2027.

Liquidity

Group liquidity, including committed and undrawn credit facilities, stood at €7,667 million at December 31, 2019, which is enough to cover its short-term gross debt maturities by a factor of 1.5. Repsol had undrawn credit lines amounting to €1,818 and €2,265 million at December 31, 2019 and 2018, respectively.

€7,667M
liquidity

€0.916
per share
in shareholder
returns

Credit rating

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

Term	Standard & Poor's	Moody's	Fitch
Long-term	BBB	Baa1	BBB
Short-term	A-2	P-2	F-2
Outlook	positive	stable	positive
Date of latest modification	12/12/2018	10/12/2018	31/07/2019

Treasury shares and own equity investments

In 2019, a highlight was the acquisition under the Repsol share buy-back program of approximately 4.56% of Repsol's share capital at December 31. Those shares were redeemed in order to offset the dilutive effect of the bonus share issue launched during the year under the "Repsol Flexible Dividend" program (see section 4.4).

In addition, as part of the discretionary treasury shares operation, shares representing approximately 3.6% of share capital were acquired for use as required for any capital reductions that may occur in 2020.

At year-end 2019 the Group held treasury shares (80.8 million shares) representing 5.16% of 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 24 days in 2019, 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 19 "Trade and other payables" of the consolidated Financial Statements.

4.4. Returns to shareholders

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 2019 and 2018 under the "Repsol Flexible Dividend" program¹ is as follows:

- Return of € 0.916 per share² in 2019. Repsol paid a total gross amount of 398 million euros to shareholders and delivered 71,394,987 new shares, for an equivalent amount of 1,017 million euros, to those who opted to receive new shares in the company.
- Return of € 0.873 per share³ in 2018. Repsol paid a total gross amount of 253 million euros to shareholders and delivered 68,777,683 new shares, for an equivalent amount of 1,095 million euros, to those who opted to receive new shares in the company.

In November 2019, a capital reduction was carried out through the redemption of treasury shares, approved by shareholders at the Annual General Meeting in 2019, to offset the dilutive effect of the bonus share issue formalised in 2019 under the "Repsol Flexible Dividend" programme.

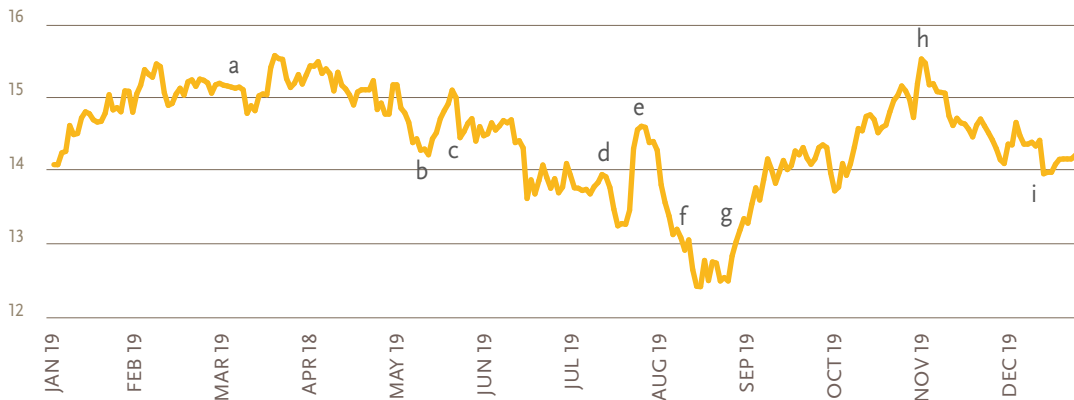
On July 23, 2019, the Board of Directors decided to lay before stockholders, for their approval at the next Annual General Meeting, a proposal to reduce share capital by an amount equivalent to 5% of capital as of December 31, 2018, through the redemption of treasury shares. This proposed capital reduction is independent from that which may be submitted at the next Annual General Meeting within the context of stockholder remuneration under the "Repsol Flexible Dividend" program.

1. For additional information on the total returns received by shareholders and the capital increases issued under the "Repsol Flexible Dividend" program, see section "Share capital" of Note 7 "Equity" of the 2019 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 2019 (€0.411 and €0.505 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 2018 (€0.388 and €0.485 gross per right, respectively).

Share price evolution



↑ 5%
stockholder returns

- a) €15.1; March 5, production resumes in Libya.
- b) €14.27 €; May 8 and 9, Downstream Day at the Cartagena refinery.
- c) €14.435; May 23, 6% drop in Brent price.
- d) €14.29; July 24, presentation of results for first quarter and announcement of additional 5% buyback.
- e) €14.385; July 31, Fitch Ratings raises Repsol's short term credit rating from F3 to F2.
- f) €12.7; August 14, 4% fall in Brent price (general drop in crude and gas in first fortnight of August).
- g) €13.065; August 29, announcement of the start of the share repurchase program associated with the flexible dividend.
- h) €15.415; November 5, end of the share repurchase program.
- i) €14.145; December 2, announcement of the target of zero net emissions by 2050.

In addition, in January 2020, under that program, replacing what would have been the interim dividend from 2019 profits, Repsol paid out 107 million euros in cash (€0.424 gross per right) to those stockholders opting to sell their bonus share rights back to the Company, and delivered 38,647,825 shares, worth 541 million euros, to those opting to take their dividend in the form of new shares.

At the date of the authorization for issue of the Management Report, the Board of Directors is expected to submit a proposal to stockholders 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.

Our share price

In 2019, Repsol's shares were weighed down by a highly volatile environment, macroeconomic uncertainties and underperformance of the Ibex, Spain's stock exchange index, as against the leading European indices.

The first ten months of the year saw positive share performance, with a 10% rise, reflecting the strength of the Company's integrated model in a highly volatile environment and the market's welcome to improved stockholder remuneration through share buybacks.

However, in the last two months of the year, a worsening of geopolitical tensions and a drastic drop in the international price of gas penalized share performance, with a 1% decline with respect to year-end 2018.

The Group's main stock market indicators in 2019 and 2018 were:

Key stock market indicators	2019	2018
Stockholder return ⁽¹⁾ (€ per share)	0.92	0.87
Share price at period-end ⁽²⁾ (€)	13.93	14.08
Period average share price (euros)	14.43	15.78
Maximum price during the period (euros)	15.52	17.29
Minimum price during the period (euros)	12.48	13.74
Number of shares outstanding at end of the year (million)	1,527	1,527
Market capitalization at year-end (million euros) ⁽³⁾	21,277	21,506
P/E ratio ⁽⁴⁾	10.90	9.7
Dividend yield ⁽⁵⁾ (%)	6.6	6.2
Book value per share ^(euros) ⁽⁶⁾	16.1	19.2

- (1) For each period, stockholder returns include dividends paid and the fixed price guaranteed by Repsol for the bonus share rights awarded under the "Repsol Flexible Dividend" program.
- (2) Share price at year-end in the continuous market of the Spanish stock exchanges.
- (3) Year-end closing market price per share, times the number of outstanding shares.
- (4) Year-end closing market price per share / Earnings per share attributable to the parent company.
- (5) Earnings 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.

€13.93
per share
share price at year-end 2019

5. Our business in 2019

5.1.Upstream¹

**709
kboe/d
net output**

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 evaluation probes, definition of discovered resources and determination of their commerciality.
- **Development:** drilling of production wells and building of facilities for the production of reserves.
- **Production:** Commercial operation of hydrocarbons.
- **Dismantling:** abandonment and refurbishment of all facilities to leave the area in the same environmental condition as prior to the commencement of E&P operations.

Main operating figures

	2019	2018
Net undeveloped acreage (km ²)	179,516	232,331
Net developed acreage (km ²)	6,695	5,494
Reserves of crude oil, condensate and LPG (Mbbbl)	620	638
Natural gas reserves (Mboe)	1,519	1,702
Proven reserve replacement ratio (%) ⁽¹⁾	23	94
Net production of liquids (kbbbl/d)	254	261
Net production of gas (kboe/d)	455	454
Net hydrocarbon production (Kboe/d)	709	715
Average crude oil price (\$/bbl)	57.3	63.9
Average gas price (\$/kscf)	2.9	3.4
Bonds, dry boreholes, general and administrative expenses ⁽²⁾ (millions of euros)	297	457

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

(2) Only costs directly assigned to exploration projects.

1. For more information, see "Information on oil and gas exploration and production" at www.repsol.com.



Our performance in 2019

Millions of euros	2019	2018	Δ
Results from operations	1,969	2,514	(545)
Income tax	(948)	(1,211)	263
Investees and non controlling interests	29	22	7
Adjusted net income ⁽¹⁾	1,050	1,325	(275)
Special items	(5,645)	(326)	(4,482)
Net income	(4,595)	999	(4,777)
Effective tax rate (%)	(48)	(48)	-
EBITDA	4,255	4,801	(546)
Investments	2,429	1,973	456

(1) Adjusted Net Income by geographical area

Geographical area	2019	2018	Δ
Europe, Africa and Brazil	653	768	(115)
Latin America - Caribbean	387	501	(114)
North America	76	212	(136)
Asia and Russia	182	264	(82)
Exploration and other	(248)	(420)	(172)
Adjusted net income	1,050	1,325	279



Period highlights

2019 was a year marked by low crude oil prices and, in particular, gas. Repsol has prioritized the generation of value over production, focusing its efforts on improving efficiency, lowering the cash breakeven and optimizing the portfolio.

- **Average production** reached 709 Kboe/d in 2019, in line with the previous year (-6.6 Kboe/d; -7 Kbb/d in liquids and +0.4 Kboe/d in gas). This decrease was mainly attributable to Trinidad and Tobago, Venezuela, Libya, Shenzi (USA) and divestments in the USA (Midcontinent), and was partly offset by production from new wells in Marcellus (US), Duvernay (Canada) and Akacias (Colombia), acquisitions in Norway (Mikkele) and the United States (Eagle Ford), and the start-up of production at Buckskin (US).
- **Exploration campaign:** in 2019, 16 exploratory and 8 delineation/appraisal drillings have been completed, 9 with positive results (5 exploratory

in the United States, Indonesia, 2 in Malaysia and Norway and 4 of appraisal in the USA), 10 with negative results (8 exploratory in Bulgaria, 3 in Colombia and 2 in Norway, Guyana and Indonesia and 2 of appraisal in Algeria) and 5 with results under evaluation.

- **Acreage:** acquisition of 2 blocks in Indonesia (exploratory, operated), 1 block in Greece (exploratory, operated), 6 blocks in Norway: 3 new blocks and an extension in the APA Round (concessions in predefined areas) 2018 and two acquired (Mikkel Field), 24 blocks in USA (7 in the Gulf of Mexico and 17 in Alaska). In addition, 4 blocks were obtained in Brazil pending official ratification at December 31.
- The **net addition of proven reserves** in 2019 was 58 Mboe, mainly from extensions and discoveries, and acquisitions in North America and the **total reserve replacement ratio** was 23% in 2019.





7,278 km²
net
exploration acreage



66 Mboe
net output



619 Mboe
net proven reserves

North America

Performance of operations	2019	2018
Net developed acreage (Km ²)	2,505	2,134
Net undeveloped acreage (Km ²)	9,837	12,562
Net development acreage (Km ²)	5,064	4,698
Net exploration acreage (Km ²)	7,278	9,998
Net proven reserves (Mbep)	619	535
Finished and ongoing exploratory wells ⁽¹⁾ :		
Positive	1	-
Negative	-	2
Under evaluation	-	-
Ongoing	2	-
Finished development wells		
Positive	103	136
Negative	1	-
Under evaluation	-	-
Net production of liquids (MMb)	18	17
Net production of natural gas (bcf)	274	261
Total net output (Mbep)	66	64
Oil production wells	1,434	1,439
Gas production wells	2,918	2,795
Average crude oil realization price (\$/bbl)	55.0	58.5
Average gas realization price (\$/boe)	12.5	14.0

(1) Does not include appraisal wells: 5 in 2019, 4 positive and 1 in development, and 1 ongoing in 2018.

Sustainability performance	2019	2018
No. employees	790	923
% women	32	32
% of women in leadership positions	25	23
Hydrocarbon spills reaching the environment (t) ⁽¹⁾	5.52	12.72
CO ₂ e emissions (Mt) (Scope 1 + 2)	1.55	1.5
TRIR	3.40	4.26
PSIR	2.89	2.82
Voluntary social investment (€ thousand)	688	981

(1) Oil spills exceeding one barrel and reaching the environment.

Period highlights

- **United States: positive exploratory campaign in Alaska and the Gulf of Mexico, start of production in *Buckskin* and purchase of Equinor's stake in Eagle Ford**

The presence of hydrocarbons has been confirmed in the southern part of the Pikka unit in Alaska, where the first delineation well known as Pikka-B was completed in January and the Pikka-C appraisal drilling was completed in April, both with positive results.

In late April, an important discovery was announced at the Blacktip exploration well, located in deep waters of the Gulf of Mexico (USA) 400 km south of Houston, with a net crude area more than 122 meters thick. Repsol has an 8.5% stake in this hydrocarbon discovery in the Alaminos Canyon basin, alongside Shell (operator), Chevron and Equinor. The project is in the phase of appraisal and delineation of reserves. The Blacktip-1 ST1 appraisal drilling was also positive in June.

In June, hydrocarbon production began in the Buckskin deepwater project (in which Repsol holds a 22.5% stake, LLOG being the operator) in the Keathley Canyon area in the U.S. Gulf of Mexico.

In November, Repsol reached an agreement with Equinor to acquire its 63% stake in Eagle Ford, a production asset located

in Texas, United States, for USD 352 million. In this way, Repsol will control 100% of the assets and will be its operator. This additional stake in the asset will allow for improvements in operational efficiencies and synergies. This transaction adds approximately 280 net square kilometers and 34 kbep/d, bringing total production after the deal to around 54 kbep/d. This acquisition is in line with the 2018-2020 Strategic Plan, which identifies North America as a key area due to its advanced infrastructure and stable regulatory framework. For further information, see Note 5 of the consolidated Financial Statements.

- **Mexico: approval of investment plans 2019-2022**

In June, the Mexican National Hydrocarbons Commission (CNH) approved the 2019-2022 investment plans submitted by Repsol (as operator) for Areas 10, 14 and 29, with Repsol holding 40%, 50% and 30% respectively, located in the deep waters of the Gulf of Mexico, awarded in January 2018. These plans include the drilling of four exploration wells in the period 2020-2021, as well as geological studies.

- **Canada: drop in average gas production**

The average daily production for the year was 57,768 Boe/d, compared to 61,483 Boe/d in 2018.

Countries	Main assets ⁽¹⁾	% Repsol	P/D/E ⁽²⁾	L/G ⁽²⁾	Description
United States	Shenzi	28.00%	P	L-G	Deep waters of the Gulf of Mexico south east of Louisiana
United States	Eagle Ford	100%	P	L-G	Non-conventional onshore gas with associated liquids to the south of Texas
United States	Marcellus	89.22%	P	G	Non-conventional shale gas in the states of Pennsylvania, New York and West Virginia, mainly
United States	Buckskin	22.50%	P	L-G	Deep waters of the Gulf of Mexico to the southwest of the state of Louisiana
United States	North Slope - Pikka	49%	E	L-G	Area with discoveries in the delineation phase
United States	North Slope -Horseshoe	49%	E	L-G	Exploratory area comprising the Horseshoe discovery in northern Alaska
United States	North Slope (rest)	Average 43.60%	E	-	Extensive exploratory area, mainly onshore, in northern Alaska
United States	Leon	50.00%	E	L-G	Deep-sea exploratory asset in the Gulf of Mexico southwest of Louisiana
United States	Moccasin	30%	E	L-G	Deep-sea exploratory asset in the Gulf of Mexico southwest of Louisiana State
Canada	Edson & Wild River	Average 65.66%	P	L-G	Production area in the heart of the state of Alberta. Non-conventional
Canada	Chauvin	Average 67.04%	P	L-G	Heavy crude oil located in Alberta/Saskatchewan. Non-conventional
Canada	South Duvernay	100%	P	L-G	Area in the development phase, with oil and gas production, in central Alberta. Non-conventional

(1) Further information in Appendix Ic of the consolidated Financial Statements

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

Latin America -Caribbean



121Mboe

net output



1,196Mboe

net proven reserves



44,602 km²

net exploration acreage



Performance of operations

	2019	2018
Net developed acreage (Km ²)	761	682
Net undeveloped acreage (Km ²)	48,663	95,104
Net development acreage (Km ²)	4,822	4,822
Net exploration acreage (Km ²)	44,602	90,959
Net proven reserves (Mbep)	1,196	1,419
Finished and ongoing exploratory wells ⁽¹⁾ :		
<i>Positive</i>	-	4
<i>Negative</i>	4	6
<i>Under evaluation</i>	3	-
<i>Ongoing</i>	2	1
Finished development wells		
<i>Positive</i>	30	28
<i>Negative</i>	-	1
<i>Under evaluation</i>	2	3
Net production of liquids (MMb)	35	36
Net production of natural gas (bcf)	483	504
Total net output (Mbep)	121	125
Oil production wells	792	771
Gas production wells	241	227
Average crude oil realization price (\$/bbl)	52.4	59.6
Average gas realization price (\$/boe)	12.9	15.9

(1) Does not include appraisal wells: 1 in evaluation in 2019 and no activity in 2018.

Sustainability performance

	2019	2018
No. employees	1,123	1,218
% women	24	24
% women in leadership positions	20	20
Hydrocarbon spills reaching the environment (t) ⁽¹⁾	5.95	0.32
O ₂ e emissions (Mt) (Scope 1 + 2)	0.83	0.84
TRIR	0.71	1.41
PSIR	0.52	0.19
Voluntary social investment (€ thousand)	6,095	4,156

(1) Oil spills exceeding one barrel and reaching the environment.

Period highlights

- **Trinidad and Tobago: start of gas production at Angelin**

In February, the BPTT consortium (30% Repsol) announced the start of gas production from its Angelin platform (West Block), which is remotely operated and is located 60 km off the south-eastern coast of the island of Trinidad, on a 65-meter sheet of water.

- **Colombia: record production in Akacias and signing of two new contracts in two marine blocks**

In March, the Akacias project, in which Repsol has a 45% stake, achieved a record total output of 20 kbbbl/d as a result of the drilling work included in Phase I of the Development Plan approved in 2018. The final objective is to reach a total output of 50 kbbbl/d in the medium term.

In April Repsol signed two contracts with Colombia's National Hydrocarbons Agency (ANH) for the exploration and production of the marine blocks GUA OFF-1 and COL-4, located off the Colombian coast in the Caribbean Sea. Repsol is the operating company for block GUA-OFF-1 with a 50% stake (Ecopetrol owns the remaining 50%) and in block COL-4, also with a 50% stake (ExxonMobil owns the remaining 50%).

- **Brazil: 4 new marine exploration blocks in the Brazilian pre-salt layer**

In October, the Brazilian authorities awarded four new exploration concessions in the Brazilian pre-salt area during the 16th concession round pending official ratification at December 31, 2019. Of the four marine blocks in deep water, three are located in the Campos basin and another in the Santos basin. With a 100% stake, Repsol will explore the C-M-795 block located in the Campos basin in the state of Rio de Janeiro. Also in this basin, but with a 60% stake, Repsol will operate the C-M-825 block, in a consortium with Chevron. The third field acquired in Campos is C-M-845, in which Repsol has 40%, along with Chevron (40%) and Wintershall Dea (20%). The block acquired in the Santos Basin is the S-M-766, in which Repsol has a 40% stake, together with Chevron (40%) and Wintershall Dea (20%).

- **Venezuela**

In 2019, Repsol's average output in Venezuela reached 55 kboe/d (62 kboe/d in 2018). Political instability, economic recession and inflation continued throughout the period. For further information, see Note 21.3 of the 2019 consolidated Financial Statements.

Countries	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 (<i>Sapinhoá</i>)	15.00%	P	L-G	Ultra-deep waters in pre-salt area of Santos Basin
Brazil	BM-S-9A (<i>Lapa</i>)	15.00%	P / D	L	Ultra-deep waters in pre-salt area of Santos Basin
Brazil	BM-S-50 (<i>Sagitario</i>)	12.00%	E	L-G	Ultra-deep waters in pre-salt area of Santos Basin
Brazil	BM-C-33 (C-M-539)	21.00%	D	L-G	Ultra-deep waters in pre-salt area of Campos Basin
Brazil	Albacora Leste	6.00%	P	L-G	Deep waters in Campos Basin
Bolivia	Margarita - Huacaya (<i>Caipipendi</i>)	37.50%	P	L-G	Sub-Andean Sur basin in the south of the country
Bolivia	Sábalo	24.17%	P	L-G	Sub-Andean Sur basin in the south of the country
Bolivia	San Alberto	24.17%	P	L-G	Sub-Andean Sur basin in the south of the country
Colombia	Equion	Average 29.07%	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 (<i>Kinteroni & Sagari</i>)	53.84%	P / D	L-G	Madre de Dios basin (Andean region)
Venezuela	Cardón IV (<i>Perla</i>)	50.00%	P / D	L-G	Shallow waters of the Gulf of Venezuela basin
Venezuela	Quiriquire (EM)	40.00%	P	L-G	Maturin onshore basin
Venezuela	Quiriquire Gas	60.00%	P	G	Gas in the Maturin onshore basin
Venezuela	Barua Motatan	40.00%	P	L	Maracaibo onshore basin
Venezuela	Mene Grande	40.00%	P	L	Maracaibo onshore basin
Venezuela	Carabobo	11.00%	P / D	L	Heavy crudes of Orinoco Petroleum Belt in the southeast of country

(1) Further information in Appendix Ic of the consolidated Financial Statements

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

Asia and Oceania



94,032 km²

net exploration acreage



27 Mboe

net output

109 Mboe

net proven reserves



Performance of operations

	2019	2018
Net developed acreage (Km ²)	1,738	1,051
Net undeveloped acreage (Km ²)	94,749	100,052
Net development acreage (Km ²)	2,454	2,951
Net exploration acreage (Km ²)	94,032	98,152
Net proven reserves (Mbep)	109	154
Finished and ongoing exploratory wells ⁽¹⁾ :		
Positive	3	-
Negative	1	2
Under evaluation	-	-
Ongoing	-	1
Finished development wells		
Positive	50	48
Negative	-	-
Under evaluation	6	1
Net production of liquids (MMb)	9	10
Net production of natural gas (bcf)	98	108
Total net output (Mbep)	27	29
Oil production wells	668	625
Gas production wells	70	82
Average crude oil realization price (\$/bbl)	61.2	67.3
Average gas realization price (\$/boe)	36.7	37.7

(1) Does not include appraisal wells: no activity in 2019 and 1 positive in 2018.

Sustainability performance

	2019	2018
No. employees	610	736
% women	33	32
% of women in leadership positions	18	18
Hydrocarbon spills reaching the environment (t) ⁽¹⁾	0.57	-
O ₂ e emissions (Mt) (Scope 1 + 2)	8.62	7.83
TRIR	1.03	0.73
PSIR	-	0.37
Voluntary social investment (€ thousand)	1,335	602

(1) Oil spills exceeding one barrel and reaching the environment.

Period highlights

- **Indonesia: the country's largest gas discovery in the Sakakemang block and signing of the new contract in Corridor**

In February, the largest gas discovery in Indonesia in 18 years was announced; it is also one of the 10 largest in the world of the past 12 months. The well, called Kaliberau Dalam-2X (KBD-2X), is located in the Sakakemang onshore block on the southern island of Sumatra. Repsol is the operator with a 45% stake. This discovery has a preliminary estimate of recoverable resources of at least 2 billions cubic feet (TCF) of gas. In August, preliminary work began on the development of this gas field. A memorandum of understanding has been signed with ConocoPhillips, the operator of the Corridor PSC, to work together on the feasibility of piping the Sakakemang gas through the Corridor facilities, given that this project is only about 20 km away, which would make it possible to speed up gas extraction and take advantage of synergies using existing facilities.

In July, Repsol signed a Memorandum of Understanding (MoU) for the marketing of natural gas from the Sakakemang area with the company PGN. The signing of this MoU represents a key milestone for the development of Sakakemang.

In November, the new 20-year contract for Corridor's PSC (Production Sharing Contract) in Indonesia was officially signed with the partners in this project: ConocoPhillips and Pertamina. Corridor is located in South Sumatra. Currently, Repsol has a 36% stake in the PSC that would end on December 19, 2023. During the 20-year extension, Repsol's stake will be reduced to 21.6% to accommodate a greater role for the national oil company, Pertamina, which will increase its stake from the current 10% to 30%, and a local public company, which will take a 10% stake. Pertamina also obtains the right to take over the operations of ConocoPhillips from 2026.

The Corridor PSC makes a significant contribution to Repsol in terms of production and annual free cash flow generation, making it one of the company's most important assets.

In December, the state-owned company Petronas acquired 49% of Repsol's stake in the offshore Andaman III block, which previously stood at 100%.

- **Russia: deal with Gazprom Neft and Shell for joint exploration of two blocks in Siberia**

In June Repsol signed a memorandum of understanding with Gazprom Neft and Shell to form a joint venture for the exploration of two adjoining license blocks, Leskinsky and Pukhutsyayakhsky, located in the peninsula of Gyudan on the coast of Siberia. Gazprom Neft will have a 50% stake and Repsol and Shell 25% each. The agreement is expected to be completed in 2020 when the corresponding authorizations are in place.

In December, a joint venture was entered into with Gazprom Neft to perform geological explorations in six license blocks in the area of Karabashsky in the autonomous region of Khanty-Mansi, in southwest Siberia. This synergy, with which Repsol acquired a 50.1% stake in the capital of Karabashsky-6 LLC, will make it possible to continue the expansion of prospecting work in Russia and, in the future, production.

- **Malaysia: discovery in the PM-03 CAA block**

In May, the Bunga Saffron-1 and Bunga Saffron-1 ST1 wells, located in the offshore PM-03 CAA block, were drilled with positive results. Repsol is the operator with a 35% stake.

- **Vietnam**

The cessation of activities of the Ca Rong Do development project in offshore block 07/03 continues. (For further information, see Note 21.3 to the consolidated Financial Statements.)

Countries	Main assets ⁽¹⁾	% Repsol	P/D/E ⁽²⁾	L/G ⁽²⁾	Description
Russia	SNO	49.00%	P / D	L	Diverse assets in the Volga-Urals Basin
Russia	TNO	48.79%	P	L	Diverse assets in the Volga-Urals Basin
Russia	Karabashsky - Eurotek Yugra	70.78%	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
Indonesia	Sakakemang	45.00%	E	G	Onshore asset operated in the South Sumatra basin
Malaysia	PM3 CAA	35.00%	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

(1) Further information in Appendix Ic of the consolidated Financial Statements.

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



Europe

17,377 km²
net
exploration acreage

88 Mboe
net proven reserves

22 Mboe
net output



Africa

6,845 km²
net
exploration acreage

127 Mboe
net proven reserves

22 Mboe
net output

Europe and Africa

Performance of operations	Europe		Africa	
	2019	2018	2019	2018
Net developed acreage (Km ²)	596	533	1,095	1,095
Net undeveloped acreage (km ²)	17,913	12,511	8,355	12,100
Net development acreage (Km ²)	1,132	1,122	2,605	2,605
Net exploration acreage (Km ²)	17,377	11,922	6,845	10,590
Net proven reserves (Mbep)	88	102	127	129
Completed and ongoing exploration wells ⁽¹⁾ :				
Positive	1	-	-	-
Negative	3	3	-	3
Under evaluation	-	1	-	-
Ongoing	-	1	-	-
Finished development wells				
Positive	7	4	14	7
Negative	-	-	-	-
Under evaluation	-	-	-	-
Net production of liquids (MMb)	16	16	15	16
Net production of natural gas (bcf)	35	31	42	26
Total net output (Mbep)	22	22	22	21
Oil production wells	241	231	385	94
Gas production wells	11	12	92	93
Average crude oil realization price (\$/bbl)	64.5	71.2	63.3	71.1
Average gas realization price (\$/boe)	25.8	46.8	25.9	29.5

(1) Europe. Does not include appraisal wells: no activity in 2019 and no activity in 2018.
Africa. Does not include appraisal wells: 2 negative in 2019 and no activity in 2018.

Sustainability performance	Europe		Africa	
	2019	2018	2019	2018
No. employees	890	908	131	163
% women	31	32	15	14
% women in leadership positions	25	25	2	3
Hydrocarbon spills reaching the environment (t) ⁽¹⁾	-	-	-	-
O ₂ e emissions (Mt) (Scope 1 + 2)	0.05	0.05	-	-
TRIR	2.02	4.77	-	-
PSIR	-	-	-	-
Voluntary social investment (€ thousand)	430	444	354	2,672

(1) Oil spills exceeding one barrel and reaching the environment.

Period highlights: Europe

• Bulgaria: new exploration block acquired

In April, the acquisition was announced of 20% of the Khan Kubrat offshore exploration block in Bulgaria, with Shell participating as operator with 50% and Woodside Petroleum taking the remaining 30%.

• Greece: signing of a new exploration contract

In April, Repsol signed an exploration contract in Greece for the offshore Ionian block (located in the Ionian Sea north of Kefalonia and west of the islands of Lefkada and Corfu), thus increasing Repsol's presence in this country where it already has two other onshore blocks. The Ionian block has an area of 6,671 km². Repsol has a 50% stake (operator) while the Greek company Hellenic holds the remaining 50%.

• Norway: new awards, extensions, acquisitions and exploratory discovery

In January, the Norwegian Ministry of Petroleum and Energy announced that Repsol would be awarded stakes in three new exploration licenses and the extension of an existing one. The

new licenses are located in the large Egersund Basin (2) and the Barents Sea (1) and further strengthen Repsol's position in the country.

In February Repsol announced a deal to acquire from Total 7.65% of the Mikkell field in Norway, which currently produces a total of 50 thousand barrels of crude oil equivalent per day.

In March, an exploration discovery was made with the Telesto well (7.7% Repsol) in the PL 120 production license located in the Tampen area, in the North Sea (Norway). Repsol participated in this oil discovery together with Equinor (operator), Petoro and ConocoPhillips. The early estimate is that the recoverable resources could be between 12 and 28 million barrels of oil.

In August, the Norwegian authorities greenlighted the extension of the lifetime of the Rev field facilities (Repsol is the operator and has a 70% share) until April 1, 2021, when the current production license expires.

Countries	Main assets ⁽¹⁾	% Repsol	P/D/E ⁽²⁾	L/G ⁽²⁾	Description
Norway	Operating Assets (Varg, Gyda, Yme...)	Average 64.67%	P	L-G	Offshore assets located in the North Sea to the south of the country
Norway	Non-Operated Assets (Visund, Brage, Gudrun, Mikkell, etc.)	Average 18.53%	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 40.20%	P	L-G	Offshore assets located mainly in the Central North Sea basin
United Kingdom	RSRUK non-operated assets (Balmoral, Cawdor...)	Average 5.79%	P	L-G	Offshore assets located mainly in the Central North Sea basin

(1) Further information in Appendix Ic of the consolidated Financial Statements

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

Period highlights: Africa

• Libya

Repsol's average output in Libya in 2019 reached 29 kbb/d (36 kbb/d in 2018). The situation of political uncertainty continues, affecting the security conditions of the country and the oil

industry. For further information, see Note 21.3 to the 2019 consolidated Financial Statements.

Countries	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
Algeria	Greater MLN/ Menzel Ledjmet Sud-Est	35.00%	P	L	Assets located in the Ghadames/Berkine basin in the east of the country
Libya	NC-115	20.00%	P	L	Asset located in the Murzuk basin in the southwest of the country
Libya	NC-186	16.00%	P	L	Asset located in the Murzuk basin in the southwest of the country

(1) Further information in Appendix Ic of the consolidated Financial Statements

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

5.2. Downstream

Our activities

- **Refining:** obtaining fuels, combustible materials and other petroleum by-products.
- **Chemicals:** production and marketing of a wide range of products. Includes basic and derivative petrochemicals.
- **Trading:** transport and supply of crude oil, and products to the refining system, marketing of crude oil, products outside the proprietary system.
- **Mobility:** marketing and sales (at service stations and directly) of oil products and other products, and services via service stations and direct sales, offering a differentiated service to industries such as aviation, shipping, heavy industries and end consumers.
- **LPG:** production, distribution and sale of wholesale and retail liquefied petroleum gases.
- **Lubricants, asphalts and specialties:** production and sale of lubricants, bases for lubricants, bitumen for asphalts, extender oils, sulfur, paraffins and propellant gases.
- **Gas wholesaling, marketing and trading:** LNG/ natural gas supply and trading, including LNG regasification and marketing to wholesale customers in North America and Spain.
- **Electricity and gas:** low emission power generation and trading of electricity and gas in Spain, as well as development of renewable energy projects.

Main operating figures	2019	2018
Refining capacity (kbb/d)	1,013	1,013
Europe (includes stake in ASESAs)	896	896
Rest of the world	117	117
Conversion rate in Spain (%)	63	63
Conversion utilization Spanish refining (%)	103	107
Distillation utilization Spanish refining (%)	88	93
Crude oil processed (millions of t)	44	46,6
Europe	39.6	41.6
Rest of the world	4.4	5.0
Refining margin indicator (\$/b)	-	-
Spain	5.0	6.7
Peru	6.2	3.0
Number of service stations	4,944	4,849
Europe	4,138	4,121
Rest of the world	806	728
Sales of oil products (kt)	49,932	51,766
Europe	44,007	45,316
Rest of the world	5,925	6,450
Sales of petrochemical products (kt)	2,787	2,610
Europe	2,289	2,137
Rest of the world	498	473
LPG Sales (kt)	1,253	1,330
Europe	1,224	1,304
Rest of the world	29	26
Electricity generation capacity (MW)⁽¹⁾	2,952	2,952
Electricity generation (GWh)	6,308	N.A.

(1) In May 2019 a capacity review of the Oviedo-Navia plant (see section 5.2.5.4) certified a 5 MW reduction with respect to December 31, 2018. The loss was made up by the start of production at the floating wind power project off the coast of Portugal.

Our performance in 2019	2019	2018	Δ
<i>Millions of euros</i>			
Results from operations	1,928	2,143	(215)
Income tax	(446)	(526)	80
Investees and non-controlling interests	(26)	(34)	8
Adjusted net income⁽¹⁾	1,456	1,583	(127)
Inventory effect	(35)	(68)	(33)
Special items	(112)	25	(137)
Net income	1,309	1,540	(231)
Effective tax rate (%)	23	25	(2)
EBITDA	3,057	2,859	198
Investments	1,376	1,831	(455)

(1) Detail by geographical area:

Geographical area	2019	2018	Δ
Europe	1,398	1,500	(102)
Rest of the world	58	83	(25)
Adjusted net income	1,456	1,583	(127)

Sustainability performance	2019	2018
No. employees	19,258	18,851
% women	36.9	35.8
% women in leadership positions	27.5	26.1

Period highlights

The year 2019 stands out for the weakening of margins in the industrial businesses, and for the adaptation of our products to new specifications (in Refining to low-sulfur marine fuel - IMO) and certifications (Chemicals) to maximize the production of products with lower carbon intensity, improve their differentiation and focus on the Circular Economy. Also on account of the increase in Trading activity (chartered vessels and time charter travel) and in Gas Wholesale and Trading (new long-term purchase agreements and expansion in North America).

In the commercial businesses, the strategy as a multi-energy supplier (rapidly growing in electricity and gas) was further developed, focusing on the customer and the commitment to digitalization (Waylet and Pidetubombona) and electric mobility. The international expansion continues (in Mexico - Mobility; France - LPG; and South East Asia - Lubricants), while renewable electricity generation projects in Spain are also on the rise.

Refining: High levels of use and new bios in fuel formulation

- Utilization levels were maintained and shutdowns were conducted at the refineries in A Coruña, Bilbao, Cartagena and Puertollano.
- At the La Pampilla refinery, the Monoboaya T4 terminal started operations.
- Advanced bios have begun to be used in the formulation of fuels.
- Production of marine fuel (in Spain and Peru) in compliance with the new specifications.

Chemicals: New products and certifications

- Membership of the "Circular Plastics Alliance" (CPA)
- First polyolefin producer to obtain Food Safety System Certification under the FSSC 22000 standard at all its sites.

- Award to the "Best Low Density Polyethylene Producer in Europe".
- Marketing of the first grade of polyethylene with 50% post-consumer plastic waste.
- Market launch of the first certified circular polyolefins.
- New extended range of polyolefins for the healthcare industry.

Trading: Seizing opportunities

- Seizing opportunities in highly-volatile markets over the course of the year (Fleet, LPG, fuel oils).
- Launch of marine oil fuel with a low sulfur content.

Mobility: Electric mobility and digitalization.

- The Waylet payment app exceeded 1.4 million registered users.
- The first two ultra-fast charging points for electric vehicles on the Iberian Peninsula was inaugurated: one of them is the most powerful facility in Europe.
- New alliance with Conforauto workshops to facilitate the adaptation of gasoline vehicles to LPG.

Gas wholesaling and trading: Increased activity

- New long-term LNG purchase contracts with producers in the US and with gas distributors.
- Expansion in natural gas trading in North America, increasing traded volume.

LPG: International expansion and digitalization

- Launch of propane gas in France.
- New "Pidetubombona" application that markets our products.

Lubricants, asphalts and specialties: International expansion

- We acquired 40% of the United Oil Company, which gives us a third production hub in South East Asia.

+1 million
customers
in electricity
and gas

Petroleum product sales	Europe		Rest of the world		Total	
	2019	2018	2019	2018	2019	2018
<i>Thousand tons</i>						
Own marketing	21,368	21,754	3,176	2,681	24,544	24,435
Light products	17,792	17,978	2,997	2,473	20,789	20,451
Other products	3,576	3,776	179	208	3,755	3,984
Other sales ⁽¹⁾	8,864	9,506	1,363	1,358	10,227	10,864
Light products	8,712	9,337	1,016	995	9,728	10,332
Other products	152	169	347	363	499	532
Exports ⁽²⁾	13,775	14,056	1,386	2,411	15,161	16,467
Light products	5,633	5,903	241	440	5,874	6,343
Other products	8,142	8,153	1,145	1,971	9,287	10,124
Total sales	44,007	45,316	5,925	6,450	49,932	51,766

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

(2) From country of origin.

1.4M
Waylet users

USD 5.0 /bbl
refining margin
index in Spain

Electricity and gas: Growth and new renewable projects

- The number of customers has exceeded one million (31% more than at the beginning of the marketing activity).
- New deal with El Corte Inglés for electricity and gas subscriptions at 47 of its centers.
- Start of production of a floating wind farm (25 MW of installed capacity) in Portugal.
- Acquisition of several renewable electricity generation projects in Spain (capacity of 921 MW).

5.2.1. Refining

Assets

The Repsol Group owns and operates 6 refineries, 5 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) and one in Peru, in which Repsol is the operator with a 92.42% stake, installed capacity amounts to 117 thousand barrels of oil per day.

	Primary distillation (Thousands of 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	-
Total Repsol (Spain)	896	63	265
La Pampilla (Peru)	117	24	-
TOTAL	1,013	59	265

(1) Includes 50% of the capacity of Asfaltos Españoles S.A. (ASESA), a company 50% owned by Repsol and CEPESA.

(2) Ratio of equivalent Fluidized Bed Catalytic Cracking ("FCC") capacity to primary distillation capacity.

Performance

The refining margin index in Spain in 2019 stood at \$5.0 per barrel, lower than in 2018 (\$6.7 per barrel). For Peru, the annual refining margin index stood at USD 6.2 per barrel, compared to USD 3.0 per barrel in 2018.

In 2019, volatility drove international refining margins. The increase in global demand was worse than expected due to the slowdown in the economy and trade relations between the United States and China. On the supply side, a large number of new projects were launched (especially in Asia), which was partially offset by an increase in maintenance shutdowns to maximize operation and profitability in the face of the new regulatory scenario regarding IMO specifications for marine fuel. This balance, together with additional

disruptions, such as the attacks on Saudi Arabia, the contamination of Ural oil and the closure of the Philadelphia refinery, led to sharp variations in the margin throughout the year. In Peru, the indicator was impacted by price mechanisms in the country.

In this context, the Group's refineries in Spain processed 39.6 million tons of crude oil, 5% less than in 2018, and their average use of distillation was 88% in Spain compared with 93% the previous year, thus maintaining high utilization levels.

In Peru, the level of use was lower than in 2018, rising from 81.7% to 74.8% in 2019.

In 2019, shutdowns were conducted at the refineries in A Coruña, Bilbao, Cartagena and Puertollano:

- In A Coruña, multiple investments were made in technological innovation and safety, aimed at improving the integrity, energy efficiency and operational effectiveness of the facilities. The coke unit concentrated most of the actions.
- The Bilbao Refinery conducted a conversion shutdown dedicated to the maintenance and updating of production facilities, a highlight being the environmental improvements implemented in the Fluid Catalytic Cracking (FCC) unit, resulting in reduced particulate emissions. In addition, a shutdown was conducted to improve the efficiency of the units, such as Refinery 1, for investments in technology and improving efficiency, a highlight being the installation of an air pre-heater in the crude oil furnace to improve energy efficiency and reduce CO₂.
- In Cartagena, fuel and HDT shutdowns were carried out, with investments aimed at improving efficiency and reliability.
- In Puertollano, the Distillation area was shut down to improve energy efficiency, reduce emissions, and make the facilities more reliable and competitive. A standout was the investment in a new crude oil preheating system in the furnace of the distillation unit.

Additionally, in 2019, the following initiatives are to be highlighted:

- We achieved record biofuel use (1.5 million m³) and started to use advanced commercial biofuels made from industrial and domestic waste. This line of work mitigated atmospheric emissions by 2.8 Mt of CO₂. Use of advanced biofuels may bring emissions savings of up to 90% compared to other automotive fuels.
- Start-up of the Monoboya T4 terminal at the La Pampilla refinery has begun, which will reduce costs due to inclement maritime weather.

39.6 Mt
crude oil
processed
in 2019 at
refineries in
Spain

- At the Group's refineries (Spain and Peru), 200,000 tons of the new marine fuel were produced with a reduced sulfur content (0.5%), in accordance with the new specification (IMO) which is compulsory from January 1, 2020.

200 k/ton
output of new low-sulfur marine fuel

(Thousand tons)

Processed raw material	2019	2018
Crude oil	43,978	46,565
Other refinery intake	8,736	8,292
Total	52,714	54,857

Sustainability performance	2019	2018
Oil spills reaching the environment > 1 bbl (t)	3.24	56.84
O ₂ e emissions (Mt) (Scope 1 + 2)	8.72	8.99
TRIR	1.90	1.95
PSIR	0.45	0.77
Voluntary social investment (€ thousand)	1,636	2,433

activities in the case of the Spanish complexes. Repsol also has a number of subsidiaries and affiliated companies, through which it produces polypropylene compounds, synthetic rubber and chemical specialties. In particular, these chemical specialties are produced through Dynasol, a 50% partnership with the Mexican KUO group, with plants in Spain, Mexico and China, the latter of which work with local partners.

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

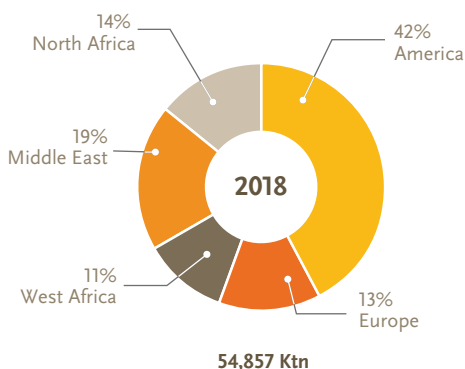
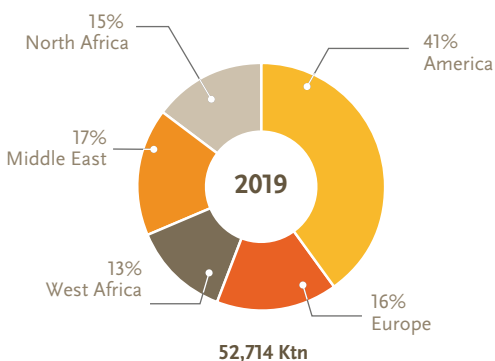
(1) Includes ethylene vinyl acetate (EVA) and ethylene butyl acrylate (EBA) copolymers.

5.2.2. Chemicals

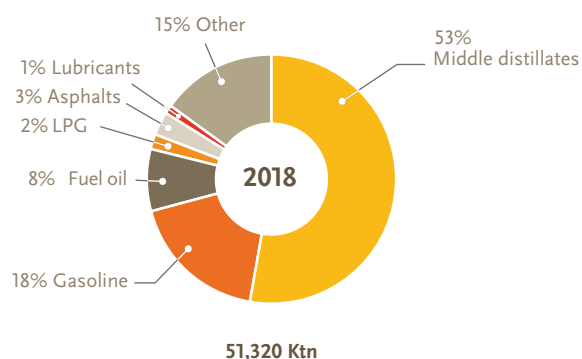
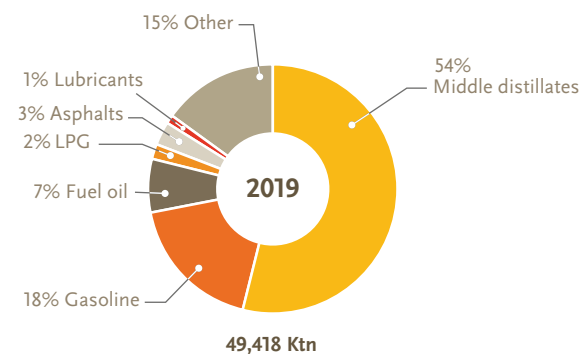
Assets

The production of Repsol's Chemicals business is concentrated in three petrochemical complexes, located in Spain (Puertollano, Tarragona) and Portugal (Sines), in which there is a high level of integration between base chemicals and derived chemicals, as well as with the Group's refining

Source of processed crude oil



Refining production



2.8 Mt CO₂
emissions avoided using advanced biofuels

Chemicals

adhere
to Circular
Plastics
Alliance

Performance

Throughout 2019, the Chemicals business has been affected by an international environment that shows weakening compared to the historic highs of the period 2015-2017, both in terms of demand and margins. This year has also been affected by the planned shutdown of the Tarragona complex.

In 2019, the volume of sales to third parties came to 2.8 million tons, exceeding volume in 2018 despite the multiyear stoppage of the Tarragona complex referred to earlier.

Thousand tons

Sales by product	2019	2018
Basic petrochemicals	829	808
Derivative petrochemicals	1,958	1,802
Total	2,787	2,610
Sales by market	2019	2018
Europe	2,289	2,137
Rest of the world	498	473
Total	2,787	2,610

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.

In 2019, the following initiatives are worth note:

- Adherence to the "Circular Plastics Alliance" (CPA), an initiative launched by the European Commission that aims to increase the volume of plastic recycled in the EU market.
- Marketing of the first grade of polyethylene made from 50% post-consumer plastic waste, for the production of shrink film for packaging. This is one of the first developments by the Reciclex project (to boost the circular economy through the mechanical recycling of polyolefin waste without compromising the technical requirements of the applications).
- Obtaining the ISCC PLUS certification for the first tons of circular polyethylene and polypropylene produced by means of conventional raw material and chemical recycled oil from plastic waste not suitable for mechanical recycling.
- Obtained Food Safety System Certification (FSSC 22000) for the polyolefin centers in Puertollano and Sines.
- Presentation of the expanded range of polyolefins for healthcare, incorporating new grades of low density polyethylene.
- Recognition with the award for "Best Low Density Polyethylene Producer in Europe".

1,635

vessels
chartered
in 2019

Sustainability performance	2019	2018
Hydrocarbon spills (>1bbl) reaching the environment (t)	-	-
O _{2e} emissions (Mt) (Scope 1 + 2)	3.36	3.10
TRIR	1.35	1.65
PSIR	0.14	0.50
Voluntary social investment (€ thousand)	265	456

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 associated 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.

In 2019, a total of 1,635 vessels were chartered (1,489 in 2018) and 374 voyages were made through the fleet in Time Charter (333 in 2018).

Sustainability performance

With regard to safety and the environment, in 2019 the vetting area consolidated the review of the safety and environmental protection management systems of the Technical Operators of time charter vessels using the reference to the OCIMF-TMSA.

In addition, the following initiatives have been carried out:

- Member of the ISCC (International Sustainability and Carbon Certification) Association, which promotes the responsible development of society through the production of sustainable biomass in the context of environmentally appropriate, climate-friendly, socially acceptable, economically viable and traceable use. Repsol also extended the ISCC EU certification for the Singapore office.
- Registration as an agent, dealer and transporter of both hazardous and non-hazardous waste in compliance with Law 22/2011. In addition, Repsol aims to obtain registration in the SANDACH register for the marketing of animal by-products unsuitable for consumption for the manufacture of second-generation biofuels and to obtain ISCC PLUS certification, which will enable the Company to enter other sectors of the circular economy, such as petrochemicals, bio-plastics and sustainable packaging.

5.2.4. Gas Wholesaling and Trading

Assets and operations

On 31 December 2019, 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 the North East United States, where natural gas supply is usually restricted, cold weather scenarios can cause significant spikes in the area's reference prices. The company's activity in this area focuses on optimizing the margin from marketing of regasified LNG from Canaport and concentrating gas sales on days with the highest prices in the winter (peaks).

Additionally, Repsol markets and trades natural gas in North America from its own production in the United States (Marcellus) and Canada (Alberta), as well as production acquired from third parties.

Performance

	2019	2018
Regasified LNG (TBtu) at Canaport (100%)	24	16
Gas marketed in North America (TBtu)	608	520

In 2019, commercial activity in the North East United States was conducted in a context characterized by low price volatility during the winter and moderate temperatures. The realization margin was protected by the use of hedges. In the rest of North America, natural gas sales benefited from the high volatility on the West Coast during the first quarter of the year, and from low temperatures in the North Central United States. The marketing and trading of natural gas in the Gulf region of the United States from our proprietary facility in Marcellus continues to develop strongly.

Furthermore, Gas Wholesaling and Trading covers the gas supply requirements of the Repsol Group's electricity generation and industrial facilities, natural gas marketing in Spain and LNG trading. Outside North America, therefore, we marketed 206 TBtu. The gas volume managed in Spain accounted for 13% of the total Spanish market by volume. To securely underpin this supply, Repsol has in place medium and long-term gas/LNG contracts that are combined and optimized with LNG and Gas trading transactions in the Spanish system (PVB hub).


The main milestones for 2019 are as follows:

North America:

- A long-term gas sales contract was signed with a gas distribution company in the North East United States. This is in addition to the two long-term contracts signed in 2018.
- Expansion in natural gas trading in North America, increasing the volume marketed in the different regions and with a significant growth in economic contribution margin with respect to 2018.

Spain:

- Signing of the first contract in Spain for the supply of liquefied gas as fuel for the ships of the Brittany Ferries line, which operate on the route between the United Kingdom and Spain. The supply will be implemented at the ports of Bilbao and Santander from 2022 through fixed storage facilities.
- Several small-scale LNG supply operations have been carried out through the use of cisterns (at both LNG facilities and ships).

 **17%**
gas volume sold in North America

5.2.5. Energy sales

5.2.5.1. Mobility

Assets

At December 31, 2019, Repsol had 4,944 service stations, with the following geographical distribution:

Country	No. of points of sale
Spain	3,354
Peru	572
Portugal	486
Italy	298
Mexico	234
Total	4,944

Performance

Repsol's challenge is to continue leading the sector in Spain, offering the best service to its customers and achieving the goals set out in the Strategic Plan. The soundness of the business model was demonstrated during the year in the course of operations. Highlights included:

- 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 was sustained. Premium products and non-oil products and services all performed strongly.

 **4,944**
points of sale worldwide in 5 countries

234

service stations in Mexico

- In Direct Sales, 2019 was a year of tough competition in the market that resulted in a drop in volume compared to 2018.
- 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 Stations and Direct Sales businesses continued to perform well despite a harsher competitive environment.

The milestones of 2019 were:

- The Waylet payment app topped 1.4 million registered users, who can use the app to make payment at more than 3,500 service stations in the Repsol network, more than 4,600 affiliated retail outlets and 250 El Corte Inglés establishments thanks to a deal that reinforces the strategic alliance between the two groups.
- The expansion project for Direct Sales and International Aviation in France gathered momentum.
- The expansion plan in Mexico ended the year with 234 service stations operating out of a total of 341 flag contracts.
- We unveiled the first ultra-fast charging point for electric vehicles on the Iberian Peninsula, with a maximum power of 700 kW. The service station, located in Lopidana, Álava, allows electric vehicles to be recharged within five to ten minutes. In October the service station in Ugaldebieta, Biscay, was added to the project; it is now the most powerful facility of its kind in Europe, allowing a vehicle to be recharged with up to 400 kW. This means that Repsol's charging network has more than 230 publicly accessible charging points.
- Repsol and the Confortauto workshop network (110 facilities throughout Spain) have signed an alliance to facilitate the adaptation of gasoline vehicles to LPG. The DGT environmental label thus obtained allows drivers access to traffic-restricted areas in large capitals.

Sustainability performance	2019	2018
Hydrocarbon spills (>1bbl) reaching the environment (t)	63.73	41.13
O ₂ e emissions (Mt) (Scope 1 + 2)	0.04	0.04
TRIR	0.66	0.77
% of contracts with human rights, environmental and anti-corruption clauses	100	100

+230

public charging points in Spain

5.2.5.2. Liquefied Petroleum Gas (LPG)

Repsol is one of the leading LPG¹ retail distribution companies, being top in Spain and third-largest in Portugal.

Thousand tons

LPG sales volume by geographical area	2019	2018
Europe	1,224	1,304
Spain	1,126	1,154
Portugal	98	150
France	0	0
Latin America	29	26
Peru (AutoGas)	29	26
TOTAL	1,253	1,330

In Spain, Repsol distributes bottled, bulk, and AutoGas networks, with over 4 million active customers. In Portugal, Repsol distributes LPG bottled, bulk and in AutoGas to end customers, while also supplying other operators.

Thousand tons

Sales volume of LPG by product	2019	2018
Bottled	650	678
Bulk, piped and others ⁽¹⁾	603	652
TOTAL	1,253	1,330

(1) Includes AutoGas sales, LPG operators and other.

- As part of the digitalization of processes and the improvement of the customer experience, a new app, Pidetubombona, was rolled out, offering the products to customers in a user-friendly and dynamic way.
- Implementation of the new RFID (Radio Frequency Identification) system in gas transport trucks, further enhancing safety and speeding up the loading process.
- Propane gas marketing in France began, leveraging the logistical proximity of our facilities.

¹ In Spain, prices continue to be regulated for piped LPG and gas cylinders containing 8 kg to 20 kg and a tare of 9 kg, excluding hybrid cylinders for use of LPG as automotive fuel. For further information on the regulatory framework in Spain, see Appendix IV to the 2019 consolidated Financial Statements.

Sustainability performance	2019	2018
Hydrocarbon spills (>1bbl) reaching the environment (t)	-	-
O ₂ e emissions (Mt) (Scope 1 + 2)	0.01	0.01
TRIR	2.43	1.83
PSIR	1.64	-
% of contracts with human rights, environmental and anti-corruption clauses	100	100

5.2.5.3. Lubricants, asphalts and specialized products

Production is mainly concentrated in Spain, although in the case of *lubricants* and following the acquisition in 2019 of 40% of United Oil and in 2018 of 40% of Bardahl, lubricants are produced in Indonesia, Singapore and Mexico. In strategic countries there are deals in place with domestic producers to manufacture some product ranges locally.

As to business **performance** in 2019, compared to 2018 it should be noted that contribution margins improved in all product lines: Lubricants Spain (+14%), International Lubricants (+76%), Asphalts (+139%) and Specialties (+10%).

We invested to improve the capacity of the Puertollano lubricants plant, achieving output capacity of 145,000 t in 2019 (125,000 t in 2018).

Marketing and distribution are strongly international in scope, with sales in more than 93 countries throughout the world. Sales by geographical destination are presented below.

The main milestones in 2019 were as follows:

- In November, we completed the **acquisition of 40% of United Oil**. This transaction allows for the production and marketing of lubricants in Indonesia, Singapore, Malaysia and Vietnam and will boost our position in the Southeast Asian lubricants market, one of the largest and fastest-growing worldwide. United Oil Company operates one lubricant plant in Singapore and another in Indonesia, with a total capacity of 140,000 tons. The deal gives us a third production hub alongside those in Spain (Puertollano) and Mexico.
- A **range of lubricants for hybrid vehicles**, Hybrid 5W-30 and OW-20, designed by Repsol's TechLab research team to respond to hybrid vehicles with petrol and electric motors, both plug-in (PHEV) and non-plug-in (HEV), was launched in October. These are fully synthetic, very stable, degradation-resistant low viscosity oils, designed to offer high engine protection and fuel savings and therefore contribute to the reduction of CO₂ emissions.

 **36%**
increase in lubricant sales on the international market with respect to 2018

Sustainability performance	2019	2018
Hydrocarbon spills (>1bbl) reaching the environment (t)	-	-
CO ₂ e emissions (Mt) (Scope 1 + 2)	0.01	0.01
TRIR	0.44	0.83
% of contracts with human rights, environmental and anti-corruption clauses	100	100

Thousand tons

Region	Lubricants	Asphalts	Specialized products ⁽¹⁾	Total 2019	Total 2018
Spain	72	495	328	985	857
Europe	32	248	154	434	489
Africa	2	0	244	246	277
Americas	54	2	14	70	34
Asia and Oceania	40	21	86	147	151
Sales to Traders	-	76	0	76	102
Total	200	842	826	1,868	1,910

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

international sales in
93 countries

2,952 MW
total capacity
in operation

5.2.5.4. Electricity and gas

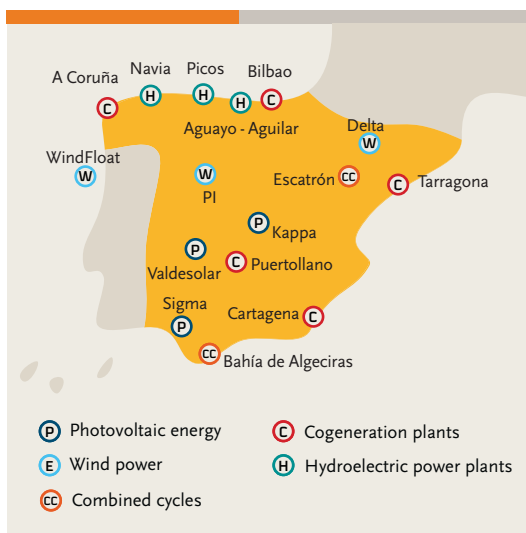
In 2018, Repsol reinforced its position as a multi-energy supplier by starting its electricity generation and gas and electricity trading activities with the acquisition of the unregulated low-emission electricity generation businesses and the gas and electricity trading company from Viesgo¹.

Electricity generation

In 2019, following the new strategic approach (see section 2.4), the objective of the Strategic Plan 18-20 of low carbon electricity generation capacity in 2025 was increased by 3,000 MW to 7,500 MW.² In addition:

- Four renewable electricity generation projects were acquired in Spain, with a total capacity of 921 MW. The projects are at different stages of execution and consist of a 335 MW wind farm located between the provinces of Zaragoza and Teruel; another located between Palencia and Valladolid, with a total installed capacity of 255 MW, a solar project in Cadiz of 204 MW and another in Ciudad Real of 126.6 MW. The implementation of these projects will take place over the next four years.
- The floating wind farm off the coast of Portugal, 20 kilometers from Viana do Castelo, started production, with an installed capacity of 5 MW (considering Repsol's participation in the project).

Repsol's electricity generation assets and projects



+2%
retail market share
for electricity
and gas in Spain

6,308 GWh
electricity
output in 2019

Repsol is a major player in the Spanish electricity **generation market**, with a total installed capacity in operation of 2,952 MW and capacity under development of 1,185 MW as of December 31, 2019.

	Installed capacity (MW)
Hydroelectric plants ⁽¹⁾	
Oviedo – Navia	195
Picos de Europa – Picos	114
Aguilar – Aguayo Aguilar	388
Total	697
Combined cycle plants	
Zaragoza – Escatrón	819
Algeciras – Bahía de Algeciras	831
Total	1,650
Cogeneration plants ⁽²⁾	
Renewable (offshore wind)	5
Total operating installed capacity	2,952
Wind projects	590
Photovoltaic solar projects	595
Total installed capacity under development	1,185

(1) Hydroelectric plants are a renewable and efficient source of electricity and serve to store usable electricity at times when there is a shortfall 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.

In 2019, electricity production excluding cogeneration plants amounted to 6,308 GWh, with a notable contribution from combined cycle plants that increased their output as a result of better market conditions.

Electricity and gas marketing

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 sells electricity and gas in the retail sector with a portfolio of more than 1 million customers (share of more than 2% of the market) distributed throughout Spain. The objective is to have 2.5 million customers by 2025 (market share of 5%).

Sustainability performance	2019	2018
CO ₂ e emissions (Mt) (Scope 1 + 2) ⁽¹⁾	2.1	0.2
TRIR	-	0.5
Employees	454	386
Women	146	114
Men	308	172

(1) The difference with the year 2018 is due to the fact that during 2019 the cycles have increased their hours of operation, which has contributed to the displacement of coal in the Spanish energy mix.

1. For further information, see Note 5 to the 2019 consolidated Financial Statements.

2. In December, the Board of Directors approved an investment in two photovoltaic projects and one wind power project for a total of 1,600 MW.

5.3. Corporate and other

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

Our financial performance

<i>Millions of euros</i>	2019	2018	Δ
Corporate division and adjustments	(236)	(261)	25
Financial result	(390)	(462)	72
Income tax	167	168	(1)
Profit/(loss) from investees and non-controlling interests	(5)	(1)	(4)
Adjusted net income	(464)	(556)	92
Special items	(66)	358	424
Net income	(530)	(198)	(332)
Effective tax rate (%)	27	23	4
EBITDA	(151)	(147)	(4)
Net investments	56	70	14

Sustainability performance

	2019	2018
People:		
No. employees	2,426	2,489
% women	53.8	53.6
% women in leadership positions	42.6	42.1

6. Sustainability

Sustainability Model

Repsol's Sustainability Policy reflects the company's commitment to best practices in sustainability and defines guidelines for managing and controlling impacts on society, the environment and the safety of operations throughout the value chain. This policy is implemented through a range of internal rules and procedures organized around Repsol's Sustainability Model. This model is structured in 6 axes that relate to material issues by reason of the type of company that Repsol is, as well as stakeholders' expectations, and the leading international standards.

This framework is specified annually in the Global and Local Sustainability Plans. In 2019, Repsol defined a new Global Sustainability Plan (GSP) that includes the key targets of the Company's strategic plan in the realm of sustainability. The 2019 Global Sustainability Plan cuts across domains, setting objectives in the supply chain, and has a longer time horizon, setting targets up to 2025. The Plan establishes 31 medium-term targets and 35 annual lines of action, articulated around the axes of the Sustainability Model and linked to the United Nations 2030 Agenda.

Based on the Global Sustainability Plan, Local Plans are rolled out in countries and main industrial facilities, incorporating commitments related to the local context and thus contributing to all the Sustainable Development Goals (SDGs). In 2019, Repsol had in place 22 Local Plans, with Algeria, the United Kingdom and Canada having joined in this year.

Repsol and the Sustainable Development Goals

Repsol supports the United Nations 2030 Sustainable Development Agenda and contributes to its 17 Sustainable Development Goals (SDGs). In 2019, an SDG Promotion Plan was launched to integrate commitment, dissemination and action in favor of this global agenda into the Company's culture.

As a starting point, the Company made known among its employees, with the involvement of the Executive Committee, the 2030 Agenda and the roadmap that Repsol has laid down to make a contribution.

In addition, the Company identified a range of indicators to measure Repsol's contribution to those SDGs to which, due to the features of our activity, we can best support: SDG 7, SDG 8 and SDG 13, for our role in access to energy, the contribution to socio-economic development and the fight against climate change; SDG 6, SDG 9 and SDG 12, highlighting innovation, sustainable management and efficient use of resources in operations; and SDG 17, relating to alliances with other actors and as active members of industry associations such as IPIECA, IOGP, CONCAWE, FUELS EUROPE, CEFIC, etc.

For further information on the Company's contribution to the SDGs and the 2030 Agenda, see www.repsol.com.

We have a firm and continuous commitment to Sustainability as a key element for value creation, today and in the future.

For further information about Sustainability, see Appendices III and IV to this report.

Our Sustainability plans [global, by country and by industrial facilities] are available at www.repsol.com, along with information for socially responsible investors, information on green bonds, and further information about each of the pillars of the Sustainability Model.

Repsol and the Sustainable Development Goals

€2,500 M investment in low carbon [2018-2020 Plan] | **2,952 MW** total low-emissions installed capacity

€13,052 M paid in taxes

4,888 suppliers, of which **74% are local**

2,605 social impact analyses on **1,248 suppliers**

€20,5 M voluntary social investment in **681 projects**

+25,000 employees

633 differently-abled | **2,790** telecommuters

37.4% women | **89** nationalities

DECENT WORK AND ECONOMIC GROWTH

INDUSTRY, INNOVATION AND INFRASTRUCTURE

68 R&D projects | **6** new patents

+190 digital initiatives | **80 M€** R&D investment

CLIMATE ACTION

Reduction of **171 kt** in CO₂e in 2019

0 net emissions by 2050

↑ 1,000,000 electricity customers

AFFORDABLE AND CLEAN ENERGY



CLEAN WATER AND SANITATION

↑ 75% increase in water reuse vs. 2015 | **22%** water reused of total water consumed⁽¹⁾

+200 initiatives included in the circular economy catalog

Reused waste: **3%** hazardous | **4%** non-hazardous

Recycled waste: **5%** hazardous | **10%** non-hazardous

Recovered waste: **31%** hazardous | **5%** non-hazardous

RESPONSIBLE CONSUMPTION AND PRODUCTION

(1) Water consumed is counted as water withdrawn, including water reused, excluding the Electricity and Gas business, since its usage and consumption are classified differently.

Governance Model

The Board of Directors approves, after supervision by the Sustainability Committee, the Company's strategy and policy on sustainability proposed by the Company's senior management and the Sustainability Committee itself which, among other functions, oversees and guides the policy, objectives and guidelines in the environmental, social and governance domains. In 2019, this Committee held 4 meetings and addressed the following matters:

- Oversight of non-financial information: 2018 Integrated Management Report
- Oversight of the Company's Sustainability strategy: proposal of 2019 objectives and monitoring, evaluation and close-out of 2018 objectives
- Global Sustainability Plan
- Sustainability risk map: emerging and climate change risks
- Analysis and regular monitoring of performance in:
 - Accident rate, KPI scorecard and safety and environmental strategy.
 - Community relations and human rights
 - Circular economy
- ESG (Environmental, Social and Governance) analyst and investor reports.
- Analysis and monitoring of initiatives relating to the Climate Disclosure Project (CDP) and the Task Force on Climate-related Financial Disclosures (TCFD).
- Energy transition and climate change: Sustainability Day, OGCI, targets monitoring, benchmark scenarios and trends
- Safety culture at Repsol
- Materiality analysis 2019.
- Crisis and emergency management procedure.
- Sustainable Development Goals (SDGs) promotion Plan.

The Company has an ongoing dialogue on environmental, social and governance (ESG) matters with stakeholders (including investors, associations, financial institution representatives, analysts and proxy advisors) to learn first-hand their opinion on these matters and explain the Company's practices. The management team also conducts specific ESG roadshows, some of which are led by the CEO himself.

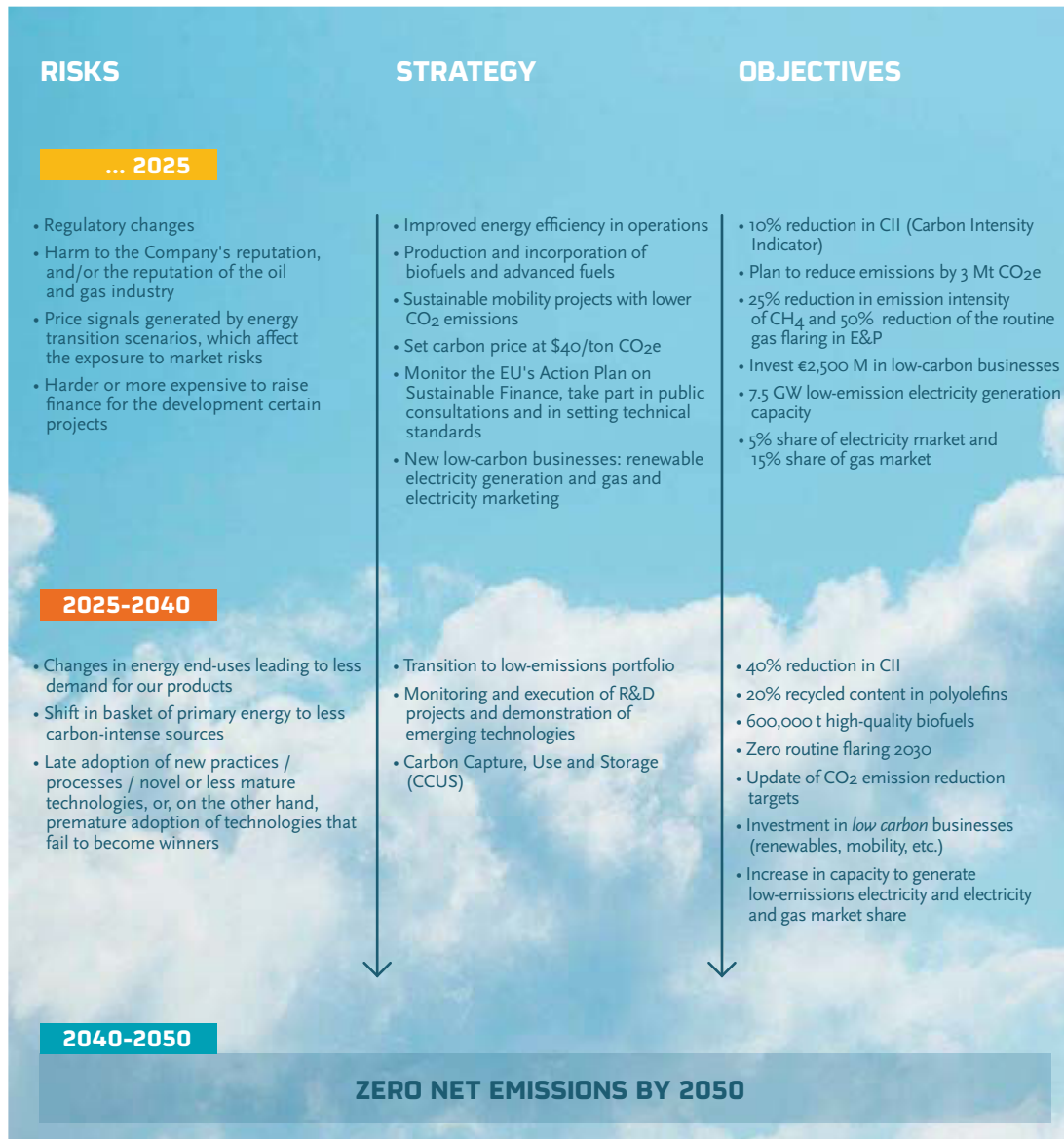
The conclusions, messages and feedback obtained through the roadshows and other events such as Sustainability Day are presented to the Board of Directors on a regular basis.

As to ethics and transparency, the Audit and Control Committee and the Ethics and Compliance Committee are responsible for ensuring compliance with the Code of Ethics and Conduct and for reviewing the related projects and their modifications, ensuring that they comply with regulatory requirements and are appropriate for the Company.

Further, senior management, defines the Company's objectives, action plans and practices with respect to sustainability. In order to ensure deployment, the Sustainability objectives entailed, in 2019, up to 25% of the CEO's annual variable remuneration and up to 25% of the 2019-2022 Long-Term Incentive Program applicable to all management personnel, as well as other employees, including the CEO.

6.1. Climate change¹²³

Climate change roadmap



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

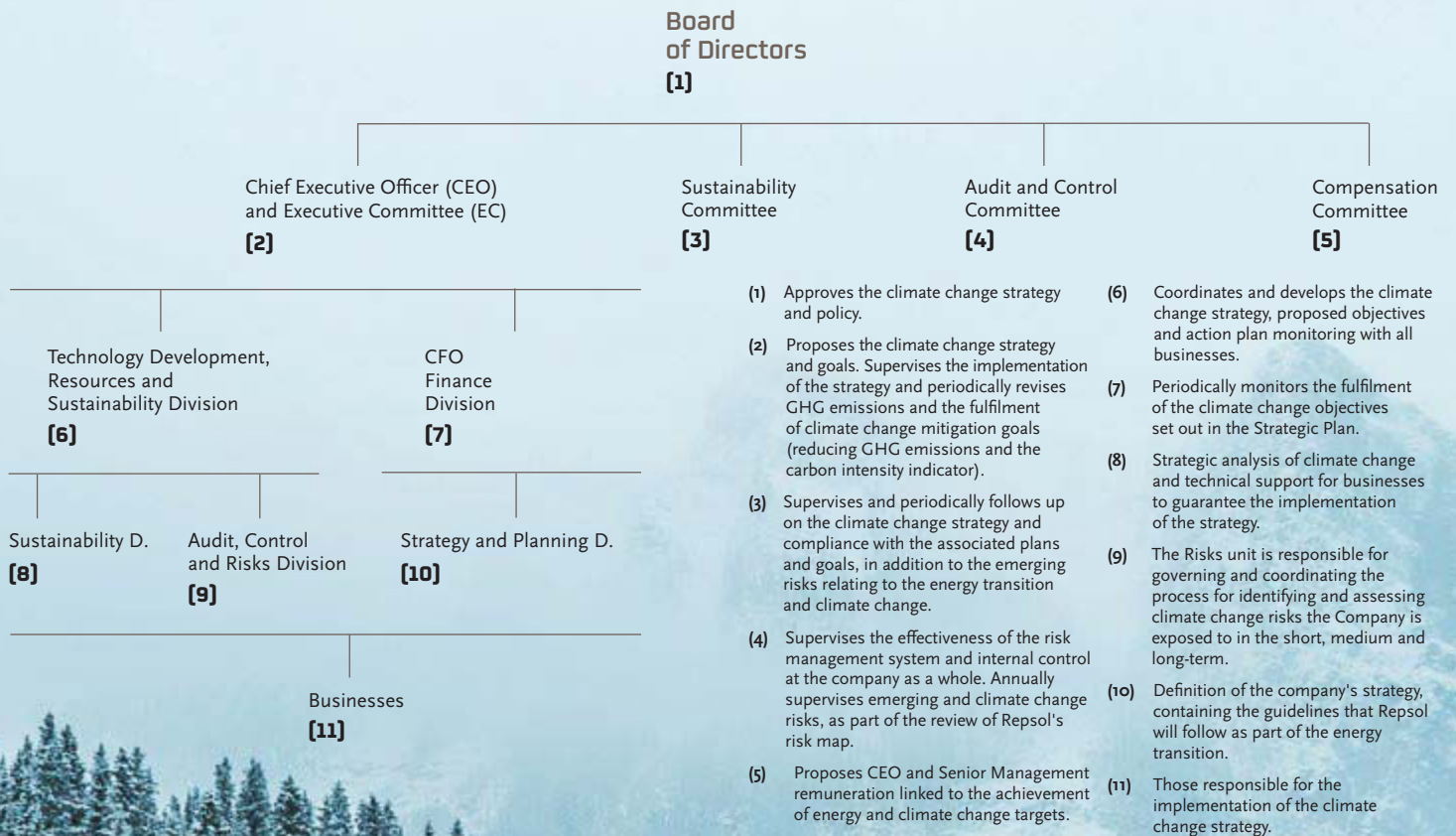


1. The figures and indicators in this section have been calculated in accordance with corporate standards that set out the criteria and common methodology to be applied in Safety and Environment (S&E). As a general rule, safety and environmental information includes 100% of the data from companies in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

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

3. Each year, Repsol publishes additional climate change information in the *Climate Disclosure Project* survey (CDP, available at www.cdp.net).

Climate change governance



Governance

Strategic decisions concerning climate change and the corresponding lines of action are established at the highest executive level, being the Executive Committee (EC) directly responsible for 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).

The Executive Committee and the Sustainability Committee regularly review information on the implementation of the climate change strategy and GHG emissions.

In addition, every quarter the Board of Directors monitors compliance with the objectives included in the Strategic Plan, analyzing, among other matters, the indicators related to Sustainability and the energy transition (reduction of emissions, frequency and occupational and process safety rates, performance of the electricity and gas business, wholesale gas sales, generation capacity, investment in low-carbon generation, etc.).

The Company's climate change targets have a direct impact on employees' variable remuneration:

- Annual sustainability objectives, which include actions related to the reduction of GHG emissions, have a weight of between 10% in the Corporate Areas and 20% in the Businesses.
- Additionally, Repsol has a long-term incentive for the period 2019-2022 linked with a weighting of 10% to compliance with the GHG emissions reduction plan. This bonus is available to the CEO, senior management and other employees.

Recently, Repsol announced that it will link 40% of the long-term variable remuneration of its executives and leaders, including the CEO and members of senior management, to targets that will enable the Company to comply with the Paris Agreement and, therefore, with gradual decarbonization, with an ambition of zero net emissions by 2050.

Climate change risks

The Group's risk policy, approved by the Board of Directors, establishes that **risk management** is embedded in business processes, and that risks are identified, assessed and mitigated in order to keep them at levels tolerated by the Company. The risks arising from climate change, both physical and so-called transitional, are managed in the same way as the other risks to which the Group is exposed, except for the fact that their emerging nature makes them the subject of more detailed examination in the long term. The Group's risk profile, both in the short and in the medium and long term, is available to the Group's executive and governing bodies for decision-making purposes. To do so, they have available the information regarding the risk profile and the statement of risk tolerance set out in the risk policy. 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 variables in the economic models on which key decision-making processes are based, such as the preparation of the annual budget and the preparation and regular updating of the strategic plan, are subject to risk analysis. Going beyond deterministic approaches, these analyses provide a probabilistic view of the relevant figures of the income statement, according to the values that the modeled variables are expected to take and considering correlations between them, within pre-established probability ranges.

Risks relating to the phenomenon of climate change are emerging risks, i.e. factors of growing uncertainty, in relation to others, in the medium and long term. Over the next five years, approximately 10% of the Group's risks analyzed are related to climate change to one extent or another.

To determine our exposure to these risks in the longer term, Repsol has developed its own analysis **methodology**, as there is no standard methodology available in the industry, adjusting the risk analysis approach in the short and medium term (typical 5-year horizon of a strategic planning cycle) to extend its scope to the long term (to 2025, 2030 and 2040). The main features are:

- Based on future scenarios for changes in the energy mix, taking as a yardstick the scenarios considered by the International Energy Agency (IEA). Probabilistic analysis of scenarios is carried out by a panel of the Company's experts in strategy, markets, technology and

sustainability. Some of these risks may have an adverse or positive impact depending on risk mitigation and climate scenario adaptation strategies, since they imply the emergence of business opportunities that can be put to good use.

- The model identifies the key emerging and climate change risks for the company on the 2025, 2030 and 2040 horizons. Following the sequential process of identification, prioritization and analysis, 19 emerging and climate change risks have been identified and classified according to their features. A taxonomy of sustainable development, socio-political, operational, reputational and technological risks has therefore been developed. Of these 19 risks, the 10 that concentrate most of the exposure are prioritized for subsequent analysis.
- The model quantifies the impact of these risks on the Company's performance in each of the scenarios over the pre-determined time horizon.

In the **short term**, the climate change **risks** that concentrate the greatest exposure are:

- 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.
- Harm to the Company's and/or industry's reputation caused by social disapproval, whether or not justified, of its performance in relation to sustainable development initiatives.
- Price signals generated by the energy transition scenarios, which modify the exposure to market risks such as the volatility of the price of crude oil, natural gas or other commodities such as greenhouse gas emission allowances.
- Greater difficulty or cost in raising funds to finance the development of certain projects, arising from the position that the financial sector or investors with exposure to the energy sector may adopt, either voluntarily or induced by the regulator.

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



<https://www.oilandgasclimateinitiative.com>

GSP
2020

Target:
Net Zero Emissions.

In the **medium** and **long term**, the main **risks** are:

- Changes in energy end-uses that lead to a reduction in demand for marketed products, either as a result of natural market dynamics or induced by regulation (e.g. electrification of the car fleet, user preference for innovative forms of mobility, etc.)
- Changes in the basket of primary energy sources toward others with less carbon intensity, entailing decreased use of fossil fuel sources.
- Late adoption of new or immature practices/processes/technologies for energy production (including renewable energies), distribution and storage, which finally prevail in the market, or, at the other extreme, premature adoption of technologies that ultimately fail to become "winners".

In other words, the forecast is that over the next ten years **regulatory changes** and **society's perception** of the industry will be the main factors of uncertainty. These two phenomena are catalysts of the **energy transition** process, and therefore will foreseeably bring about changes in the final uses of energy, in the primary energy mix and in the technologies that will make these changes possible in the future.

Repsol is therefore more exposed to transitional risks than to physical risks. However, the Company is taking steps to reduce exposure to both. Climate change can exacerbate adverse weather phenomena to which Repsol is exposed (hurricanes, floods, changes in rainfall or temperature, patterns, etc.), which can have an impact on its activities. As an example of physical risk, Repsol operates in areas that are affected by water stress, where the rainfall regime could affect the operation of our facilities. In these operations, Repsol implements plans for reducing water consumption and supporting water reuse.

Strategy

Repsol supports the Paris Agreement and works to play an active role in the solution to climate change. The Company's commitment to energy transition is in line with the objectives of the Paris Summit and the United Nations Sustainable Development Goals.

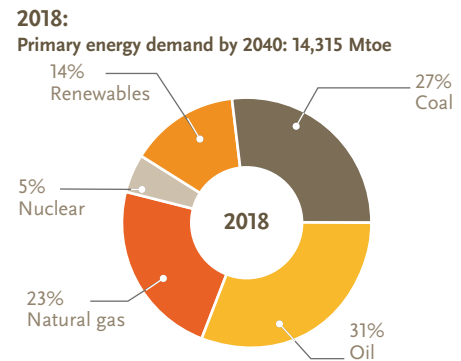
Repsol will orient its strategy to be a company with zero net emissions by 2050. This ambitious goal is intended to help limit global warming to below 2°C with respect to pre-industrial levels. To achieve this transition, a holistic approach is needed, involving analysis of future scenarios, identification of risks and opportunities associated with climate change, and development of a strategy aligned with the

transition to a low-carbon economy. This requires taking into account all available and emerging technologies, their costs and the degree of maturity, while maintaining technological neutrality.

Repsol sets down future climate scenarios to anticipate how the energy sector will adapt to sustainably provide the energy that society will need in the future. Medium- and long-term scenarios have been analyzed, assessing the impact on the Company's strategic lines and competitiveness. The International Energy Agency's (IEA) guidelines have been taken as a yardstick, establishing the roadmap towards the performance that businesses should achieve by 2030 and 2040.

Scenario analysis is integrated with the strategy development process, taking into account the energy mix, the average price trend of oil and gas and the demand for products, in order to define the portfolio of the various businesses:

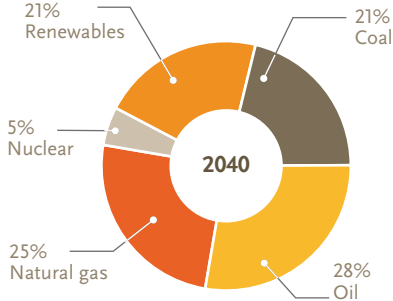
Energy mix



Energy mix

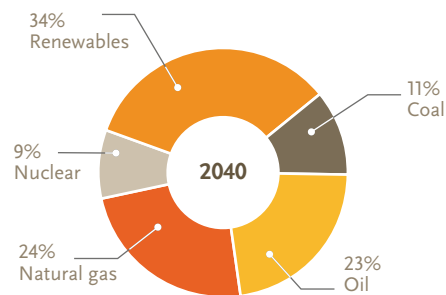
Stated Policies Scenario:

Primary energy demand by 2040: 17,724 Mtoe



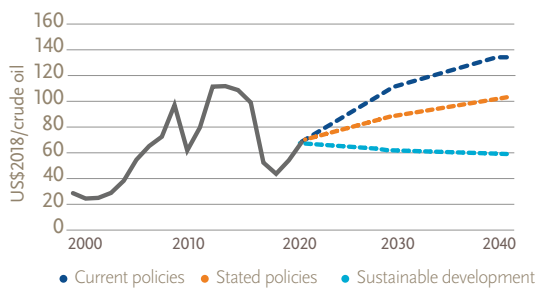
Sustainable Development Scenario:

Primary energy demand by 2040: 13,278 Mtoe



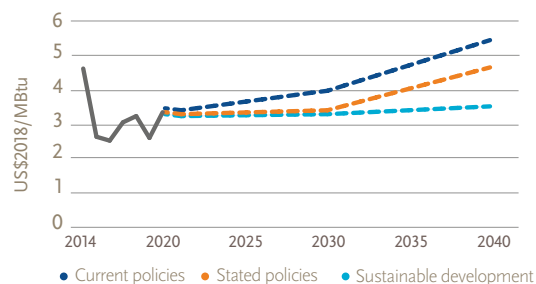
Source: IEA 2019 Energy World Outlook

Average crude oil price, by scenario



Source: IEA World Energy Outlook 2019

Average Henry Hub price, by scenario



Source: IEA World Energy Outlook 2019

The future scenarios foresee a significant substitution of coal by natural gas for electricity generation, as it is a fuel with lower CO₂ emissions per energy unit, as well as providing greater performance in electricity generation. Switching from coal to natural gas represents a great opportunity to achieve large-scale CO₂ reductions in a cost-efficient manner, i.e. at a lower cost to society, and is one of the most effective solutions for promoting a structured transition to a low-emission future. Repsol has an Upstream gas portfolio of around 62% production and 71% reserves.

For more information on the Group's vision for the energy sector in the short and long term, see section 7.1.

The Sustainable Development Scenario (SDS) will be the basis for the implementation of the Strategic Plan 2021-2025, which will be presented to the market and investors in the first half of 2020. For further information, see section 2.4 Strategy.

Based on the possible ways of achieving a low-emission future and scenario analysis, Repsol has defined several lines of action that are integrated into its strategy:

- Reducing the carbon intensity of traditional businesses.
 - a) E&P. Prioritizing gas production over oil production, prioritizing short-cycle projects, and calculating the profitability of assets at prices consistent with the SDS.
 - b) Refining. Sustain the cost-effectiveness of operations and reduce carbon intensity by improving energy efficiency, electrifying facilities and integrating renewable electricity and by producing biofuels and waste-to-fuels)
 - c) Chemicals. Development of new chemical applications, increasing the energy efficiency of operations and promoting circular economy projects.
- New low-carbon businesses. As a multi-energy company, integration of low carbon electricity generation (renewables) with a combined offer of increasingly decarbonized products and services (electricity, gas, distributed energy).
- The role of new and emerging technologies. Exploration and development of new "zero emission" or negative emission technological solutions such as Carbon Capture, Use and Storage (CCS and CCUS), e-fuels, hydrogen produced from solar energy, or natural climate solutions (CO₂ sinks).

Methane Guiding Principles

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

\$40/t CO₂

CO₂ internal price in 2025

Thus, in the **short to medium term** (2020-2025), aspects that are closely related to competitiveness, such as energy costs and CO₂, and the regulatory framework of the Company's activities are taken into account. Examples of this regulation are the EU-ETS, the Renewable Energy Directive (RED) and the Energy Efficiency Directive (EED) in Europe or the Canadian regulatory framework (Pan-Canadian Framework on Clean Growth and Climate Change). These laws are changing the use and consumption of energy, so new opportunities arise in the sector. These challenges are analyzed through the Integrated Risk Management System and are taken into account in the setting of the Company's strategy, resulting in ambitious business plans to meet these goals.

Operational efficiency is one of the cornerstones of the strategy (energy efficiency, methane management, reduction of routine flaring, etc.) to reduce Scope 1 and 2 emissions. With regard to improving Scope 3 emissions management, *biofuels*, *chemicals* and *natural gas production* are the most important levers.

Repsol has established emission reduction plans to reduce energy and carbon intensity through operational efficiency. These plans led to a reduction of 2 million tons in the period 2006-2019. In addition, the Company extended its 2014-2020 plan to a new 2018-2025 plan, including, among others, unit energy integration projects, process optimization and efficient operation of facilities. As part of this plan, reduction targets have been set down for methane emissions and gas flaring by 2025.

Repsol issued a 500 million euro green bond for refinancing in the period 2014-2016 and financing in the period 2017-2022 of energy efficiency projects in the facilities of the Refining and Chemicals businesses in Europe. Repsol strongly supports the use of financing as an instrument to promote sustainability and accelerate the energy transition. The Company is working on monitoring the EU Action Plan on Sustainable Finance so that it is inclusive with technological neutrality, progressive,

Low-emissions electricity production

<p>Hydro and combined cycle plants</p>  <p>Three hydropower plants in northern Spain with an installed capacity of 700 MW, and two combined cycle plants with combined capacity of 1,650 MW.</p>	<p>Solar photovoltaic plants</p>  <p>Valdesolar will be one of the largest solar plants in Spain. With a capacity of 264 MW, it will come online in 2020. We also acquired Sigma, a 204 MW solar project.</p>	<p>Wind power projects</p>  <p>Two wind power projects in Spain: one in Aragon with 355 MW, and another in the Castilla y León region, with 255 MW.</p>	<p>Floating offshore wind power</p>  <p>Windfloat Atlantic is one of the largest floating offshore wind farms in the world, with planned capacity of 25 MW.</p>
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and ultimately allows for a sustainable energy transition at a reasonable cost.

The total volume of biofuels incorporated into the fuels marketed by Repsol in 2019 came to 1,498,275 m³, of which 576,953 m³ were produced at the Group's refineries and the remaining 921,322 m³ have been purchased from external companies and mixed in the appropriate proportion to respond to the specifications of gasolines and diesel fuels and the requirements of our customers. These biofuels have reduced emissions released during transport by 2.8 M of CO₂. Repsol's biofuel production capacity is 871,000 m³/year, divided up between BioETBE (429,000 m³/year) and hydrogenated vegetable oil (GVO, 442,000 m³/year).

Furthermore, internal carbon pricing is a critical element of climate policies aimed at carrying out the transition to a low-emissions future. For investment decisions on new projects, Repsol updated the internal CO₂ price pathway, starting at USD 25/ton in 2018, with an increase to USD 40/ton in 2025.

Other lines of work through which Repsol pursues its objectives are *renewable energies*, *sustainable fuels* and *sustainable mobility*, which will be its main levers.

In relation to *renewable energies*, in 2019 Repsol incorporated into its portfolio of assets the development of three new renewable projects, two wind and one solar, which add up to a capacity of around 800 megawatts (MW). And the Company has increased the target for low-carbon electricity generation capacity to 7,500 MW by 2025 with the intention of becoming a major international player in renewable energy. For further information, see section 5.2.5.4 Electricity and Gas.

With respect to sustainable fuels and sustainable mobility, see section 2.4, which describes the new strategic approach.

In the **long term** (2025-2050), we take into account the change in energy end-uses, the change in the primary energy mix and the development of new technologies, as well as future regulations applicable in that timeframe (derived from the EU Energy and Climate Roadmap 2050, sustainable financing at an EU level or national contributions of other countries to the Paris Agreement).

Within this timeframe it will be necessary to develop new technological solutions such as Carbon Capture, Use and Storage (CCUS), Natural Climate Solutions, Green Hydrogen, etc.

A key element of the company's strategy to reduce CO₂ emissions in the value chain is the use of CCS technologies. Repsol takes part in R&D and demonstration projects of these technologies that may allow their future application on a large scale. Through the investment fund OGCI - Climate Investments, Repsol, in coalition with other oil and gas companies, continues to invest in low-emissions projects and technologies. It will support projects where a collective effort is the key to achieving successful results. To this end, OGCI will invest more than €1,000 million over ten years.

The Technology and Corporate Venturing Units contribute to the Company's strategy by investing in low-emission technologies, such as biofuels and advanced mobility, among others (see details in section 6.5. Technology development for decarbonization).

Repsol firmly believes that its strategy, portfolio and financial framework lay the foundations for the company's resilience, providing the adaptability and flexibility necessary for future changes in the energy system in the long term.

The Group has adjusted the book valuation of its assets to a pathway of oil and gas prices that in the short term has had an accounting effect on the current value of the assets (see section 4.1), mainly in the Upstream assets, which has shown the quality of the assets and the capacity to adapt business models in the Downstream segment.

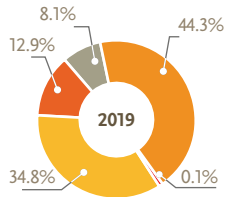
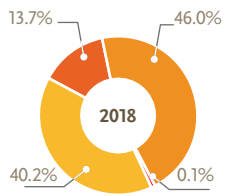
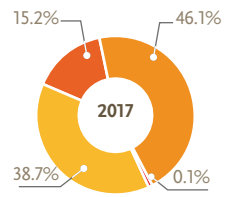
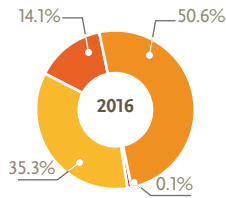
Repsol is part of the international Climate & Clean Air Coalition-O&G Methane Partnership of UN Environment, a program for detecting, quantifying and reducing methane emissions.



<https://www.oilandgasclimateinitiative.com>

Targets and metrics

Scope 1 emissions by activity



- Exploration and Production
- Refining
- Chemicals
- Electricity and Gas
- Other

Direct and indirect emissions

	2019	2018	2017	2016
Emissions Scope 1⁽¹⁾⁽²⁾⁽⁷⁾ (CO ₂ , CH ₄ and N ₂ O)	24.7⁽⁹⁾	22.0	23.0	24.9
Total GHG (Mt CO₂e)				
Upstream	10.9	10.1	10.6	12.6
Refining ⁽⁷⁾	8.6	8.9	8.9	8.8
Chemicals	3.2	3.0	3.5	3.5
Electricity and Gas	2.0	n/a	n/a	n/a
Other ⁽⁴⁾	0.01	0.01	0.02	0.02
Total CO₂ (Mt CO₂)	20.1	17.9	18.4	19.7
Upstream	6.5	6.0	6.3	7.7
Refining	8.5	8.8	8.6	8.6
Chemicals	3.2	3.0	3.4	3.4
Electricity and Gas	2.0	n/a	n/a	n/a
Other ⁽⁴⁾	0.01	0.01	0.02	0.02
Total CH₄ (CO₂e)	4.5	4.1	4.3	5.0
Total N₂O (CO₂e)	0.08	0.04	0.02	0.2
Emissions Scope 2⁽¹⁾⁽³⁾ (Mt CO ₂ e)	0.56	0.45	0.40	0.55
Emissions Scope 3⁽⁵⁾ (Mt CO ₂ e)	189	194	193	183
Use of sold products ⁽⁶⁾	180	186	185	175
Use of sold products based on Upstream production ^(6bis)	88	89	87	86
Raw materials: Crude	7.6	7.5	7.2	6.9
Raw materials: Hydrogen	0.7	0.6	0.7	0.6
Energy (Scope 1 + 2)⁽⁸⁾ (million GJ)	278	234	239	243
Energy (Scope 3) (million TJ)	2.8	2.9	2.8	2.7
Use of sold products	2.7	2.8	2.7	2.6
Raw materials (crude+hydrogen)	0.08	0.08	0.07	0.07
TOTAL flared hydrocarbons (Mt)	0.32	0.38	0.29	0.47

(1) The Company's direct and indirect emissions (Scope 1 and Scope 2) will be subject to an additional verification under EU-ETS and international standard ISO 14064-1. Once verification is complete, these certificates will be available at www.repsol.com.

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

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

(4) Includes LPG, Lubricants, Asphalts and Specialties, Mobility and Asset Management.

(5) In Scope 3, indirect CO₂ emissions associated with the purchase of goods and services and the use of products are considered significant.

(6) Scope 3: Use of sold products (sales base): These emissions have been calculated considering the sale of natural gas by the Exploration and Production business (Upstream) and sales of LPG, naphtha, gasoline, kerosene, gasoil, fuel oil and coke produced in the Refining business (Downstream). The 2018 figure has been updated accordingly.

(6a) Scope 3: Use of sold products based on Upstream production: These emissions have been calculated considering the sale of natural gas plus the sales of LPG, naphtha, gasoline, kerosene, gas oils, fuel oils and coke from our Refining system, according to the production of the Exploration & Production business (Upstream).

(7) The Steam Cracker is included in the Chemicals business.

(8) Energy consumption calculation includes fuel consumption, flaring, fugitives and venting, as well as steam and electricity purchases (scope 1 and scope 2).

(9) In 2019, the emissions increase is mainly due to the incorporation of the Electricity and Gas business.

Energy intensity

In the Oil&Gas sector, it is important to establish a clear distinction between Downstream and Upstream energy intensity, owing to the difference between these operations.

In Refining, energy intensity is calculated as energy consumption per ton of crude processed, coming to 2.95 GJ/t crude in 2019 (2.84 GJ/t crude in 2018). It should be noted that this calculation does not include the Olefinas Cracker plant, which belongs to the Chemicals business.

In Exploration and Production, the data is calculated per barrel of oil equivalent (boe, gross production of assets operated by the Company), coming to 0.275 GJ/boe in 2019 (0.29 GJ/bep in 2018).

Both indicators include energy consumption associated with fuel consumption, flared gas burning, fugitive emissions and venting, in addition to the purchase of steam and electricity (scope 1 and scope 2).

Intensity of greenhouse gas emissions

The criteria for calculating emissions intensity are the same as for energy intensity; this value in 2019 for the Refining business came to 0.198 t CO₂e/t crude (0.19 tCO₂e/t in 2018) and to 60.17 t CO₂e/kboe for E&P (60.52 tCO₂e/kbep in 2018).

Plan to reduce equivalent CO₂ emissions

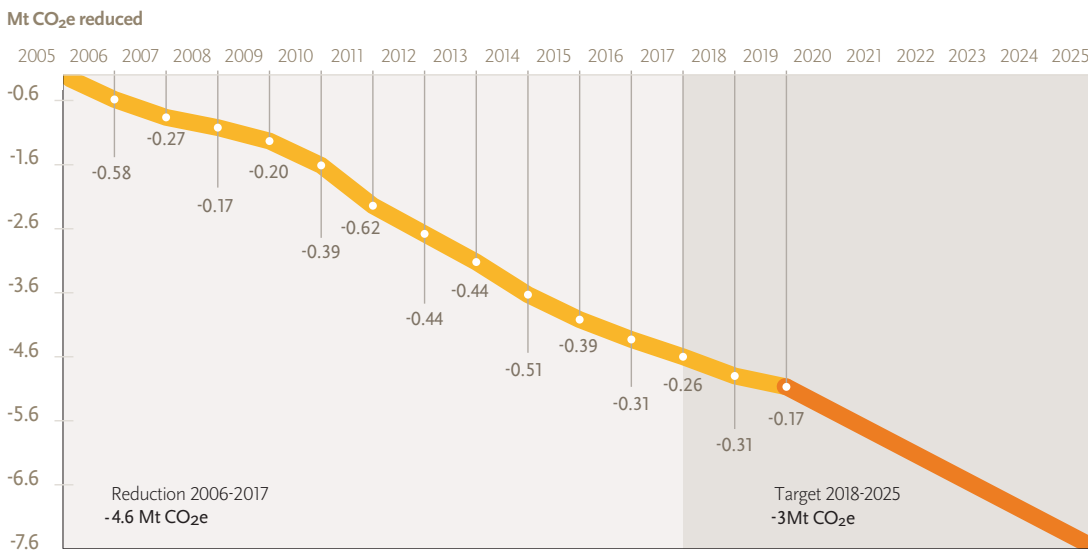
The target for the reduction of CO₂e emissions at the end of the period 2014-2020 is 2.1 Mt. DDuring 2019, Repsol has promoted several actions that have reduced 171 kt of CO₂e emissions, which means that an accumulated reduction of 2 million tonnes of CO₂e have been achieved for the period 2014-2019.

In energy terms, in 2019 a reduction of 2.3 million GJ was obtained, which means a cumulative reduction of 30.5 million GJ throughout the period.

In energetic terms, the company has accomplished a reduction of 2.3 million GJ, which translates to an accumulated reduction of 30.5 million GJ for the same period.

3 Mt CO₂e
of reduction
as a new
target for
2018-2025

CO₂e emission reduction (millions of tons)



Repsol set a new, more ambitious goal: reduce CO₂e emissions by 3 Mt by 2018-2025. This objective can be achieved with the following levers:

- Reduction of methane emissions in Upstream.
- Reduction of routine flared gas in Upstream.
- Energy efficiency both in Upstream and Downstream.
- Use of low carbon technologies and renewable energies in our operations.

Carbon intensity indicator (CII) reduction

Repsol has defined a carbon intensity indicator in g CO₂e/ MJ) to establish its emissions reduction targets based on the scope 1+2+3 over time, until the target of Net Zero Emissions is reached in 2050. To facilitate the monitoring of progress towards the long-term ambition and for the sake of transparency, Repsol considers it essential to set intermediate objectives. Thus, Repsol has set itself a reduction target with respect to the 2016 base year of 3% in 2020, estimates of 10% in 2025 and 20% in 2030, to achieve the ambition of 40% in 2040 in line with

5.1Mt
of CO₂e
reduced
between
2006 and 2019

Principles for Responsible Investment (PRI) Methane Initiative

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

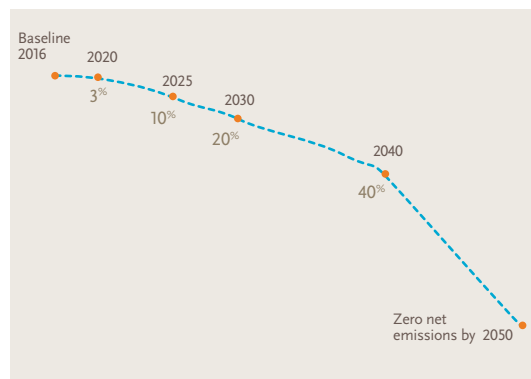


www.unpri.org

the International Energy Agency (IEA) Sustainable Development (SD) scenario and in accordance with society's demands.

With regard to 2050, Repsol estimates that at least 70% reduction of the Carbon Intensity Indicator can be achieved with the technological evolution that we can anticipate today without major technological disruptions, and is committed to applying the best technologies available at that time to raise this figure, including the carbon capture, use and storage and, if this were not enough, to offset emissions through reforestation and other natural climate solutions.

Carbon intensity indicator (CII) reduction targets



Repsol's carbon intensity indicator takes into account in the numerator the emissions derived from the Company's activity (direct and indirect emissions derived from exploration and production, refining and chemicals operations, and emissions from the electric power generation) and emissions associated with the use of fuel products derived from our primary energy production (oil, and natural gas). In the denominator, the indicator includes the energy that Repsol makes available to society in the form of end products derived from the production of primary energy from oil and gas, biofuels and the electricity produced.

Carbon intensity	2019	2016
g CO ₂ e/MJ	75.5	77.7

In 2019 we achieved a 2.8% reduction via energy efficiency plans and methane emissions management, increasing use of biofuels in gasolines and diesels, the contribution of the low-emissions electricity business, and the Company's commitment to petrochemical businesses.

Reduction of methane emission intensity

Convinced of the importance of the role of natural gas in the energy transition, Repsol has taken on the goal of reducing the intensity of methane emissions in its operated assets by 25% in 2025 compared to 2017.

This commitment is in line with the joint objective of the OGCI (Oil and Gas Climate Initiative) established in 2018. The achievement of this objective is mainly based on three lines of action:

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

Methane intensity ⁽¹⁾	2019	2018	2017
CH ₄ emissions/ gas produced (%)	1.28	1.17	1.34

(1) Volume based calculation.

Reduction of flared gas

In June 2016, Repsol joined the World Bank's Zero Routine Flaring by 2030 initiative. 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.

Since then, work has been done to improve the inventory of emissions due to gas flaring year by year, segregating this inventory into routine and non-routine flaring, applying the definitions of the Global Gas Flaring Reduction and standardizing criteria among OGCI companies.

Repsol set a target for reducing routine flaring of flare gas by 50% by 2025, referring to E&P operated assets and whose baseline was established in 2018. The lines of work are:

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

Routine gas flaring	2019	2018
kt CO ₂ e Upstream routine flaring	280	344

In 2019, routine gas flaring has been reduced by 19% compared to 2018.

6.2. People¹

6.2.1. Human capital

Repsol is a global and diverse company whose greatest strength is the people who, day by day, drive it with their experience and skills. Our more than 25,000 employees worldwide are part of a diverse, experienced and committed team. Mutual respect and trust are intrinsic values of the Company and a fundamental pillar to maximize the results.

	2019	2018
Number of employees	25,228	25,288
Average age	42.6	42.3
New employees	3.800	3.810
% of new employees under permanent contracts	33.3%	39.5%
Total turnover rate ⁽¹⁾	21%	23%

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

Value proposition

In the process of cultural transformation needed to drive the Strategic Plan, two of the key levers for achieving a more efficient and agile organization are leadership and talent.

During 2019, Repsol redesigned and updated its strategic lines for managing people and the organization, identifying the key elements that, in a comprehensive way, will support the transformation of the Company and ensure that Repsol's talent is prepared to face the challenges that the future holds: Employee Experience, New Ways of Working and Digitalization, Leadership and Talent, Labor and Compensation Framework, and Transformation in the People and Organization function itself.

1. Employee culture and experience

Repsol is immersed in a transformation process as a Company to achieve the objectives of the Strategic Plan. To do this, a robust culture that enables us to work in an agile, flexible and engaged way is essential.

To track progress in this process, a new edition of the Culture Survey was launched in 2019 with the slogan "We want to hear your best voice". As a novelty, the global questionnaire was simplified to make it more agile and easy to answer and the leadership indicator (which replaces the 180° Feedback evaluation) was added, to measure the performance of the executive team.

In 2019 new policies and ways of interacting were designed to improve the experience for the candidate, new employee, expatriate and manager, including reinforcement actions in communication, robotizing activities for speed and efficiency and developing new information content and learning.

2. Diversity and inclusiveness

At Repsol, we encourage all employees to have the opportunity to show their talent and develop their potential regardless of gender, culture, sexual orientation, ability or age.

In 2019, the **Diversity and Work-Life Balance Committee** promoted several initiatives in five lines of work: different abilities, gender, age, cultural diversity, flexibility and work-life balance.

With regard to the **differently abled**, Repsol has an integration action plan with objectives for 2020 that covers all areas of the organization. As of December 31, 2019, the Company had 633 differently abled employees (2.51% of the workforce). In Spain, in 2019, the applicable legislation under the LGD has been exceeded, with a percentage of 2.47%, 467 being direct employees.² Another measure is the incorporation of criteria for compliance with the **LGD in the grading of suppliers**.

Following the accessibility study carried out at the head offices in 2018 with the aim of diagnosing the level of accessibility of the environment, services and management, a new Campus Accessibility Project 2019-2021 was designed.

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 2020.

1. All data, unless otherwise specified, refers to the number of employees at the companies in which Repsol establishes the policies and guidelines in people management. Societat Catalana de Petrolis S. A (formerly known as Petrocat) is excluded as a managed company.

2. Spain's law on the rights of disabled persons and their social inclusion.

Repsol, through its people management policy, promotes a working environment based on equal opportunities, diversity and inclusion.



GSP
2020

Target:
Go beyond the legal requirements in terms of professional opportunities for people with disabilities

25,228

number of employees

employees of

89 countries

different nationalities

Repsol has an Equal Opportunities Plan for the Group's companies in Spain to improve the employment position of women. Initiatives such as the study of the pay gap, parity in selection processes or gender analysis in talent management decisions, which will be continued in 2020, are the basis of a roadmap for female talent that seeks to achieve real equality of opportunity and parity in positions of seniority.

Gender indicators ⁽¹⁾	2019	2018
% women in the Company	37	37
% women among new hires	52	51
% women in worldwide leadership positions ⁽²⁾	30	29
% women in management positions ⁽³⁾	41	41

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

(2) Executives and leaders (outside collective agreement; no partial retirees).

(3) Executives, Technical Managers and Technicians (outside collective bargaining; no partial retirees).

By carrying out intercultural sensitivity workshops, we address the reality of a company that has employees in 34 countries of 89 different nationalities and more than 1,352 employees working in a country other than their country of origin. For more information, see Appendix III.

3. Employment, flexibility and work-life balance

In the area of **flexibility and work-life balance**, Repsol is a Company recognized for promoting new ways of working adapted to the uses and customs of each country, with the telecommuting programme being one of the most widely accepted by employees.

Telecommuting indicators	2019	2018
No. of teleworkers worldwide	2,790	2,267

In 2019 specific commitments were Introduced In terms of work-life balance and diversity In the sustainability plans in the countries where we operate. The scope of healthcare services for employees in Spain was widened and a new legal and admin help desk service has been launched, in addition to improvements in paid leave for childcare.

In relation to the **right to digital disconnection**, an agreement has been signed to encourage reasonable use of new technologies and promote a culture that, based on the principle of respect, will continue to promote the well-being of employees.

4. Total compensation

Repsol is committed to a flexible compensation system that seeks outward competitiveness and internal equity, based on meritocracy, and valuing performance, cooperation and teamwork.

The compensation model encompasses fixed pay, an annual bonus, long-term performance-related compensation and benefits that include the Stock Purchase Plan¹ and other items such as childcare, health insurance and additional contributions to the pension plan. Detailed information on average remuneration and the salary gap can be consulted in Appendix III.

Average personnel costs per employee² in 2019 amounted to €72.0 thousand (€70.7 thousand in 2018) and total social benefits amounted to €115.6 million (€106.2 million in 2018). Almost 80% of employee benefit spending goes to healthcare and pension funding.

Another key element in the total compensation scheme is non-monetary benefits. In 2019, the Insignia program was launched, which provides the opportunity for recognition among colleagues by awarding badges associated with the five behaviors desired by the Company, good practices in the area of SMA and contribution to their teams.

Finally, 2019 saw the first-time launch of a Global Share Purchase Plan for all employees ("Tu Repsol" Plan), enabling them to become Company shareholders on favorable terms.

5. Career development and leadership

Having an attractive career development model that offers opportunities for professional growth is key for Repsol.

Internal mobility promotes learning and career development. Repsol encourages employees to take on new challenges and responsibilities, outside or within their business, area or country. During 2019, we streamlined and improved the process, giving the manager more autonomy in leading the process and increasing the number of internal candidates, bringing available opportunities closer to employees (publishing vacancies, employee's selection of interests) and carrying out proactive searches by the HR area.

1. For further information, see Note 29.4 to the consolidated Financial Statements.

2. Personnel costs and benefits divided by accumulated average managed workforce (including Societat Catalana de Petrolis, S.A.): The personal cost include social charges and other concepts except indemnizations, remuneration to counselor and travel expenses.

GSP
2020

Target:
Achieve a 31% increase of women in leadership positions.

Mobility	2019	2018
Number of internal mobility	2,631	2,665
% women (of number of internal mobility)	42%	37%

6. Training and learning

Repsol is now **evolving its learning model**, in a bid for greater autonomy and self-leadership in the development of employee skills and abilities. Employees themselves decide on their areas of interest and growth, while the manager is provided with data and information to be able to observe, support and reinforce the development of their colleagues. The availability of just-in-time, omnichannel, employee-centered learning experiences is increasingly important. In 2019, more than 2,000 digital resources were made available to employees and Peer Learning was launched, enabling employees to share 430 lessons.

Training ⁽¹⁾	2019	2018
Investment per employee(€)	583	613
Total investment in training (millions of euros)	14.3	14.5
Hours of training per employee	36	45

(1) Criteria changed in 2019 (accumulated average managed workforce) and the data for 2018 has been recalculated, as the Managed Workforce was used.

7. Employment Framework and Health

The Group's Framework Agreement, together with the collective agreements, is the basis for a framework of sustainability and trust underpinning the mutual interests of Company and employees.

In the Repsol Group's continuous effort to promote integrity and respect in the workplace, awareness actions have been carried out in various countries on the prevention of workplace harassment, promoting an environment free from intimidation, harassment and abuse and identifying the channels enabled by the Company to report unwanted situations.

Within the strategic framework of Health and Welfare, programs have been launched to help employees manage their working and personal environment with a healthier perspective. For more information, see Appendix III.

8. New Ways of Working

In 2019, we worked on an Agenda for Cultural Transformation, led by the Executive Committee, which includes initiatives related to evolving the work context, behaviors and management practices.

The main lines of work were:

- Development of the functional model and review of the Company's processes, rolling out new "Repsol Lean&Agile" work methods, with a flatter, more liquid and flexible hierarchical structure, through multidisciplinary teams.
- Deployment of the Digital Workplace, to allow work and/or collaboration from any place or device (6,616 people have joined the digital collaboration platforms).
- On-site or online training in new ways of working (Design Thinking, Lean Startup, Agile, Scrum, etc.) and expansion of the network of facilitators to support teams in their implementation.

GSP

a

Ambition:

Be committed to people and drive their development.

GSP

2020

Target:

Improve employees' perceptions of diversity and work-life balance policies and practices.

GSP

2020

Target:

Improve employees' satisfaction index.

Repsol's policies and regulations are aligned with the United Nations Guiding Principles for Business and Human Rights.



6.2.2. Respect for human rights and community relations¹

Our responsibility: to respect and remedy

Since 2008, Repsol has had in place a community relations (including indigenous populations) policy. The Company uses all the means at its disposal to prevent its activities or decisions from having adverse impacts on human rights, and will do all it can to repair the damage of any such impacts that do occur. In 2019, the **Human Rights and Community Relations Policy** was revised, strengthening Repsol's commitment to the United Nations' Guiding Principles on Business and Human Rights, the main international standard on the subject.

The Company's goal is to achieve and maintain solid relationships, based on recognition, trust, mutual respect and shared value, with 100% of the communities in the areas of influence of its projects and assets. To this end, Repsol has a team specialized in human rights and community relations of more than 70 people in the different countries and projects, and is supported by sector alliances such as active participation in the IPIECA social work group, or agreements with stakeholders such as the United Nations Development Programme (UNDP), the Organisation of Ibero-American States (OEI), etc.

1. For more information on human rights and community relations, see www.repsol.com.

The Company's management model has an anticipatory approach that focuses on identifying and mitigating risks and impacts and on seeking out opportunities, with a commitment to prevention and ongoing dialogue with all stakeholders. In the social sphere, this model is implemented through internal regulations that govern due diligence and Repsol's actions in the area of human rights and community relations.

In 2019, we set down a social investment strategy, reflected in a new regulatory framework that establishes common criteria throughout the organization, with the aim of maximizing the Company's positive impacts. 100% of operated assets are subject to strategies of participation with local communities that lead to local development projects.

When a new operation arises or a significant change occurs, a social impact assessment is carried out. 100% of the impact assessments conducted in 2019 included social and human rights aspects, with a total of 17 impact assessments conducted in 7 countries. It should be noted the 6 social impact assessments that were carried out in Mexico, where Repsol has been the only operator not receiving requirements from the regulator thanks to its collaborative approach with authorities and other stakeholders since the beginning of the project.

In 2019, moreover, the model for joint operations agreements (JOA)² was revised so that all new agreements include clauses relating to respect for human rights. This was done in 100% of agreements signed this year. Furthermore, in 100% of due diligence processes for acquisition of assets in 2019, the human rights performance of the counterparties was evaluated in accordance with Repsol's regulatory framework in this area.

A reflection of Repsol's optimum performance in terms of Community Relations and Human Rights is the assessment of Repsol by the Corporate Human Rights Benchmark (CHRB), which in its 2019 analysis placed the Company as the best-rated oil and gas company, and 7th in the overall ranking of the 195 companies analyzed.

2. Joint Operating Agreements (JOAs) are the consortium agreements connected with acreage; they are negotiated following the 2012 model of the AIPN (Association of International Petroleum Negotiators).

Malaysia

Repsol collaborates with the Malaysian Ministry of Health to reduce the transmission and improve the quality of life of those suffering from thalassemia, a hereditary blood disorder that requires monthly blood transfusions. Thalassemia can be prevented by awareness-raising campaigns. The area in which Repsol operates, the state of Sabah, has the highest rate of this disorder in Malaysia. Repsol promotes

Thalassemia awareness program

blood tests and donations to detect the illness and help patients, with the aim of involving the population and eradicating the illness by 2030. Furthermore, this year, Repsol provided €30,000 of financing for a competition between students from 50 local schools to create a website to disseminate information on this illness.

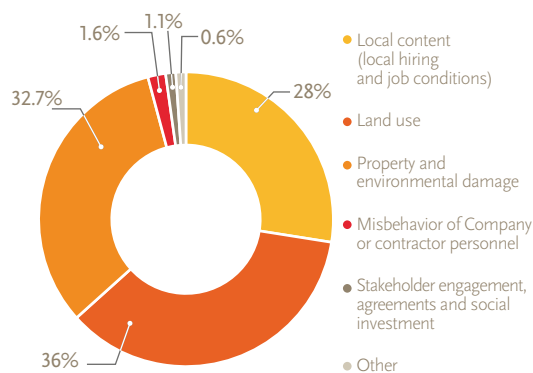
Operational level grievance mechanisms

One of the Company's priorities is to respond quickly and early to the complaints, concerns and grievances of the communities around our projects and assets (most often caused by operational impacts). This way of working helps us to anticipate and address the potential impacts of activities in the area of influence and therefore prevent human rights impacts and future conflicts. The nature of such mechanisms is special and unique in each setting. These mechanisms are designed on the basis of informed engagement and following the United Nations model.

This year, Repsol has continued to work on improving the legitimacy and accessibility of the grievance mechanisms in the highest human rights risk operations in accordance with the United Nations' Guiding Principles on Business and Human Rights, and on communicating the mechanisms among all stakeholders.

In 2019, 89% of all complaints received during the year were resolved.

Types of complaints received in 2019



Economic impact on communities

The Company identifies and strengthens positive impacts and shared value in the areas where it is present, as a result of a consensus with communities. The context determines the scope and focus of the investment. In 2019, social investment came to 50.78 million euros. See Appendix III for more information and examples of social investment projects.

Security and human rights

Since 2013, Repsol subscribes to the United Nations Voluntary Principles on Security and Human Rights to assure the security of operations in high risk or conflict areas through working procedures that ensure respect for human rights.

Repsol requires private security companies to ensure that 100% of the employees who work at Repsol facilities are trained in human rights. The Company ensures this training or holds courses for corporate security personnel. In addition, in some countries, public security forces receive specific training in human rights, with 261 members trained this year in Bolivia, Colombia, Ecuador, Peru and Malaysia.

Human rights	2019	2018
Number of employees trained in human rights (online)	207	266
Number of training hours in human rights (online)	255	532
Contracts with security firms that include human rights clauses (%)	95	100
Security providers evaluated according to human rights criteria (%)	100	100

Repsol has long-term agreements in place with indigenous communities in Peru, Bolivia and Ecuador that contribute to maintaining our social license to operate.



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



Peru

In 2019, Repsol signed a positive agreement with the Nuevo Mundo Native Community, in the Amazonian region of Cusco, for the use of land necessary to continue using the logistics base and airport corresponding to Block 57 for a 10-year period.

This agreement reflects the relationship of mutual trust built with the communities, enhanced as part of the action plan to handle

Agreement with the Nuevo Mundo Native Community

the controversy that occurred in Nuevo Mundo. This plan has made it possible to improve the relationship with the surrounding community, which also benefits as a user of the infrastructure set up for air transport.

The lessons learned have been included in the management model and applied to other projects and assets.



Repsol and the United Nations work together to support sustainable development

Partnerships

Since 2018, Repsol has had a worldwide agreement in place with the United Nations Development Program (UNDP) and the Organization of Iberoamerican States (OEI). Thanks to this agreement, in 2019, a new cooperation and development project has been undertaken in Peru, in the Amazon region of Cusco. This project sets out to promote sustainable territorial development, respect for human rights and the preservation of biodiversity, and to guarantee coordinated work with the State, communities and local players in areas where

Repsol has presence. Having completed a comprehensive diagnosis of the area, the following priority lines of intervention have been defined: strengthening of territorial governance, preservation of the environment and local productive development. This agreement represents the consolidation of a 5-year partnership to work towards sustainable development in the Megantoni District, the area of influence of Block 57.

- A process of regulatory and procedural roll-out to all businesses and assets, which in addition to compliance with corporate requirements, encompasses all necessary features arising from the specific nature of each business, specific legal requirements, national and local, and different modes of operation.
- Systematic and independent internal audit and verification processes that ensure the effectiveness and efficiency of the above processes.

Process safety

Repsol has a proactive safety program that enables it to manage process safety at all times in order to prevent industrial accidents, keeping risks under control and properly managed. This program is being reinforced with initiatives established in the Key Action Lines up to 2025 in the three vectors involved (people, facilities and processes).

Repsol works on the proper management of critical processes and in an adequate design, implementation and maintenance of safety barriers to ensure the integrity of the installations. International standards such as API, NFPA, ISO, EN, IEC, IOGP or CCPS are applied.

Repsol carries out inspection and preventive maintenance programs to check the correct functioning of safety-critical systems and equipment. These programs are part of the Company's tools that help to improve and reduce the industrial accident rate at assets.

One of the main challenges of the process safety approach is to align the entire organization with the risk reduction goal. Workshops and specific sessions are therefore held at the Company's assets with the involvement of the personnel directly involved in the execution of the operational activities.

All of the above is part of normal operations at all facilities. However, in 2019 the **corporate Asset Integrity standard** was updated, providing a uniform and robust reference framework, establishing the basic requirements for ensuring the integrity of the Company's assets and preventing leaks of hazardous substances or uncontrolled release of energy during operation.

The management framework contained in this standard rests on three pillars: provision of safety barriers to control identified hazards, ongoing maintenance of technical requirements and performance to ensure effectiveness and, finally, verification on the condition of barriers and compliance with technical integrity requirements.

GSP

a

Ambition:

Establish strong relations with communities in which the Company is present.

6.3. Safe operation¹

The Company is focused on a proactive risk management throughout the activity cycle to ensure the protection of people and safety at our facilities. This means guaranteeing proper identification, assessment and management of the risks associated with the processes and industrial assets throughout their lifespan.

Safe operation is based on:

- An internal regulatory body, subject to the most rigorous international standards, which sets the Company requirements for our operations throughout their lifecycle and supports standardized risk management throughout the Company. The process of reviewing and updating all corporate regulations initiated in 2016 was completed with the approval in 2019 of the regulations on maritime and river transport, asset integrity and emergency and crisis management.

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

8 DECENT WORK AND ECONOMIC GROWTH



¹. The figures and indicators in this section have been calculated in accordance with corporate standards that set out the criteria and common methodology to be applied in Safety and Environment (S&E). As a rule, safety and environment disclosures include 100% of the data on the companies in which Repsol has a majority stake or operational control. Specifically, with regard to security, data is provided on contractors that provide services under a direct contract.

Process safety indicator ⁽¹⁾	2019	2018	2017
PSIR ⁽²⁾ TIER 1 + TIER 2	0.55	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 CO₂ 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: number of Tier 1 and Tier 2 process safety incidents which occurred within the period per million hours worked related to process.

Safety management and monitoring is performed through effective measurement of the indicators in alignment with the main international references (IOGP, API and CCPS). In 2019, this indicator has increased by 16% year-on-year. Despite this increase, this figure is now below the unit in an asymptotic trend since 2016, affected by slight changes. In absolute terms, Tier 1 incidents have decreased by 2 compared to 2018 and Tier 2 incidents have increased by 6. The ratio of Tier 1 plus Tier 2 to Tier 3 is 1 to 40, which means that most incidents are concentrated on the accident rate base in near misses that rather involve preventive action to reduce the most severe incidents before they occur.

Spills	2019	2018
Number of hydrocarbon spills > 1 barrel reaching the environment	25	25
Volume of hydrocarbon spills that reach the environment (metric tons) ⁽¹⁾	79	111

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

There were four significant spills in 2019: all four were the result of the overturning of the oil tank truck transporting goods. Two of them involved production water, in the Exploration and Production business, with 21 and 23 tons spilled. The other two involved hydrocarbons, in Repsol Peru business, with 31 and 19 tons spilled. Appropriate measures were taken for the remediation of the affected area in all cases.

If, despite all preventive activity, a spill should occur, the Company has internal and external emergency response mechanisms and specialized trained teams that use the most advanced detection tools and follow specific management and training protocols that ensure the assignment of the highest priority required in each case. Once 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.

In the event of marine spills, in addition to its own response resources Repsol has contracts in place that assure the swift response of external specialists and equipment (Oil Spills Response Limited - OSRL, including access to the Global Dispersants stockpile, Wild Well Control, Helix, etc.).



2nd World Safety and Environment Conference

In June 2019, Madrid played host to the 2nd World Safety and Environment Days with the active involvement of more than 400 professionals from 19 countries. Over the course of these three days of work and debate, the new challenges coming up and the way in which the safety and environment function must respond to them were discussed, leading the implementation of the 2025 S&E strategy established in 2018.

The energy transition towards a future of low emissions, circular economy as a lever for transforming the economic model or

the criticality of responsible, efficient water management were key topics at most of these sessions.

Furthermore, other topics that must contribute to Sustainability and to improving the Company's safety performance were discussed: transfer between generations as a way of incorporating new skills, a just culture in ensuring the commitment of the entire organization, opportunities to improve efficiency and minimize risks offered by digital tools or the vital importance of focusing on process safety.

Occupational safety

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

Personal safety indicators ⁽¹⁾	2019	2018
Lost Time Injury Rate (LTIF) ⁽²⁾	0.86	0.89
Lost Time Injury Rate for own staff	0.79	0.76
Lost Time Injury Rate for contractor staff	0.91	1.01
Total Recordable incident rate (TRIR) ⁽³⁾	1.24	1.59
TRIR for own staff	1.02	1.26
TRIR for contractor staff	1.42	1.90
No. of own staff fatalities	0	0
No. of contractor staff fatalities	1	2
Number of safety training hours	260,872	217,464

- (1) A corporate standard establishes the criteria and methodology for recording incidents and is completed with a guide to incident management indicators.
- (2) Number of personal consequences (fatalities with loss of days) during the year, for every million hours worked. It includes subcontractors and managed workforce.
- (3) Total number of cases with personal consequences (fatalities, loss of days, medical treatment and restricted work) accumulated during the period, for every million hours worked. It includes subcontractors and managed workforce.

Regretfully, in 2019 we have to report a fatality among Repsol’s contractors in a road accident. The accident was due to a loss of control of the truck on a bend, causing the vehicle to overturn. An investigation was carried out to analyze the causes. Actions were taken to prevent the immediate and underlying causes. Some of them have focused improving the assessment of the usual routes from field sites to the main logistics points.

At Repsol, occupational safety indicators are reported in accordance with the internal incident management standard based on international standards (IOGP and OSHA). Incidents are classified according to the seriousness of both their real and potential consequences.

Occupational incidents	2019	2018
Very serious	1	2
Serious	1	1
Moderate	80	81
Minor	41	69
Trivial	4	-
TOTAL	127	153

The Company has set targets for reducing the TRIR since 2014. In 2019, the TRIR fell by 22% compared to 2018, for both own staff and contractors. This drop was mainly due to a 43% reduction in incidents whose consequences did not cause loss of worked days.

Repsol is driven by an ambition to achieve a zero accident rate, based on the conviction that all accidents are avoidable. To minimize the risks that can cause harm to the people involved in our operations, the Company has 10 Basic Safety Rules. These rules are mandatory for all employees and contractors, and represent a commitment by the Company to provide our people with the appropriate tools to reduce exposure to hazards in the performance of their jobs.

Additionally, we explore the possibilities offered by technology and digital tools to minimize exposure to hazards.

Development of a safety culture

Repsol continues to work so that the safety culture within the whole organization is increasingly robust and becomes a fundamental barrier in the prevention of major accidents. Only from the commitment of all the people who make up the organization is possible to build a work environment in which safety is consolidated as a fundamental value presents in all decisions and daily actions.



Norway

In Norway, the assets in the Gyda field (North Sea) are being decommissioned. The scope of the works entails the sealing and abandonment of wells in addition to the dismantling of surface facilities. Work began in January 2019 to seal and abandon the wells, involving a team of 80 people.

Safety coaching in the decommission of Gyda

Three safety coaches recruited externally and that work independently are overseeing these tasks. With their help, the project's focus on safety and the environment has been stepped up, involving all those on the platform and working as a team to achieve optimal safety results.

In addition to the diagnostics of the safety culture and reinforcement workshops of previous years, this year's diagnostics were carried out in the Engineering Division, Repsol's service stations operated network in Spain and Portugal, the lubricants, asphalts and specialities business unit, and the mobility unit in Peru. A total of 16 Repsol businesses and assets have undergone safety culture assessment processes. The assessments are carried out by an independent team, following the best available practices. The outcome of each diagnostic focuses on identifying the organizational factors that may limit the efficiency of work processes.

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, focused on aspects of Human Factors and Safety Leadership.

The driving force of transformation toward a safety culture is leadership. We have rolled out specific training and awareness actions such as Safety Leap, an ambitious worldwide program. In addition, both internal and external promotion activities are carried out, in which cultural and organizational elements that identify an excellent company are detailed.

Emergencies and crisis management

The Company does its utmost to prevent accidents. In addition, Repsol is working on mechanisms that aid early detection and swift and effective management of emergencies.

The Company continues to make progress in the deployment and improvement of the comprehensive emergency and crisis management model, which encompasses industry best practices. This model includes management of emergencies at facilities and businesses, and involves senior management for the most serious cases, with specific support teams that ensure the assignment of the highest priority required in each case. Proof of this is the approval and launch of the new **Crisis and Emergency Management Standard**, which ensures compliance with several key requirements:

- Implementation of internal requirements in emergency management throughout Repsol, providing uniformity regardless of location or business.

- Ensuring a minimum management standard that is more stringent than the most advanced regulations.

The standard also describes the model and levels of emergency and crisis management, and establishes the information flow that allows management to be raised to the appropriate level, as well as the minimum levels of training and simulation exercises at all levels.

The operation of this model is supported through frequent training activities, drills and exercises at all levels, including at least one annual crisis management drill at the highest level of the Company, led by the CEO. 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.

GSP
a

Ambition:
0 accidents.



Safety Leap

In 2019, the global roll-out of the safety leadership program known as *Safety Leap* began. The Executive Committee participated in the first edition of the program as an example of leadership and commitment. Through this initiative, the Company has reinforced its message that a qualitative step forward is essential in the actions of leaders to continue improving our performance when it comes to safety.

The program is structured around increasing the perception of risk, not letting our guard down, promoting appropriate behavior and

providing the necessary tools: open communication, consistency, fair recognition, positive error management or transparency.

In 2019, the training was imparted to a total of 1,970 people. Although the program was initially aimed at people in leadership positions at the company (executive personnel and managers), in 2020 it will be extended to other levels of the organization.

Safety leadership program

Repsol prioritizes efficient management of resources, promoting the Circular Economy.

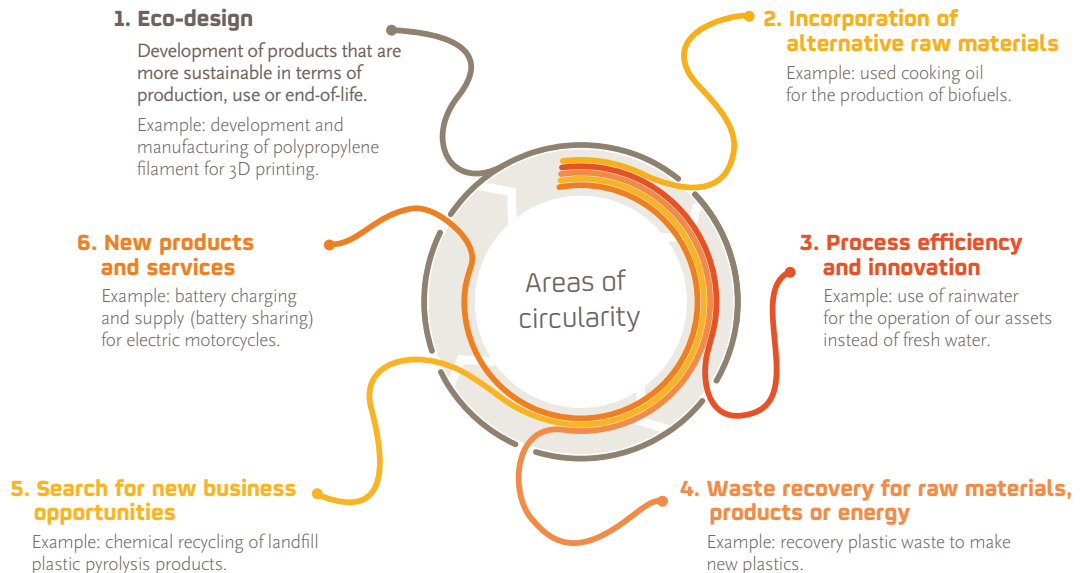


GSP
2025

Target: Developing cross-cutting circular economy projects in cooperation with external institutions, working with all businesses across the Company.

6.4. Environment¹

Areas of circularity



At Repsol, the priority is to carry out its activities while minimizing any potential environmental impacts, optimizing water and waste management, minimizing atmospheric emissions and considering biodiversity as a key aspect. Repsol relies on its team of specialized professionals, and on its active engagement in sector alliances such as IPIECA, CONCAWE, or IOGP.

Circular economy

The Circular Economy is a substantial part of the Global Sustainability Plan that operates within the scope of the efficient use of natural resources, applying criteria of maximum efficiency and minimum environmental impact, contributing to the mitigation of identified climate risks. The strategy on Circular Economy was approved by the CEO in December 2016 and is part of the key lines of action

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

up to 2025 within the Company's sustainability strategy. With the Circular Economy, Repsol seeks to:

- Minimize consumption of virgin raw materials
- Extend product lifespan
- Optimize production processes
- Minimize waste
- Manage waste by applying the principles of the waste hierarchy: prevention, as the best option, followed by reuse, recycling and recovery, including energy recovery and, as a last option, safe disposal.

The key steps forward in 2019 were:

- More than 200 circular initiatives identified since 2016, in 13 business units and areas of the company, of which more than 60% are being evaluated with strategic partners.
- Expansion of the external network to more than 360 contacts to contribute to the proposal and implementation of new projects.
- Expansion of the internal network with experts from other businesses and areas of the Company. (13 different areas now involved)

- Active engagement in more than 10 national and international working groups, such as CEOE, Chamber of Commerce, UNE-ISO, COTEC, IPIECA, World Economic Forum, Plastics Europe, CEFIC, CONCAWE, European Commission, etc.
- Membership of the Circular Plastics Alliance (CPA) in February 2019. Repsol participates through Plastics Europe, PCEP, SCS and CEFIC in this initiative, which aims to increase the volume of recycled plastic on the market.

With the aim of framing and reinforcing current initiatives, developing new ones and making progress in integrating circularity criteria into decision-making processes, Repsol has created a specific committee for the Circular Economy in 2019, with the participation of representatives of the Company's main divisions. The committee has approved the Circular Economy Plan, which defines the main lines of action for the coming years. Key actions include:

- Move towards quantitative analysis of initiatives through environmental and economic indicators that enable a better tracking of the above-mentioned initiatives, accounting for benefits generated and improvement of environmental parameters.
- Standardize and promote the definition, analysis and implementation of Circular Economy opportunities.
- Set concrete objectives at the Company level in line with the 2018-2025 Safety and Environment Strategy.
- Promote opportunities for industrial symbiosis and collaborative economy with third parties.
- Move forward with development of and investment in technologies that support circular projects as a key line of the Repsol Technology Lab.
- Continue investment in strategic circular projects through the Corporate Venturing area.

Water

Water is a vital resource for society. Water management is one of the main environmental challenges facing the Oil&Gas sector.

Ensuring water supply is essential to continue with all the Company's operations, which makes this resource a key element at a strategic level, and necessary to retain the license to operate.

Repsol has managed water for decades at its facilities, focusing efforts on developing methods for risk assessment and management and seeking new solutions to minimize the use of this natural resource, preserve its quality and deal with the climate risks associated with this vector.

Risk analysis and the Repsol Water Tool (RWT)

The Company uses the Repsol Water Tool (RWT) to analyse the exposure of its operations to the risk of water shortages. Risks are assessed both internally (measurement quality, types of water use, treatment technologies, etc.) and externally (availability, quality and ecosystems that are withdrawal sources or discharge receiving bodies, future water availability, regulatory and business risks, etc.). The tool enables us to identify businesses and facilities where it is necessary to make a greater management effort and the needs for action are a priority.

Since 2013, RWT has been applied in refineries, chemical facilities and E&P assets that account for more than 90% of the fresh water captured by Repsol operations around the world.

Market launch of the first certified circular polyolefins [see 5.2.2].

GSP

a

Ambition:
Excellent environmental management embedded in the decision-making process.

Bolivia

The activities performed in the Caipipendi Area [area of potential "water stress"] require the use of water and could potentially cause an impact on this resource, which is mainly sourced from the aquifers in the region.

Against this backdrop, a hydrological survey has been performed to establish how these aquifers behave, to assess the sustainability of water exploitation, obtaining a model that makes it possible to simulate different scenarios.

Using this model, it has been possible to conclude that the operating water balance of the aquifer is currently positive [extrac-

tions account for just 1%] and that it has a high supply capacity. Furthermore, it has been demonstrated that there has been no pollution of water bodies as a result of Repsol's activities.

The completion of this project has also entailed, for communities in the region, an opportunity to learn about improving the use of water sources to minimize pollution.

Hydrogeological survey of the Caipipendi area

GSP
**20
25**

Target:
Integrating water management into 100% of our assets and industrial facilities of the Exploration and Production, Refining and Chemicals businesses.

Water

Scheme of lines of action up to 2025

Use of alternative, non-fresh sources of water

The Company is committed to searching for and using alternative sources of water from third parties.



The industrial facilities in Tarragona uses non-fresh regenerated water from a wastewater treatment plant, thereby reducing the use of fresh water. In 2019, almost 11% of the total water consumed at the

industrial facility (refining and chemical plant) came from the municipal waste water treatment plant.

Efficient use of water

The Company is working to reduce water consumption across its range of activities.



During the construction of the access road and platforms for the Boyuy X2 well, pits to collect rainwater were set up, avoiding the consumption of 4,480 m³ of surface water bodies, almost the entire amount needed. During the drilling stage, 6,775 m³ that had been recovered from the

water treatment plant located on the site, were reused. This far exceeded the requirements under the environmental legislation in force (avoid extracting more than 10% of water sources), in addition to avoiding disputes with the local communities.

Internal reuse of water

Between 2015 and 2019, Repsol increased its use of reused water by 75%. In 2019, reused water accounted for 22% of the total water consumed by the Company, excluding water collected by the Electricity and Gas Business.



As part of non-conventional operations in Marcellus (USA) in 2019, internally reused water accounted for 19% of total water consumed in operations. This is a sign of the E&P business' commitment to the search

for new uses of production and return water, reducing our reliance on the resource and reducing the need to extract fresh water from the environment.

Reducing the impact during discharges

In 2019, a total of 39,147 kt of water was discharged, excluding discharges from the Electricity and Gas business. This made for a reduction of 21% compared to 2015.



In this area, water management is based mainly on complying with the requirements defined by the national or local legislation, such as, for example, the requirements promoted by the European Union (Best Available Techniques Reference Documents, BREFs); or the specific Business regulations, such as those established in E&P through the Environmental Performance Practices (EPPs) relating to

the quality of sanitary effluents and production water and their impact on the environment.

Repsol's CoOpera Aguas task force is dedicated to disseminating knowledge of issues such as improving the management of discharged by units by controlling these critical parameters at the source, the implementation of best measurement practices or developing guidelines for treating effluents.

Water

For further information on water, see www.repsol.com

1. Water consumed is measured as water captured, including water reused.

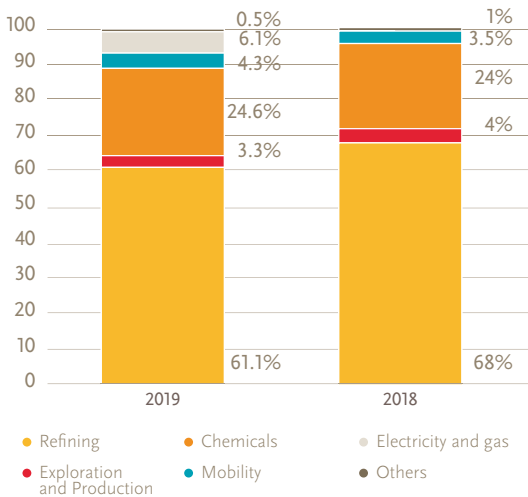
Actions for sustainable water management

Water is one of the main issues to work on in the coming years, with a range of objectives set for 2025 as a result of the strategic rethinking on safety and the environment carried out in 2018.

Achievement of these goals requires accurate analysis of water-related risks, incorporation of the real value of the resource in decision-making processes, and nurturing of a water culture in the Company. Progress in 2019 is discussed on page 72.

The main fresh water sources are the public network (59%), surface resources (36%), and, to a lesser extent, underground aquifers (5%). In 2019, the Electricity and Gas business, which accounts for 6% of water withdrawal, has been included in the Group's consolidation.

Water withdrawal by activity



Water management	2019	2018
Fresh water withdrawn (kilotons)	57,643	51,320
Reused water (kilotons)	15,679	17,368
Reused water (kilotons)/ Water withdrawal (kilotons)	0.27	0.34
Water discharged (kilotons) ⁽¹⁾	39,147	36,813
Hydrocarbons in water discharged (metric tons)	186	224
Water withdrawn in Refining /processed crude oil (tons)	0.80	0.75

(1) Refrigeration water in offshore operations is no longer classified as water discharged. The 2018 figure has been amended accordingly.

Discharged water of the Electricity and Gas Business is reported separately, as this water forms part of an open cooling circuit, non-fresh water is withdrawn and returned into the environment.

Discharged water Electricity and Gas business	2019
Non-fresh water withdrawn (kilotons)	205,084
Water discharged (kilotons)	205,172

The water discharged has increased by 6% with respect to 2018, mainly due to the incorporation of the Electricity and Gas business.

Natural capital and biodiversity

Natural capital is the set of ecosystem services provided by nature that contribute directly or indirectly to the well-being of people, the development of society and the global economy. Companies like Repsol depend on natural capital and their operations generate impacts on it.

Repsol is committed to mitigating potential impacts on biodiversity and ecosystem services throughout the entire life cycle of its activities. It follows the principles established by the United Nations (more information at www.repsol.com):



Ecuador

Yasuní biological monitoring

In the Amazonian region of Ecuador, operations are ongoing in blocks 16 and 67, in the Yasuní National Park and Waorani Ethnic Reserve. In line with its corporate standards, Repsol has an environmental management plan that promotes the prevention and mitigation of potential impacts to secure the conservation of biodiversity, considering the biological sensitivity of the region, in addition to the regulations and best practices available.

Biological monitoring represents an essential part of the plan; this began 25 years ago and has remained a constant ever since. This includes performing research and monitoring tasks across several years and seasons [dry/

wet] in order to gather scientific information on the conservation of biodiversity and update fauna and flora species inventories. Based on the results, Repsol implements different biodiversity impact management initiatives, applying the mitigation hierarchy. An example of this can be seen in the replanting and reforestation actions that seek to protect habitats, control erosion, preserve native biodiversity and minimize the decrease of native coverage and decline in forests.

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

Repsol is working to enhance the integration of environmental factors in its decision-making process through the concept of natural capital in the financial assessment of impacts and dependencies on ecosystem-related services. To this end, it is developing a tool whose methodology is aligned to the Natural Capital Protocol, developed by the Natural Capital Coalition, of which Repsol has been an active member since 2017.

This tool will allow the Company to define which mitigation and restoration measures are most efficient and effective, more accurately follow their implementation and contribute to training and awareness raising on biodiversity matters and ecosystem-related services aimed at both Repsol employees and contractors, and local communities and other stakeholders.

Furthermore, since 2019, Repsol has participated with other companies in the Spanish energy sector as part of a collaborative project to share best practices and lessons learned in the field of natural capital. This alliance has generated more detailed and up-to-date information about the value that natural goods and services offer to stakeholders and society, which will make the decision-making process easier to contribute to their conservation.

6.5. Technology development for decarbonization

Indicators (Million euros)	2019	2018
Investment R&D ⁽¹⁾	80	84
Corporate Venturing and OGCI ⁽²⁾	18	18
Total investment in R&D	98	102

(1) Indicator that includes the R&D investment corresponding to joint ventures in Brazil.

(2) Includes the investment of Repsol's investment funds in Corporate Venturing, and the Group's contributions to OGCI Climate Investments.

The development and incorporation of new technologies is a key process at Repsol to continue offering differential products. Against a backdrop of the transition towards a low-carbon economy, the systematic capacity to test, assess and adopt technologies and new innovative business models is essential in achieving the objectives defined in the new strategy rolled out by the Company.

In 2018, the Board predicted this trend and approved a new strategy in Technology and Corporate Venturing focuses on:

- Reduction of energy intensity and emissions of CO₂.
- Sustainable and efficient improvement of the profitability of assets.
- Creation of a significant proposal to differentiate energy products and services with a highly customer-oriented focus.

In 2019; in line with the new commitments assumed by the Company to make progress towards zero emissions by 2050, work has been stepped up relating to the energy transition and decarbonization, in addition to the **development of critical technologies** in new models of distributed generation to facilitate the optimal management of electrical charges, including electric vehicles, which will make it possible to connect solar panels or energy storage systems. Repsol has acquired capital in Ampere Energy, a company specializing in the design, development and production of storage and energy management systems. In this vein, it

Peru

Ecological restoration in Block 57: a sustainable synergy between communities, the State and the Company

Repsol is in the process of restoring two drilling platforms located in Block 57, in the Amazon rainforest in Peru, joining forces with local communities, the administrator of the Asháninka Communal Reserve and the State. To this end, the Company continued to focus on shared value, focusing on enhancing skills, the generation of local employment and restoration, supported by the local community.

In 2017 and 2018, the planning and analysis of alternatives was performed, in addition to the enhancement of capacities, the conclusion of inter-institutional agreements and calls for tender. In 2019, environmental permits were obtained and work began, completing the restoration of the area with more than 13,000 seedlings distributed across an area of 8.37 ha. Jobs have been created both directly and

indirectly, and more than 35,000 man hours have been needed, resulting in zero accidents and zero social conflicts. In 2020 and 2021, reforestation maintenance work and environmental monitoring will be performed to ensure the sustainability of restoration efforts.

To share these environmental best practices, this project has been submitted to the 2nd Peruvian Symposium on the Restoration of Amazonian, Andean and Coastal Forestry Ecosystems, held in Lima last November. Additionally, a national Peruvian ecosystem restoration network has been set up, which Repsol forms a part of.

should be noted that Repsol has launched Solify, a new photovoltaic product for single-family houses that makes it possible to consume 100% renewable energy and enjoy savings in their electricity bills.

In addition, new developments have been made in terms of mobility, with projects to produce advanced biofuels with a low carbon footprint by harnessing waste. In terms of transport electrification, projects involving new electrochemical batteries and smart battery control systems are worth note.

In the field of **reducing energy intensity and CO₂ emissions**, the progress made with the SUN₂HY project, undertaken with Enagás, a joint venture, in the design of a pilot plant to generate hydrogen using sun power as the main source is worth particular mention.

In terms of the initiatives linked to **circular economy** policies that support different lines of the Chemicals business, worth mention is the implementation of the ZERO project to harness synthetic oils produced by treating, using new chemical recycling technologies, plastic waste that cannot be recycled using traditional, mechanical methods. These technologies transfer plastic polymers into hydrocarbons or pyrolysis oil to be reused in the petrochemical industry.

Concerning the development of **carbon capture, storage and use technologies**, progress continues to be made in the use of CO₂ polymers to replace fossil energy sources. In 2019, the polycarbonate polyol production process was scaled up to an industrial level with the incorporation of up to 30% CO₂, to be marketed by Dynasol (a joint venture in which Repsol has a stakeholding). Through Repsol's participation in the OGCI Climate Investments. Repsol invests in different CCUS initiatives, to develop projects that use CO₂ as a raw material, through Solidia and Eonic, and to develop capture and storage projects, through Investys, Clean Gas Project and Wabash Valley Resources, which is due to become the largest capture and storage project in the USA.

Furthermore, through OGCI Climate investment, Repsol invests in projects to reduce **methane emissions and the efficiency of E&P operations**, in companies such as:

- Kairos Aerospace has developed a technology for detecting methane emissions through aerial inspections.
- SeekOps offers local methane emission detection and quantification services, using drones and mobile detectors. A pilot project is due to be carried out at Repsol, which is currently in the visualization and conceptualization phase.

- ClarkeValve, which has developed low-cost control valves that are capable of eliminating fugitive methane emissions from seal zones.

Venture Capital

Repsol aims to quicken the pace of incorporation of technologies and innovative business models in Company practices through an investment fund which is 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 six technological areas in order to complement the internal R&D capacities by bringing in external innovation. For the 2016-2020 fund, Repsol has committed to making a contribution of €85 million (by 2019, the fund had already invested €32 million). It currently holds more than fifteen stakes and joint development projects.

The investment process starts with the search for technological opportunities in the aforementioned fields and assesses the potential and suitability of the selected start-ups to Repsol's businesses. With a view to stepping up the harnessing of technology and the roll-out of investment, pilot tests have been planned at the company's operations that will make it possible to maximize the likelihood of success (further information at www.repsol.com).

In 2019, special mention must be made of the investments made in Artificial Intelligence firms, including Nnaisense or Belmont Technology, and in blockchain technology, such as Finboot, which was incubated as part of the Repsol Foundation Entrepreneurs Fund.

These investments contribute to the goal of sustainably improving the profitability of Repsol's assets and account for 22% of the investment made in 2019.

The investment in Low Carbon Technologies in 2019 came to 61%.

Furthermore, Repsol participated with its partners in the Oil&Gas sector in the OGCI Climate Investments (OGCI-CI), a vehicle for channeling \$1,000 million in investments over a 10-year period in start ups with a view to **fighting climate change by reducing greenhouse gas emissions linked to the supply of energy**. In 2019, Repsol has invested \$6 million in this initiative.

The investments made by OGCI in Climate Investments in 2019, in addition to the aforementioned Wabash Valley Resources y Seekops, are as follows: **Kelvin**, a US firm that

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



GSP

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Ambition: drive technological innovation as a lever of transformation toward sustainable business models.

develops artificial intelligence-based control systems, making it possible to reduce the carbon footprint of industrial facilities; **Boston Metal**, a US firm that has developed technology to produce steel and other metals more efficiently and in a more environmentally sustainable manner; **XL Hybrids**, a US firm that produces electric hybridization systems that can be attached to internal combustion engines to reduce the CO₂ emissions of commercial fleets; **75F**, a US firm that develops advanced heating, air conditioning and lighting automation systems for commercial buildings that offers important savings on the consumption of electricity; **Norsepower**, a Finnish firm that designs and manufactures mechanical rotors that generate additional wind propulsion on large vessels.

In 2019, Repsol has been approved as a professional private investor by the Centre for the Development of Industrial Technology (CDTI) to co-invest

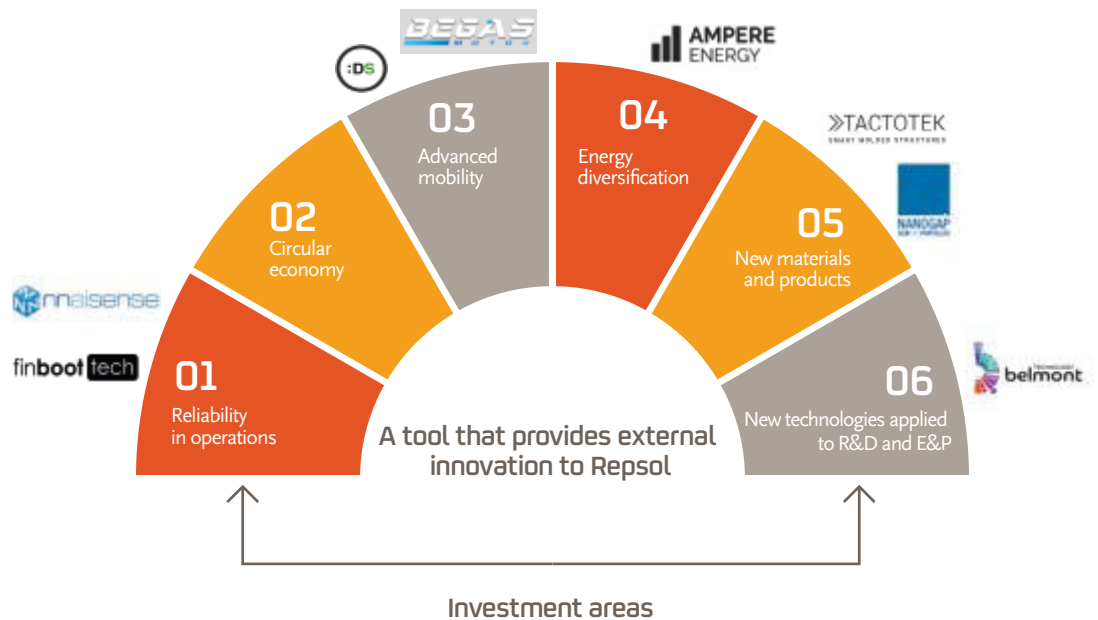
in Spanish technology start-ups through the COINVERSIÓN INNVIERTE program.

Repsol Corporate Venturing has its own website: <http://ventures.repsol.com>. to give start-ups and other investment funds information on the team and enable them to contact it with proposals. Below are just a few of the investments made.

In 2019, 68 R&D projects have been carried out and more than 15 investments made in start-ups, obtaining 6 new patents. The process has been led by the Repsol *Technology Lab*, meaning the Company has received international recognition for its technology.

Indicators	2019	2018
No. of external scientific partnerships	54	82
Projects supported by the Spanish government	14	15
Projects supported by the EU	12	19

Innovation in start-ups



GSP

2022

Target: 40% of investment in R&D projects in line with the pillars of the Sustainability Model.

Digitalization

Repsol's Digitalization program launched in 2017, contributes directly to Repsol's sustainable development goals, with more than 60 cases focusing on the fight against climate change,

protecting the environment, improving operational safety, optimizing resources and promoting digitalization and innovation in the areas in which Repsol operates.

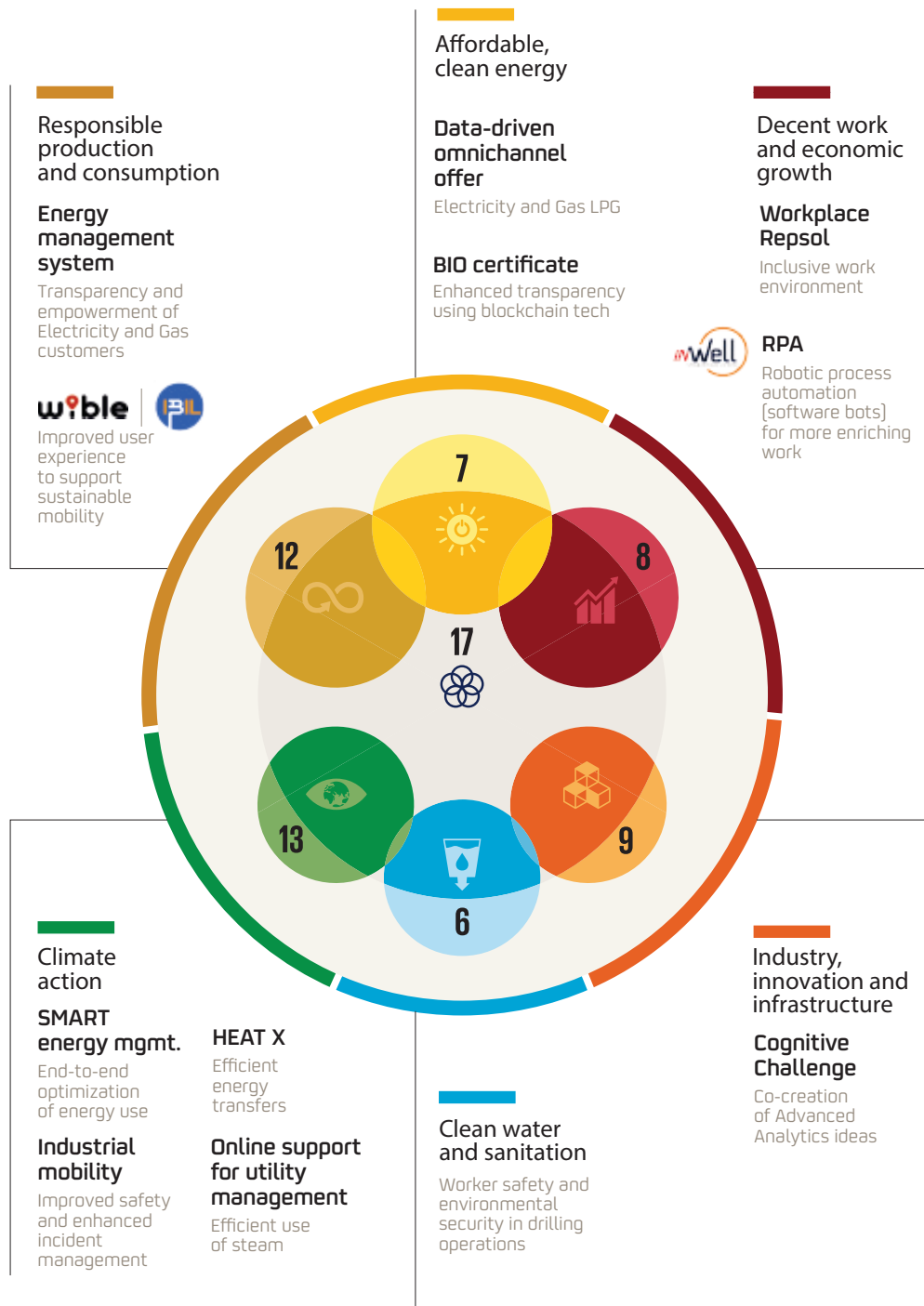
GSP

2022

Target:

Complete the roll-out of the digitalization program across the Company, ensuring that >30% of digital initiatives have an impact on sustainability.

Digital initiatives with an impact on sustainability



In **2019**
+ 190 digital initiatives
+ 1,000 professionals involved

In Exploration and Production, worth particular note is the implementation of remote control operations centers, which makes it possible to connect all drilling equipment together using a single platform and state-of-the-art machine learning tools, making gains in efficiency and increasing the safety of operations. Along these lines, the development of virtual models of equipment, facilities and entire plants makes it possible to predict fault conditions and simulate their performance with a view to determining the best option to be implemented at the actual asset.

In the industrial areas, Refining and Petrochemicals, digital autonomous plant products have been designed that increase the security of operations and industrial mobility applications, helping to georeference and catalog incidents automatically, reducing repair times, improving safety and minimizing the impact on the environment.

Another is Smart Energy Management, which makes it possible to identify deviations of energy consumption with regard to the optimum in real time, proposing actions to correct them and reduce energy consumption.

In the Commercial area, Artificial Intelligence is used to support the Company's sustainable mobility initiatives by developing applications that make it possible to bring the client closer to Repsol's new range of low-carbon products.

The Company is also experimenting with Blockchain technology to promote transparency, improve traceability and identify new business models. This technology can revolutionize the way that emissions mitigation initiatives are measured, reported on and verified, which are an essential part of supervising progress with the implementation of emissions reduction commitments.

6.6. Responsible tax policy

Repsol is aware of its responsibility for the social and economic development of the countries where it operates and knows that the taxes it pays support development and welfare.

Therefore, the commitments assumed in the Group's tax policy result in responsible payment of taxes through application of good practices in the management of our tax affairs, transparency and the promotion of cooperative relationships with governments, while avoiding material risks and unnecessary disputes.

This tax policy, which is aligned with the mission and values of the Company and the Sustainable Development Goals, aids our being recognized as a Company that practices integrity and transparency in our tax affairs.

Repsol takes on a commitment to the best practices of responsible taxation and tax governance, through the voluntary monitoring of internationally accepted principles and recommendations (B-team, GRI 207, OECD standard for tax risk control). The effective compliance of such commitment is shown below:

PRINCIPLES OF RESPONSIBLE TAX MANAGEMENT⁽¹⁾

APPLICATION AND EVIDENCE OF COMPLIANCE

1 Accountability and governance:

Tax is a crucial part of corporate responsibility and is overseen by the Board of Directors.

- The Board of Directors approves the Tax Policy.
- The Board of Directors supervises the enforcement of the strategy and tax risk management.
- The Global Sustainability Plan contains tax objectives.

2 Compliance:

Compliance with tax legislation and payment in due time in the countries where we create value.

- Regulations and internal control processes to ensure compliance with tax obligations.
- Organizational structure and appropriate means for complying with tax obligations.
- Internal procedure for setting transfer prices aligned with the creation of value and the arms' length principle.

3 Business structure:

On commercial grounds of real substance. We do not seek abusive tax advantages.

- Corporate structure aligned with the business and adapted to legal requirements and corporate governance standards.
- Corporate streamlining.
- Non-use of special purpose entities in tax havens.

4 Relationships with authorities⁽²⁾:

Development of cooperative relations with tax authorities, based on mutual respect, transparency and trust.

- Application of the Spanish Code of Good Tax Practices.
- Submission of the voluntary report on tax transparency to the Tax Agency.
- Participation in the OECD's *International Compliance Assurance program (ICAP)*⁽³⁾⁽⁴⁾.
- Classification as an Authorized Economic Operator in the European Union.

5 Seeking and accepting of tax incentives:

With a view to ensure that they are transparent and consistent with the legislative and regulatory framework.

- Use of tax benefits in compliance with the letter and spirit of the regulations.
- Verification that the incentives applied are generally available to all economic operators.
- Support for the publication of oil contract tax incentives by authorities and governments.

6 Supporting effective tax system⁽⁴⁾:

National and international dialog with governments, business groups and civil society to support the development of an effective taxation system.

- Collaboration with international organizations (OECD, UN or EU), governments and NGOs.
- Participation in international responsible taxation and tax governance initiatives (*B-Team*).

7 Transparency:

Regular provision of information to our stakeholders about our strategy and the taxes we pay (investors, policy makers, employees, civil society, and the general public).

- Pacesetters in Spain in terms of tax transparency according to reports published by different observatories.
- Publication of tax payments by country and in our Country by Country Report.
- Detailed tax information at www.repsol.com and annual reports.

(1) In line with the Principles defined by the *B-Team* (group of companies that seek to catalyze sustainable development and, in particular, responsible taxation and good governance in tax matters. For further information, see www.bteam.org)

(2) Repsol maintains a good relationship with the main tax administrations in the countries where it pays tax (Canada, Spain, Netherlands, Portugal, United Kingdom, Singapore, etc.), participating at different forums promoting transparent collaboration with the mutual objective of facilitating the application of the taxation system, improving fiscal certainty and reducing litigation. For further information, see www.repsol.com

(3) OECD initiative that seeks to enhance cooperation between the tax authorities to supervise tax risks at multinational groups, mainly in terms of transparency and permanent establishments. Repsol was supervised by the tax authorities of Spain, the United States, Canada, the Netherlands and the United Kingdom.

(4) Repsol is a member of several of the subcommittees created by the UN's Committee of Experts on International Cooperation in Tax Matters, which discuss and draw up tax guides for the authorities in developing countries. Repsol also sits on the tax committee of the OECD's *Business and Industry Advisory Committee (BIAC)*.

Repsol applies responsible tax policies and practices.



Principles of our tax policy

Responsible compliance, Tax efficiency and Protection of corporate interests

Cooperative relations, Transparency, Prevention of tax risks.

Certified good tax practices

Having taken part in the OECD's first ICAP program, Repsol was certified by the tax authorities of the main jurisdictions where it operates as a low-risk taxpayer due to its good tax practices.

Public Country by Country Report

As part of its commitment to transparency, Repsol has published its "Country by Country Report" on www.repsol.com.

Tax contribution and impact

In 2019, Repsol paid more than **€13,052 million in taxes** and similar government charges and filed close to 45,000 tax returns in more than 50 countries. Details of **payments by country** can be found in Appendix III of this Report and at www.repsol.com, but are summarized below:

Profit generated and taxes effectively paid by continent⁽¹⁾

Millions of euros	Tax burden					Taxes collected					Total 2019	Total 2018
	Profit 2019 ⁽²⁾	Profit 2018 ⁽²⁾	TOTAL	Income tax	Other income taxes	TOTAL	VAT	Hydrocarbons tax ⁽³⁾	Other			
Europe	881	1,257	858	341	517	9,696	3,187	6,094	415	10,554	11,105	
Latam & Caribbean	12	303	526	129	397	637	279	290	68	1,163	1,161	
Asia and Oceania	(331)	628	598	226	372	35	1	0	34	633	600	
North America	(4,525)	42	100	12	88	67	(5)	0	72	167	168	
Africa	146	111	528	458	70	7	(3)	1	9	535	566	
TOTAL	(3,816)	2,341	2,610	1,166	1,444	10,442	3,459	6,385	598	13,052	13,600	

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

(2) Net profit after tax and non-controlling interests, including the profit of joint ventures and other companies whose operations are managed as if they were joint ventures (for further information, see Appendix I), in addition to income from discontinued operations.

(3) Hydrocarbons tax. Includes receipts from logistics operators where the Company is ultimately liable for payment.

Transparency

Aware of the importance of its tax affairs, Repsol makes detailed tax information available to the public on its website ["Responsible tax policy" at www.repsol.com].

Presence in tax havens

Currently, there is no active controlled company registered in a tax haven within the Repsol Group. Participation in companies formed in tax havens is shown in the following table:

Group companies and non-controlling interests in tax havens

Company	Jurisdiction	Share	Status	Total income (€M)	Before profit (€M)	Nominal income tax rate	Profit tax accrued (€M)
Greenstone Assurance, Ltd. ⁽¹⁾	Bermuda	100%	Dormant	0.03	(0.07)	0%	0
Oil Insurance Ltd. ⁽²⁾	Bermuda	5.54%	Active	23.65	(3.45)	0%	0
Oleoducto de Crudos Pesados (OCP) Ltd. ⁽³⁾	Cayman Islands	29.66%	Active	27.36	26.79	0%	0
Transasia Pipeline, Co. ⁽⁴⁾	Mauritius	15%	Active	0.89	(6.15)	15%	(1.89)

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

(1) Runoff insurer that only settles risks taken on in the past.

(2) Mutual insurer of the Oil&Gas industry that covers Group risks from Bermuda, a common jurisdiction for Upstream business asset reinsurance. Latest available figures are for 2018.

(3) Company under an international joint venture agreement to channel interests in an Ecuadorian operating company that manages oil infrastructure (Oleoducto Crudos Pesados).

(4) Joint venture to channel interests in an Indonesian operating company that manages oil infrastructure. Amounts are for the year 2018.

Repsol is committed to not having a presence in tax havens, except for legitimate business reasons. In the event it should have a presence in a tax haven, the following is required: (i) authorization by the Board of Directors; (ii) performance of business activities; (iii) the application of the Group's general standards and procedures; and (iv) full transparency and cooperation with public authorities.

This commitment extends to the reduction of our presence in territories classified as non-cooperative tax jurisdictions on the EU list and other territories considered contentious for tax purposes by civil society organisations, although not included on official lists. In recent years, we have significantly reduced our presence in tax havens. Detailed information about our presence in tax havens and other controversial territories is available at www.repsol.com.

GSP
20
20

Target:
Eliminate presence in tax havens.

GSP
20
20

Target:
Promoting cooperative relations and seeking out amicable solutions.

6.7. Ethics and compliance

Repsol has in place a range of procedures and an overarching action framework designed to ensure that internal and external duties and obligations are properly fulfilled. The Company's compliance function reinforces compliance culture across the Group and improves our ability to identify ethics and compliance risks. We focus especially on anti-corruption measures, money laundering and terrorist financing prevention, crime prevention, international sanctions, antitrust rules and personal data protection.

Ethics and Compliance	2019	2018
Number of employees receiving online training on Code of Ethics and Conduct ⁽¹⁾	18,395	16,687
Number of communications received through the ethics and compliance channel	66	60
Number of corruption mitigation controls (CPM)	432	311
Number of audit projects related to compliance with the Ethics and Conduct Code ⁽²⁾	25	33
Number of ICFR controls related to mitigation of fraud	1,046	1,046
Number of serious and very serious offenses due to breach of the Ethics and Conduct Code	373	379
Written warnings	10	8
Employment and wage suspensions	294	291
Resignations	-	2
Number of dismissals due to breaches of the Ethics and Conduct Code	69	76

(1) Includes anti-corruption training.

(2) Generally speaking, in all Internal Audit projects matters related to compliance with the Ethics and Conduct Code (ECC) are reviewed, although specific reviews of Code-related or corporate social responsibility-related matters were conducted in 25 projects in 2019.

Code of Ethics and Conduct

The **Repsol Code of Ethics and Conduct** was approved by the Board and applies to all directors, executives and employees, whatever the nature of their contractual relationship with us. The Code creates a frame of reference for understanding and putting into practice the Company's expectations as to each person's behavior, in light of the Group's principles of action. This year, Repsol ran a new training action on the Code of Ethics and Conduct

for all employees in an innovative and dynamic web series format. The material focuses on anti-corruption topics and personal data protection. In 2019 Repsol also introduced new rules to supplement the Code, dealing with gifts, hospitality, conflicts of interest and due diligence on third parties.

The Code of Ethics and Conduct is available at www.repsol.com.

The Company's Ethics and Compliance Committee manages the Repsol Group's system of oversight and compliance with the Code of Ethics and Business Conduct.

Our Ethics and Compliance Channel

(ethicscompliancechannel.repsol.com) is opened 24 hours a day, 7 days a week, and is managed by an outside service provider. Employees and third parties can communicate with the Ethics and Compliance Committee directly, and confidentially or anonymously, in any language, to raise queries and report breaches of the Code of Ethics and Compliance or the Crime Prevention Model.

Fight against corruption and bribery

In its **Anti-Corruption Policy**, Repsol commits to preventing corruption and bribery by conducting its affairs in accordance with prevailing laws and regulations in all respects and in all countries where it operates, rejecting corruption in any form.

The **Ethics and Compliance Committee** is also Repsol's Crime Prevention Unit for the purposes of Article 31a(2)(2) of the Spanish Criminal Code. Repsol's prevention framework and response mechanisms facing breaches of the Code of Ethics and Compliance or suspected criminal offenses within the scope of the Repsol Crime Prevention Model are structured around its policies titled "Crime Prevention Model Management"¹ and "Internal Investigations by the Ethics and Compliance Committee."

Repsol has a Crime Prevention Manual, which was updated this year in line with the latest development in criminal law. The Manual is designed to aid understanding of crime risk and the behavior expected of employees. In 2019, we ran a specific training program including in-person sessions for new executives, industrial facility managers and key personnel in certain countries (Peru, Bolivia

1. The Crime Prevention Model adopted by Repsol's management bodies is the prevention, detection and response system addressing potential criminal conduct within the organization. Corruption is one class of crime risk within the scope of the Model.

and Ecuador). A new online course addressed Crime Prevention officers and managers of related whistleblower channels.

Protection of Fair competition

The Repsol Group is firmly committed to complying with the regulations on the protection of competition in all its areas of action and in all countries it operates in and, therefore, this is a fundamental element of our Code of Ethics and Conduct

At Repsol, we believe in fair and effective competition in the market and we do not get involved in inappropriate practices that could limit free competition. Nor do we seek to obtain competitive advantages using unethical or illegal business practices.

Furthermore, the Company has been undertaking awareness raising actions, such as preparing materials and face-to-face training. The Repsol

Group has a mailbox and channel available 24 hours a day, 7 days a week through which any employee and/or third party can file any query concerning compliance with the regulations on the protection of competition.

6.8. Supply chain

Supply chain

Management of the supply chain has a significant impact on the generation of jobs and local economic development. It must be managed sustainably to satisfy the expectations of communities in which the company operates.

Repsol's management system ensures compliance with ethical, employment, environmental, security and social standards, and guarantees risk management as follows:

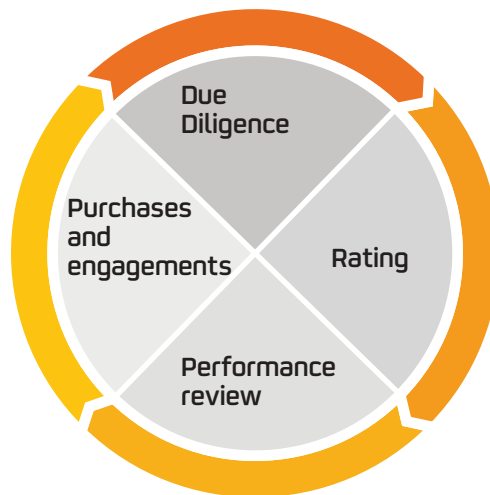
Supply chain risk management

Due Diligence

We examine matters relating to ethics, integrity, anti-corruption, sustainability, and more. Suppliers are required to adhere to the **Code of Ethics and Conduct for Suppliers**, which sets out ethical and social responsibility undertakings.

Purchases and engagements

In high-risk activities, bids are also considered in light of safety and environmental concerns. All suppliers subscribe to our **General Terms of Trade**, which covers safety, environmental, ethical and integrity matters.



Rating

Suppliers providing services and materials involving a higher degree of risk in economic factors are assessed on **quality, safety, environment, and technical aspects** as part of a continuous process. Furthermore, **rating audits** are performed.

Performance review

In the course of our relationship with a supplier and at contract expiration, **we assess their performance as to safety, environment, the community, human rights and management** to ensure that they met their commitments.

Environmental and social assessment of suppliers

Aspects of integrity, corruption and bribery were verified in 2019 by means of the Thomson Reuters external service World Check One on 5,733 suppliers. In 2019, a total of 67 supplier assessment audits were performed using the Repsol protocol, and among other aspects these carried out an on-site check with respect to human rights. 2 social audits were performed in 2019. 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, 2,605 assessments were carried out in 2019 on 1,248 suppliers and contractors with respect to a range of environmental, employment, social and integrity issues.

Indirect economic impact. Encouragement of local contracts

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, 81% of total 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.

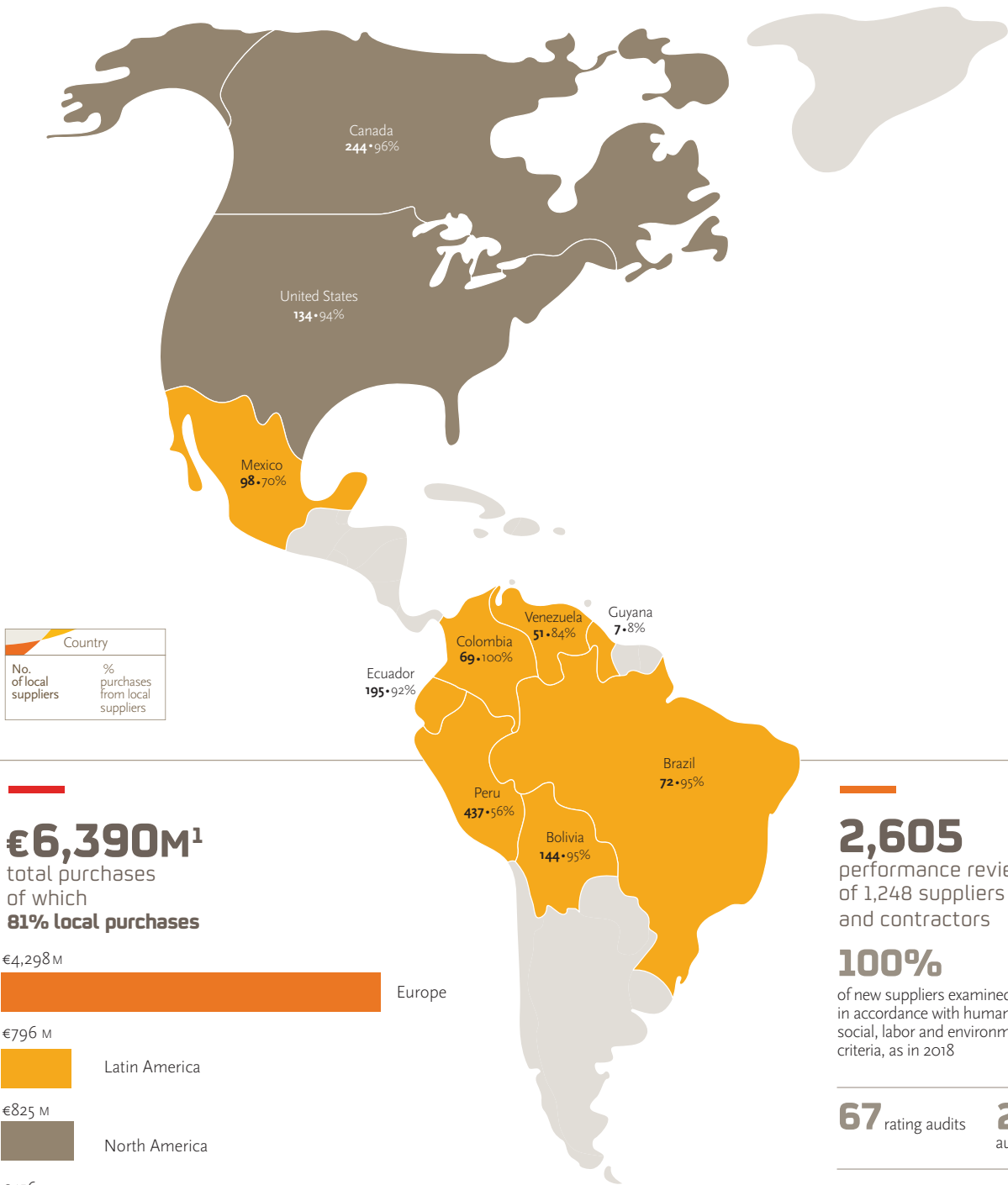
Product safety

The management of safety throughout the life cycle of the products that Repsol sells is a key aspect for the company.

Safety is present throughout all phases, from design to the marketing of the products. Repsol has internal regulations in this field that establish the requirements for ensuring risks are appropriately managed:

- During design, by studying the possible adverse effects of products, identifying their uses and establishing risk management measures.
- During procurement, gathering information on raw materials.
- During operations, by means of the inherently safe design of facilities, the assessment of risks during operations and waste management.
- Safety measures are established for transportation. These internal regulations also include the requirement that when marketing a product, it must be accompanied by the necessary information to ensure that the customers can adopt the measures to handle products safely.

Furthermore, internally, a dedicated tool is in place that provides employees with product safety information.



€6,390M¹
total purchases
of which
81% local purchases

€4,298 M



€796 M



€825 M



€456 M



€11 M



€4 M



2,605
performance reviews
of 1,248 suppliers
and contractors

100%
of new suppliers examined
in accordance with human rights,
social, labor and environmental
criteria, as in 2018

67 rating audits **2** social
audit

100%
of contracts include human
rights, anticorruption
and environmental clauses, as in 2018

0 breaches of contract
due to security reasons, as in 2018

En 2018, **42** qualification audits were performed, **4** of them were social audits. **3,060** performance reviews were performed on **1,347** suppliers and contractors and **3,768** suppliers were qualified. Purchases were made for a total of **€5,758 M** from **4,879** suppliers, **73%** of which were local and **69%** of this sum is attributable to local suppliers.

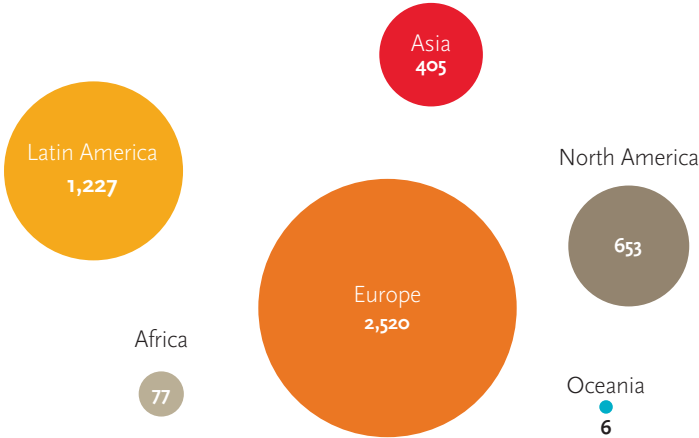
1. In 2019, the purchase reporting criteria was changed to the Total Amount Awarded rather than the Annualized Amount Awarded, as this is considered to be more representative of actual spending in the country. Furthermore, the Rating data point includes the number of suppliers rather than the number of processes. The 2018 data has been recalculated based on these new criteria.



1,423
approved suppliers²

4,888
suppliers worldwide
74% of which local suppliers³

assessment of health and safety impacts on **100% of significant products** and services



2. In 2019, as was the case 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. Repsol defines "local suppliers" as companies established or nationalized under the laws of the country in which Repsol undertakes operations as part of which the supply will be made or service provided.

3.3% ↑

global GDP
in 2020
[estimated]

7. Outlook

7.1. General outlook

Macroeconomic outlook

In 2018 and 2019, world economic growth has slowed down, particularly in the industrial sector. Furthermore, concern about the potential contagion in the services sector has seen central banks react with stimulus measures to prop up domestic demand. Against this backdrop, the latest forecasts of the International Monetary Fund (IMF WEO January 2020) estimate that global growth will recover to 3.3% in 2020 (2.9% in 2019).

The growth of advanced economies is expected to stabilize at around 1.6% in 2020. This stability hides a slight upturn in the Eurozone (1.3% vs. 1.2% in 2019) and a larger slowdown in the USA (2.0% vs. 2.3% in 2019) on account of better fiscal performance.

The upturn in world growth can be attributed to the emerging economies, where it is expected that the growth rate will bottom out at 3.7% in 2019 before increasing to 4.4% in 2020. In any case, the upturn in 2020 is due to the greater support provided by monetary policies and the recovery of countries under stress (Argentina, Turkey, Brazil, Mexico, India and Russia).

Activity is expected to decrease (greater likelihood that growth is lower than the base scenario). Amongst the risks, the possibility of a more sudden slowdown in China is worth particular note, given the current context of excessive indebtedness. Another risk would be the tightening of financial conditions due to the increase in commercial protectionism and uncertainties, which would be reflected in an additional drop in consumption and investment, generating a vicious circle between the real economy and financial markets.

Macroeconomic outlook. Key figures

	Real GDP growth (%)		Average inflation (%)	
	2020	2019	2020	2019
Global economy	3.3	2.9	3.4	3.6
Advanced countries	1.6	1.7	1.4	1.7
Spain	1.6	2.0	0.7	1.0
Emerging countries	4.4	3.7	5.1	4.6

Source: IMF (*World Economic Outlook* January 2020) and Repsol Research Unit.

Energy sector outlook

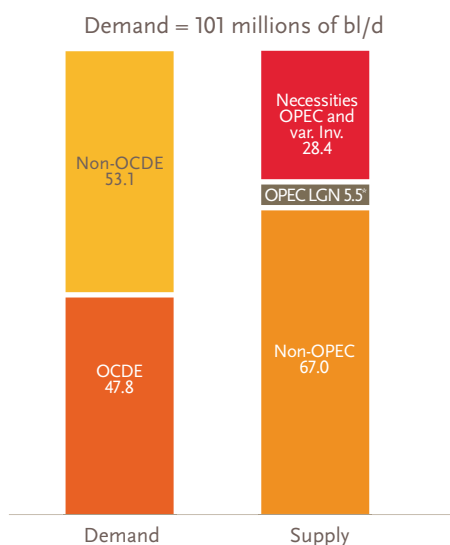
Short term

At the beginning of the year we expected that the gap between demand and supply seen in 2019 would narrow to form a closer balance in the oil market. However, we have had to revise that forecast in light of the outbreak of novel coronavirus, Covid-19, in Wuhan, China. Analysts' early estimates of the impact of Covid-19 on oil demand suggest a decline in the range of 200 kbb/d to 500 kbb/d in average growth for the year, concentrating in the first quarter and, to a lesser extent, the second quarter. On the supply side, too, output is falling off: around 1.5 Mbb/d is being kept out of the market by geopolitical and technical difficulties in Libya, Nigeria, Iraq and Kazakhstan.

OPEC's response to the expected drop in demand is yet to be seen.

The International Energy Agency (IEA), after revising its estimate of global demand growth downward by almost 500 kbb/d by reason of Covid-19, expects global demand in 2020 to rise by +830 kbb/d to reach 101 Mbb/d. Consumption by non-OECD countries is set to grow by +630 kbb/d, while OECD economies will contribute an increase of +200 kbb/d. The OECD category has seen positive growth in five of the past six years (with a slight drop in 2019). The IEA expects non-OPEC producers to raise output in 2020 by +205 Mbb/d, with just over half of the increase coming from the United States +1.07 Mbb/d forecast for 2020 vs. +1.67 Mbb/d growth in 2019) and more modest contributions from Brazil and Norway. OPEC, for its part, may agree on fresh output cuts to counter the effect of Covid-19 on demand, although in its latest report the IEA expects OPEC crude oil requirements in 2020 to reach 28.4 Mbb/d, almost 1.3 Mbb less than the average for 2019.

World balance of supply/demand 2020



Source: IEA and Repsol Research Unit

(*) OPEC natural gas liquids excluded from output cuts.

As to **gas price behavior** in the short term, the weakness seen in 2019 is expected to continue into 2020. The current oversupply will be relieved to some extent by a slowdown in production in the United States. On the demand side, however, the mild winter so far and the coronavirus outbreak in China (the main driver of LNG demand) will put downward pressure on US gas exports, which will not not be easy to place elsewhere in Asia. Nonetheless, domestic demand is expected to be strong, especially for electricity generation and exports to Mexico.

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, followed by coal (27%) and natural gas (22%).

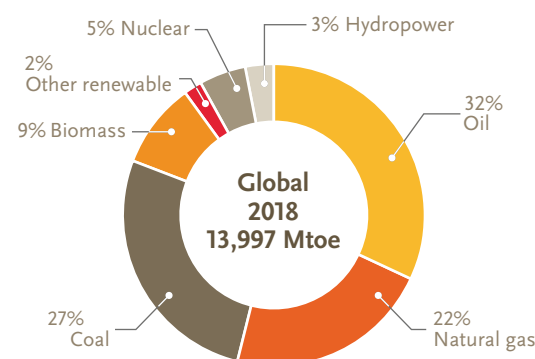
In the coming years, the world should move towards a more sustainable scenario in which all energies are involved in the energy matrix, hand in hand with technology and innovation. In this connection, the IEA has reflected a scenario of sustainable development (SD) in its 2019 *World Energy Outlook*. In this scenario, the Agency believes the policies required to achieve sustainability on three levels: 1) universal access to modern energy in 2030; 2) limitation of greenhouse gas emissions to comply with the objectives of the Paris Agreement; and 3) reduction in emissions of pollutant gases associated with energy and significant improvement in air

quality. This scenario entails achieving the UN's Sustainable Development Goals relating to the use of energy, the fight against climate change and the fight against pollution.

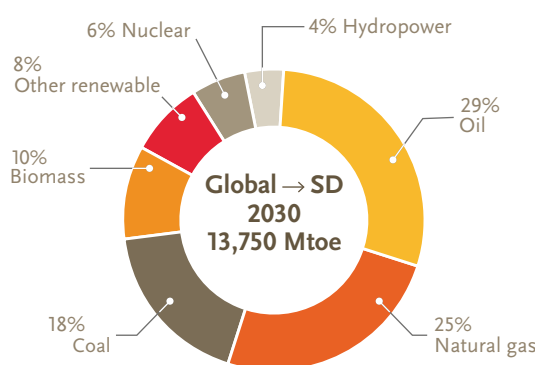
In this scenario, total primary energy employed would fall at an average pace of 0.1% per year, falling from 13,997 million tons of oil equivalent in 2019 to 13,750 million in 2030. Oil would contract by 3 percentage points in the energy matrix and coal by 9 percentage points, whilst natural gas would be the only fossil fuel to increase its share in the matrix, up from 22% to 25% in 2030. Despite the gas power generation sector reducing its consumption, its capacity would grow in comparison to the current situation, as gas would increase its capacity to make the system more flexible.

↑ 3%
Natural gas in the energy matrix in 2030 vs. 2018

World primary energy matrix in the IEA SD scenario



Source: IEA and Repsol Research Desk



Source: IEA and Repsol Research Desk

In the IEA's SD scenario, renewable energies (excluding hydroelectricity) experience significant growth, increasing their share in the primary energy matrix by 6 percentage points by 2030 to 8%, which translates to average yearly growth of 13% during this period.

720
KBoe/d
in 2019

7.2. Outlook for business

In 2020, all areas of the Company will focus on fulfilling the commitments under the Updated Strategic Plan for the period 2018-2020 (as to shareholder return, profitable growth of Upstream and Downstream businesses, and new businesses emerging from the energy transition), within the framework of our bid to be a zero net emissions company by 2050. We set ourselves this ambitious goal in December 2019 (see section 2.4), becoming the first oil and gas company to do so.

The **Upstream** business will prioritize creating value over production growth, focusing on the rotation and active management of its portfolio that offers high-quality barrels and cash generation.

In 2020, our organic investment is expected to be around \$2,000 million with the aim of developing productive assets, with the main efforts focused on onshore projects or in shallow waters. By countries, the investment will be concentrated especially in the US, Norway, Trinidad, the UK, Brazil, Colombia, Russia, Mexico and Malaysia.

The **Downstream** business will move towards decarbonization by promoting of projects associated with the energy transition, in addition to generating new opportunities to create value. The main objectives are:

- In Refining and Chemical facilities, continue increasing plant reliability and flexibility, the orientation toward decarbonization and the introduction of energy efficient measures, which will contribute towards the continuous improvement of margins.
- Attracting value in the face of the new regulatory scenario set by the International Maritime Organization (IMO) concerning the specifications for marine fuel by the Refining and Trading businesses, through the optimization of refinery production and harnessing opportunities provided by the volatility of the market.
- Promotion of projects associated with the energy transition. In Electricity and Gas, the company will continue to expand its customer portfolio and implement the renewable energy generation projects currently in the development phase.
- In Mobility, make progress with our strategy as a multi-energy supplier focused on the customer, with an integrated and differentiated value proposition, service and maximize the value of the business and consolidate our competitive position, optimizing operations.

- Continue with the international expansion of other businesses such as Lubricants, Mobility, Trading and LPG.

Repsol's clear commitment to projects associated with the energy transition and other incentives to expand the *Downstream* business are reflected in the investor efforts anticipated; in 2020, these are expected to come to €1.9 billion.

In 2020, the focus will also stay on efficiency in **corporate areas** (Corporate), automating processes and contributing to the profitability of the entire organization.

In line with the commitment to improving shareholder returns, in 2020, the dividend, paid out using the scrip dividend formula, is due to increase to €1 per share, with reductions in capital through the amortization of treasury shares that will prevent the dilution of those choosing to receive their payout in cash. It is also worth note that, pursuant to the decision taken in June 2019 by the Board of Directors, the additional amortization of 5% of the Company's share capital at December 31, 2018 shall be submitted for approval at the Annual General Meeting.

In the current environment, Repsol expects that in 2020 it will be able to generate cash to finance its investment needs and remunerate its shareholders.

Repsol will continue to make progress with the Digital Transformation, promoting business models and projects that break the mould in the energy sector, with a view to offering solutions and offering value to the entire value chain. In 2020, Upstream will continue to work on projects that seek to reduce the profitability threshold, optimizing the development of assets, improving the efficiency of operations and guaranteeing safety. In the industrial areas, the aim will be to maximize the margin, improving integrated planning and programming, committing to operational excellence, reliability and operational safety. In the commercial businesses, digitalization projects seek to maximize the cash flow through integrated planning and operations, an analytical price strategy, workforce training, new business models and a customer-oriented approach. Finally, the aim of Corporate projects is to improve efficiency and employee satisfaction through robotic process automation (RPA), an improved user experience, *Big Data and Advanced Analytics*.

As an additional lever, the 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.

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Appendix I. Alternative performance measures

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 Model¹ known as Alternative Performance Measures (APMs). APMs are measures which are "adjusted" compared to those presented under IFRS-EU or with Information on Oil and Gas Exploration and Production Activities², 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.

Certain APMs have been affected by the application of IFRS 16 (see Note 3.2.1 to the consolidated Financial Statements), which means that some of the measures compared between the periods are less representative.

1. Financial performance measures

Adjusted net income

Adjusted net income is the key financial performance measurement which Management (Executive Committee) consults when making decisions.

Repsol presents its segment results including joint ventures 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* (CCS³) net of taxes and the result from investments minority interests without including specific income and expenses (**Specific items**) or the so-called **Inventory effect**. **Financial income** corresponds to the adjusted net income under "Corporate and other".

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

Inventory effect

This is the difference between the **Result from continuing operations at CCS** and the result calculated as the average weighted cost (AWC, which is an inventory valuation method used by the company to determine its results in accordance with European accounting regulations). It only affects the *Downstream* segment, in that for the **Result from continuing operations at CCS**, the cost of volume sold during the period is determined in accordance with supply costs, and production during the year. Apart from the above effect, the **inventory effect** includes other adjustments to the valuation of inventories (write-offs, economic hedges) and is presented net of taxes and minority interests. Repsol management considers that this 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 4, "Segment reporting," to the consolidated Financial Statements.

2. The oil and gas 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. The Current Cost of Supply (CCS), 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 accepted under European accounting regulations, yet does enable comparability with other sector companies as well as monitoring businesses. As a result of the foregoing, Adjusted Net Income does not include the so-called Inventory Effect. Profit from continuing operations at the current cost of supply (CCS) is equal to EBIT CCS.

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, provisions for risks and expenses and other major income or expense items outside the ordinary management of the businesses. Special items are presented net of taxes and minority interests.

We present below the special items for the fourth quarter of 2019 and 2018 and the annual aggregate.

Millions of euros	Annual aggregate		Fourth Quarter	
	2019	2018	2019	2018
Divestments	49	83	4	24
Workforce restructuring	(64)	(55)	(31)	(13)
Impairment	(4,867)	(684)	(4,863)	(559)
Provisions and other	(941)	301	(822)	423
Discontinued operations	-	412	-	-
Total	(5,823)	57	(5,712)	(125)

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

Millions of euros	Fourth Quarter											
	Adjustments											EU-IFRS profit/loss
	Adjusted net income		Reclassification of Joint Ventures		Special items		Inventory Effect ⁽¹⁾		Total Adjustments			
2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	
Operating income	765	1,300	124	(611)	(6,408)	(487)	37	(480)	(6,247)	(1,578)	(5,482)	(278)
Financial result	(148)	(172)	21	39	(2)	24	-	-	19	63	(129)	(109)
Share of profit (loss) of entities accounted for using the equity method - net of dividends	6	(24)	70	610	6	72	-	1	76	683	82	659
Net income before tax	623	1,104	215	38	(6,404)	(391)	37	(479)	(6,152)	(832)	(5,529)	272
Income tax	(211)	(464)	(215)	(38)	691	266	(10)	124	466	352	255	(112)
Profit from continuing operations	412	640	-	-	(5,713)	(125)	27	(355)	(5,686)	(480)	(5,274)	160
Income attributed to minority interests for continuing operations	(7)	(8)	-	-	1	-	(2)	18	(1)	18	(8)	10
Net income from continuing activities attributable to the parent	405	632	-	-	(5,712)	(125)	25	(337)	(5,687)	(462)	(5,282)	170
Profit from discontinued operations	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL NET INCOME ATTRIBUTABLE TO THE PARENT	405	632	-	-	(5,712)	(125)	25	(337)	(5,687)	(462)	(5,282)	170

(1) The inventory effect represents an adjustment to "Supplies" and "Changes in inventory of finished goods" of the income statement under IFRS-EU.

Millions of euros	At December 31											
	Adjustments										EU-IFRS profit/loss	
	Adjusted net income		Reclassification of Joint Ventures		Special items		Inventory Effect ⁽¹⁾		Total Adjustments			
2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	
Operating income	3,661	4,396	(529)	(1,204)	(6,343)	(633)	(40)	(106)	(6,912)	(1,943)	(3,251)	2,453
Financial result	(390)	(462)	111	130	(22)	159	-	-	89	289	(301)	(173)
Share of profit (loss) of entities accounted for using the equity method - net of dividends	22	15	324	965	5	72	-	1	329	1,038	351	1,053
Net income before tax	3,293	3,949	(94)	(109)	(6,360)	(402)	(40)	(105)	(6,494)	(616)	(3,201)	3,333
Income tax	(1,227)	(1,569)	94	109	536	46	9	28	639	183	(588)	(1,386)
Profit from continuing operations	2,066	2,380	-	-	(5,824)	(356)	(31)	(77)	(5,855)	(433)	(3,789)	1,947
Income attributed to non-controlling interests for continuing operations	(24)	(28)	-	-	1	1	(4)	9	(3)	10	(27)	(18)
Net income from continuing activities attributable to the parent	2,042	2,352	-	-	(5,823)	(355)	(35)	(68)	(5,858)	(423)	(3,816)	1,929
Profit from discontinued operations	-	-	-	-	-	412	-	-	-	412	-	412
TOTAL NET INCOME ATTRIBUTABLE TO THE PARENT	2,042	2,352	-	-	(5,823)	57	(35)	(68)	(5,858)	(11)	(3,816)	2,341

(1) The inventory effect represents an adjustment to "Supplies" and "Changes in inventory of finished goods" of the income statement under IFRS-EU.

EBITDA:

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

EBITDA is calculated as Operating Income + Amortization + Impairment as well as other items which do not represent cash inflows or outflows from transactions (restructuring, capital gains/losses from divestment, provisions etc.). Operating income corresponds to the result from continuing operations at weighted average costs (WAC). In cases in which the **Result from continuing operations at current cost of supply** (CCS) is used, it is considered **EBITDA at CCS**.

Millions of euros	Fourth Quarter							
	Group Reporting Model		Joint Ventures reclassification and others		Inventory Effect		IFRS-EU ⁽¹⁾	
	2019	2018	2019	2018	2019	2018	2019	2018
Upstream	1,058	1,224	(348)	(493)	-	-	710	731
Downstream	822	469	(9)	(50)	-	-	813	419
Corporate and other	(28)	(13)	(18)	4	-	-	(46)	(9)
EBITDA	1,852	1,680	(375)	(539)	-	-	1,477	1,141
EBITDA CCS	1,815	2,160	(375)	(539)	37	(480)	1,477	1,141

(1) Corresponds to "Profit before tax" and "Result adjustments" in 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⁾	
	2019	2018	2019	2018	2019	2018	2019	2018
<i>Millions of euros</i>								
Upstream	4,255	4,801	(1,664)	(1,782)	-	-	2,591	3,019
Downstream	3,057	2,859	(47)	(58)	-	-	3,010	2,801
Corporate and other	(151)	(147)	(21)	20	-	-	(172)	(127)
EBITDA	7,161	7,513	(1,732)	(1,820)	-	-	5,429	5,693
EBITDA CCS	7,201	7,619	(1,732)	(1,820)	(40)	(106)	5,429	5,693

(1) Corresponds to "Profit before tax" and "Result adjustments" in 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).

ROACE ("Return on average capital employed") is calculated as: (Adjusted Net Income - considering the expense for operating leases for the corresponding instalments specified in the contracts, instead of the expense for amortization of the right

of use recognized under IFRS 16, excluding Finance Income + Inventory Effect + Special items) / (Average **Capital employed** of the period from continuing operations, which 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 (<i>Millions of euros</i>)	2019	2018
Operating profit EU-IFRS	(3,251)	2,453
Joint Ventures reclassification	529	1,204
Income tax ⁽¹⁾	(780)	(1,489)
Share of profit (loss) of entities accounted for using the equity method - net of tax	27	88
Impact IFRS 16	(46)	-
I. ROACE result at average weighted cost	(3,521)	2,256

DENOMINATOR (<i>Millions of euros</i>)	2019	2018
Total equity	25,337	30,914
Net Debt	4,220	3,439
Capital employed at year end	29,556	34,353
II. Average capital employed ⁽²⁾	31,955	33,730
ROACE (I/II)	(11.0)	6.7

(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.

ROACE with leases is calculated as: (Adjusted Net Income, excluding Financial Result + Inventory Effect + Special Items) / (Capital employed during the continuing operations period, which equals Total Equity + **Net Debt with leases**). It includes that which corresponds to joint ventures or other companies whose operations are generated as such.

NUMERATOR (Millions of euros)		2019
Operating profit EU-IFRS		(3,251)
Joint Ventures reclassification		529
Income tax ⁽¹⁾		(780)
Share of profit (loss) of entities accounted for using the equity method - net of tax		27
I. ROACE result at weighted average cost		(3,475)

DENOMINATOR (Millions of euros)		2019
Total equity		25,209
Net Debt (with leases)		8,083
Capital employed at year-end (with leases)		33,292
II. Average capital employed ⁽²⁾		35,685
ROACE with leases (I/II)		(9.7)

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

(2) Corresponds to the average balance of capital employed at the beginning and end of the year.

2. Cash flow measures

Cash flow from operations, 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**, the **Free cash flow** and **Cash 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 statements of cash flow prepared under IFRS-EU:

Millions of euros	Fourth Quarter					
	Adjusted cash flow		Joint venture reclassification and other		IFRS-EU cash flow statement	
	2019	2018	2019	2018	2019	2018
I. Cash flows from / (used in) operating activities (cash flows from operations)	1,763	2,077	(21)	(317)	1,742	1,760
II. Cash flows from investment activities	(1,515)	(2,221)	7	153	(1,508)	(2,068)
Free cash flow (I+II)	248	(144)	(14)	(164)	234	(308)
Cash flow generated	(502)	(1,017)	(6)	(163)	(508)	(1,180)
III. Cash flows from/(used in) financing activities and others ⁽¹⁾	(996)	(332)	38	125	(958)	(207)
Net increase/(decrease) in cash and cash equivalents (I+II+III)	(748)	(476)	24	(39)	(724)	(515)
Cash and cash equivalents at the beginning of the period	3,966	5,497	(263)	(196)	3,703	5,301
Cash and cash equivalents at the end of the period	3,218	5,021	(239)	(235)	2,979	4,786

Millions of euros	At December 31					
	Adjusted cash flow		Joint venture reclassification and other		IFRS-EU cash flow statement	
	2019	2018	2019	2018	2019	2018
I. Cash flows from / (used in) operating activities (cash flows from operations)	5,837	5,428	(988)	(849)	4,849	4,579
II. Cash flows from investment activities	(3,777)	(372)	(630)	(987)	(4,407)	(1,359)
Free cash flow (I+II)	2,060	5,056	(1,618)	(1,836)	442	3,220
Cash flow generated	(687)	2,706	(1,578)	(1,832)	(2,265)	874
III. Cash flows from/(used in) financing activities and others ⁽¹⁾	(3,863)	(4,855)	1,614	1,820	(2,249)	(3,035)
Net increase/(decrease) in cash and cash equivalents (I+II+III)	(1,803)	201	(4)	(16)	(1,807)	185
Cash and cash equivalents at the beginning of the period	5,021	4,820	(235)	(219)	4,786	4,601
Cash and cash equivalents at the end of the period	3,218	5,021	(239)	(235)	2,979	4,786

(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.

Millions of euros	At December 31					
	Group Reporting Model		Joint venture reclassification and others		IFRS-EU	
	2019	2018	2019	2018	2019	2018
Cash and cash equivalents	3,218	5,021	(239)	(235)	2,979	4,786
Undrawn credit lines	1,818	2,265	(10)	(16)	1,808	2,249
Time deposits of immediate availability ⁽¹⁾	2,631	1,456	-	-	2,631	1,456
Liquidity	7,667	8,742	(249)	(251)	7,418	8,491

(1) Repsol contracts time deposits but with immediate availability, which are recorded under the heading "Other current financial assets" 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 generated as such.

Millions of euros	Fourth Quarter					
	Operating investments		Joint venture reclassification and other		IFRS-EU ⁽¹⁾	
	2019	2018	2019	2018	2019	2018
Upstream	915	550	(116)	(104)	799	446
Downstream	627	1,271	(13)	(39)	614	1,232
Corporate and other	14	34	-	-	14	34
Total	1,556	1,855	(129)	(143)	1,427	1,712

Millions of euros	At December 31					
	Operating investments		Joint venture reclassification and other		IFRS-EU ⁽¹⁾	
	2019	2018	2019	2018	2019	2018
Upstream	2,429	1,973	(499)	(365)	1,930	1,608
Downstream	1,376	1,831	(28)	(41)	1,348	1,790
Corporate and other	56	70	-	-	56	70
Total	3,861	3,874	(527)	(406)	3,334	3,468

(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 and **Net Debt with leases** are the main APMs used by management to measure the Company's level of debt. They are comprised of financial liabilities (including, as applicable, lease liabilities) less financial assets, cash and cash equivalents, and

the effect arising from net market valuation of financial derivative (ex - exchange rates). They include the debt corresponding to joint ventures and other companies operationally managed as such.

Millions of euros	Net Debt	Joint venture reclassification ⁽¹⁾	Balance sheet IFRS-EU
	Dec-19	Dec-19	Dec-19
Non-current assets			
Non-current financial instruments ⁽²⁾	130	823	953
Current assets			
Other current financial assets	2,655	137	2,792
Cash and cash equivalents	3,218	(239)	2,979
Non-current liabilities			
Non-current financial liabilities ⁽³⁾	(5,306)	(2,914)	(8,220)
Current liabilities			
Current financial liabilities ⁽³⁾	(5,313)	(801)	(6,114)
Items not included on the balance sheet			
Net mark to market valuation of financial derivatives (ex: exchange rate) ⁽⁴⁾	396	(348)	48
NET DEBT⁽⁵⁾	(4,220)	(3,342)	(7,562)
Non-current net leases payables ⁽⁶⁾	(3,372)	684	(2,688)
Current net leases payables ⁽⁶⁾	(491)	75	(416)
NET DEBT with leases	(8,083)		(10,666)

(1) Mainly includes the net financing of the Repsol Sinopec Brazil Group, broken down in the following sections: Cash and cash equivalents of 14 million euros, current financial liabilities from intra-group loans of 2,946 million euros and 624 million euros from leases.

(2) Corresponds to the consolidated balance sheet heading, "Non-current financial assets" without including equity instruments.

(3) Does not include lease liabilities.

(4) The net mark to market value of financial derivatives different from exchange rate derivatives has been eliminated from this section.

(5) Reconciliations of this figure for previous periods are available at www.repsol.com

(6) Includes collection rights from sub-leases amounting to 29 million euros (21 million euros long term and 8 million euros short term).

Gross Debt and **Gross Debt with leases** are measurements used to analyze the Group's solvency and include its financial liabilities (including, as applicable, lease liabilities) and the net fair value of

its exchange rate derivatives. They include the debt corresponding to joint ventures and other companies operationally managed as such.

Millions of euros	Gross debt	Joint venture reclassification	Balance sheet IFRS-EU
	Dec-19	Dec-19	Dec-19
Current financial liabilities ⁽¹⁾	(5,264)	(803)	(6,067)
Net valuation at the market rates of financial derivative, such as current exchange rate	40	-	40
Current gross debt	(5,224)	(803)	(6,027)
Non-current financial liabilities ⁽¹⁾	(5,235)	(2,914)	(8,149)
Non-current gross debt	(5,235)	(2,914)	(8,149)
GROSS DEBT⁽²⁾	(10,459)	(3,717)	(14,176)
Current lease liabilities	(499)	75	(424)
Non-current lease liabilities	(3,392)	683	(2,709)
GROSS DEBT with leases	(14,350)	(2,959)	(17,309)

(1) Does not include lease liabilities.

(2) Reconciliations of this figure for previous periods are available at www.repsol.com.

The following ratios are used by Group management to evaluate leverage ratios as well as Group solvency.

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

Debt coverage 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, without considering the lease expenses, divided by EBITDA. This ratio is a measurement that can determine the company's ability to cover interest payments with its EBITDA.

Millions of euros	Fourth Quarter					
	Group Reporting Model		Joint venture reclassification		NIIF-UE	
	Dec-19	Dec-18	Dec-19	Dec-18	Dec-19	Dec-18
Net interest ⁽¹⁾	48	73	12	(14)	60	59
EBITDA ⁽¹⁾	1,751	1,680	(347)	(539)	1,404	1,141
Interest cover	2.8 %	4.3 %			4.3 %	5.2 %

(1) Does not include the effect of IFRS 16 Leases.

Millions of euros	At December 31					
	Group Reporting Model		Joint venture reclassification		NIIF-UE	
	Dec-19	Dec-18	Dec-19	Dec-18	Dec-19	Dec-18
Net interest ⁽¹⁾	211	288	31	(58)	242	230
EBITDA ⁽¹⁾	6,806	7,513	(1,626)	(1,820)	5,180	5,693
Interest cover	3.1 %	3.8 %			4.7 %	4.0 %

(1) Does not include the effect of IFRS 16 Leases.

Appendix II.

Risk

Risk management

Repsol's Integrated Risk Management System - [SGIR]

Repsol has an Integrated Risk Management System designed to identify, analyze, and manage 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:

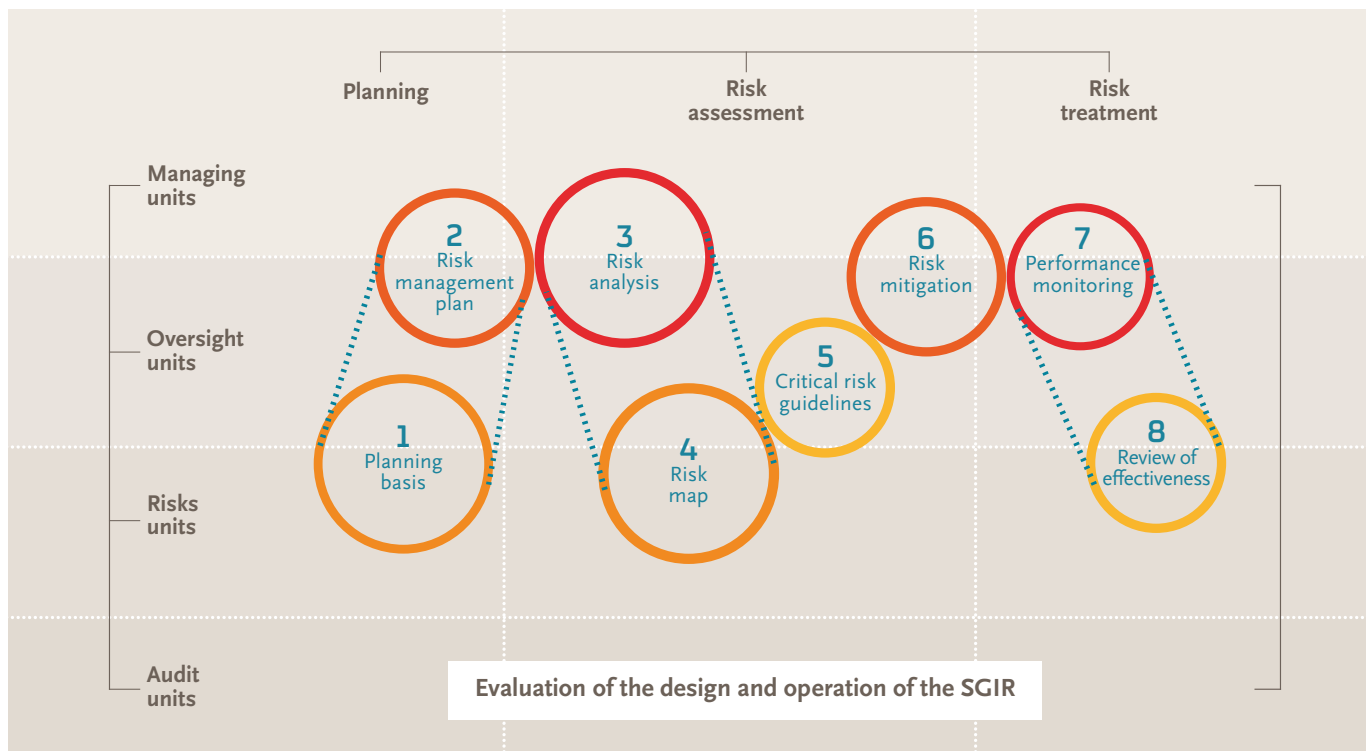
- Senior Management leads integrated risk management.
- The risk perspective is integrated into management and decision-making processes.
- Businesses and corporate areas play a role in the implementation of the model with different levels of responsibility and specialization (risk management units, 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.

ISO 31000 Risk Management - Principles and guidelines



Below are details on the Company bodies involved in the definition, implementation, monitoring and supervision of the SGIR, as well as their responsibilities:



In accordance with the risk management system, Repsol decides to what extent each of the identified risks is assumed, mitigated, covered or averted as far as possible. Among the main measures adopted by the Company are the following:

- Establishment of policies, standards, procedures, manuals and guidelines.
- Analysis and measurement of different risk-related variables, as well as the performance of an analysis of their sensitivity.
- Definition, monitoring and continuous evaluation of the design and operation of the Group's internal control and compliance¹ 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 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 ²in addition to an Internal Audit Unit

1. Repsol has an Integrated Internal Control model, inspired by the COSO reference framework, which consists, in addition to other tools, of the Group's formally developed Internal Control and Compliance Systems, including the Internal Financial Reporting Control System, the Regulatory Compliance Programme for the formal legal obligations of legal entities belonging to the Group and the Crime Prevention Model of the Group's Spanish companies.
2. The following areas are worth particular note: Sustainability, Corporate Security, Legal Counsel, Communications, CIO and CDO, Institutional Relationships, Strategy and Planning, Economic and Tax Matters, Financial Development and Rating Agencies, Technology and Corporate Venturing, Corporate Governance, People and Organization, Purchasing and Contracting, Technical Development and Safety and Environment E&P, Technical Industrial Area and Engineering.

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.

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 risks occurring in 2019, and considering the provisions of Note 15 regarding provisions and disputes, on Note 21 regarding impairment of assets and geostrategic risks, and on Note 23 regarding taxes, of the 2019 Financial Statements with the control systems employed by the Company having worked correctly, making it possible to manage these risks accordingly.

The main risks identified in section 2.3 of this document are detailed below:

Financial and market risks

Fluctuations in the reference price of hydrocarbons, derivative products and other commodities (electricity and the price of CO₂ emission rights)

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 and macroeconomic environment, OPEC influence, technological changes, the energy transition process or natural disasters.

On average, the price of Brent crude in 2019 stood at 64\$/bbl, 10% down on the 2018 average. On average, the HH gas price was 2.6\$/Mbtu in 2019, 16.1% down on the 2018 average. For more information regarding the evolution of hydrocarbon price in 2019, see section 3.2. of this report, and its expected evolution in 2020 in section 7.1.

The reduction in crude and gas 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 and gas reserves.

In turn, the price of international crude oil and its derivatives can impact the value of inventories stored in the Downstream segment. The price of finished products can also affect demand for them.

In addition to the macroeconomic environment, the scenarios associated with the energy transition process and the effects of climate change can affect the price of other commodities like electricity and CO₂ emission allowances.

Finally, it is worth considering that any potential deviations in price with regard to the Group's forecasts may also be beneficial.

<i>Competitive positioning</i>	The activity of the energy industry takes place in the context of a highly competitive sector. Such competition may be increased by a number of factors including the entry of new competitors, changes in market conditions, expiry of administrative concessions, technological obsolescence or insufficient differentiation. The combined effect of these factors may affect market share and margins.
<i>Drop in demand</i>	Should demand for crude oil, gas, electricity or oil derivatives drop beneath the Group's forecasts, the results of its main businesses would be adversely affected (E&P, Refining, Marketing, Chemicals, Trading, LGP, Electricity and Gas, etc.) as this would affect business volume. Amongst the factors that could affect demand, particular mention should be made of the slowdown in growth in countries where the Group is most exposed, trade tensions between the major powers and climate change and energy transition scenarios.
Regulatory and litigation risks	
<i>Administrative, judicial and arbitration proceedings</i>	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 15.2 of the consolidated Financial Statements.
<i>Regulatory risks:</i>	<p>The energy industry and the Group's activity is heavily regulated. The current regulatory framework affects aspects such as the environment, competition, taxation, employment, industrial safety and IT security, among others. Any changes that may be made to the applicable standards or their interpretation or any disputes in terms of compliance therewith, may adversely affect the business, results and financial position of the Repsol Group.</p> <p>In particular, the regulatory aspects that generate this exposure include tax regulations and their interpretation, the wide variety of environmental and safety regulations (environmental product quality, air emissions, climate change and energy efficiency, extraction technologies, water discharges, remediation of soil and groundwater and the generation, storage, transport, treatment and final disposal of waste materials), accounting and transparency regulations, competition rules, legal occupational regulations and data protection provisions.</p> <p>Furthermore, Repsol reports on proven oil and gas reserve estimates that involve inherent uncertainty in the assessment process that is subject to judgments and estimates (see Note 3 of the consolidated Financial Statements).</p> <p>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 in which it operates and/or companies or individuals based in them.</p>
Geostrategic risks	
<i>Arbitrary actions and loss of assets due to government decisions:</i>	<p>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.</p> <p>Specifically, Repsol operates in countries with special geopolitical risk such as Venezuela, Libya, and Algeria. For further information, see Note 21.3 of the Group's consolidated Financial Statements.</p>
Operational risks	
<i>Accident rate</i>	<p>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 and third parties as well as damage to the environment.</p> <p>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, substances, goods and equipment.</p>
<i>Deviations in organizational management and employees management</i>	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.
<i>Errors and failures in production and/or transport processes</i>	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.
<i>Attacks against people or assets</i>	<p>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.</p> <p>Noteworthy are the special safety conditions in Libya, where there have been intermittent stoppages of hydrocarbon production in 2019. For further information, see Note 21.3 of the consolidated Financial Statements.</p>

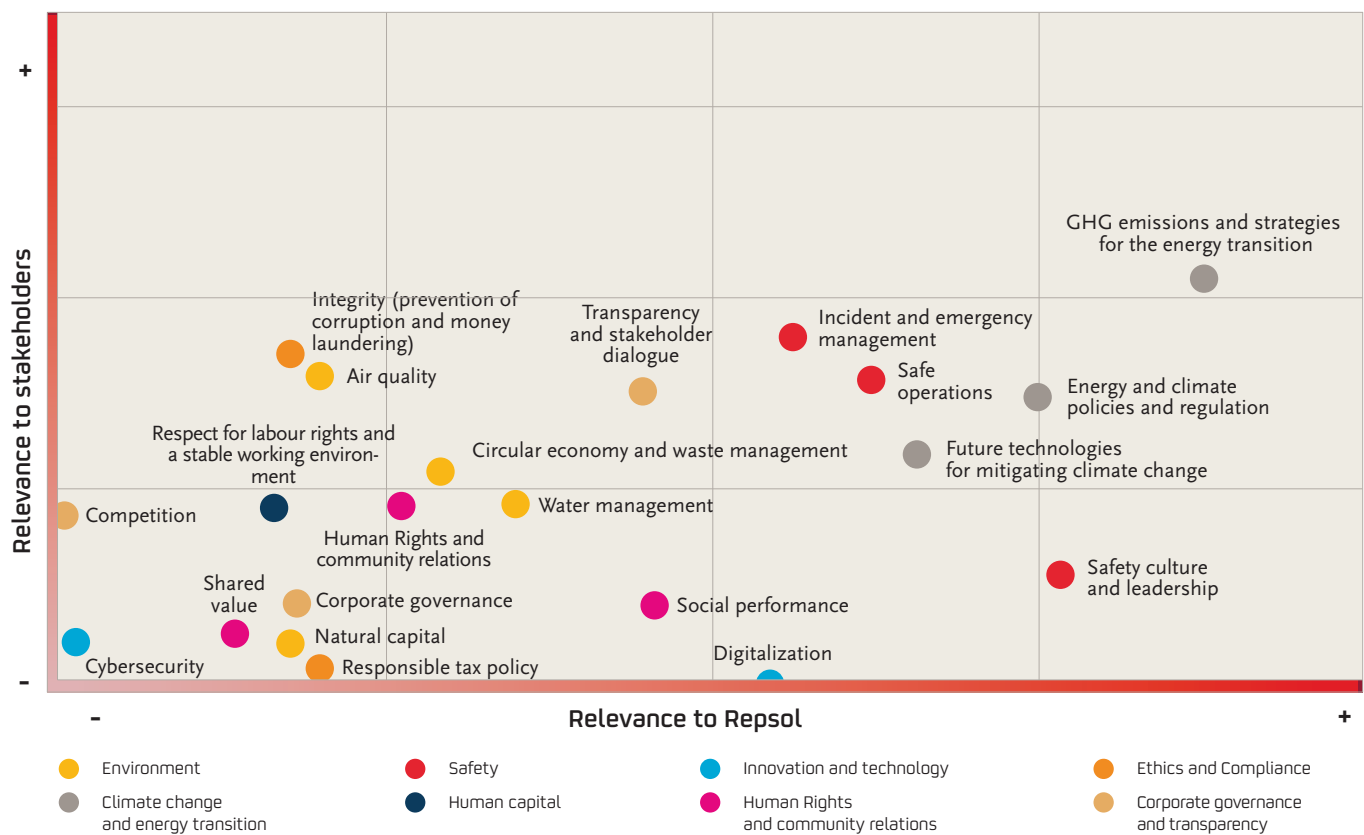
Appendix III. Further information on Sustainability¹

Materiality and stakeholder engagement

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



Repsol has performed a new materiality study in 2019, which reflects the significance of Sustainability issues both for the Company and for its stakeholders. The elaboration of the new study has involved 19 areas of the organization, including the areas responsible for stakeholder relations at the Company and areas specializing in Sustainability. Business and corporate executive personnel and the Executive Committee itself also participated in this process.

The list of stakeholders considered in this analysis has doubled from 4 to 8. Furthermore, a stakeholder map has been created and the different stakeholder groups have been prioritized.

The methodology has been based on interviews, surveys and the analysis of documents, considering the businesses and different countries where Company operates in. An overall Company matrix has been built in addition to matrices per business and stakeholder.

1. In this section, the numeric references in brackets correspond to GRI indicators.

Matters identified by stakeholders consulted:

Employees: Prioritize transparency and company/worker dialog, in addition to incident and emergency management, the energy transition and the adaptation to climate change. The Company has direct channels of communication and dialogue with its employees and also through their labor union representatives in negotiating committees to discuss issues of interest and reach agreements. Through committees and commissions meetings, monitoring and compliance are ensured of collective agreements and understandings applicable in Group companies. The European Works Council of the Repsol Group stands out for their capacity for dialogue with employees' representatives at an international level.

Partners, competitors and business associations: Repsol maintains a constant relationship with these stakeholders through negotiation processes, alliances (for example the OGCI [Oil and Gas Climate Initiative]), sector associations, conferences and events. Included in this stakeholder group are our partners and competitors in the energy sector, who share Repsol's interest in climate change and safety. Furthermore, in terms of their relations with Repsol, this group is particularly interested in the responsible management of business relations and transparency in communications and dialogue channels.

Public institutions and organizations: Contact with this stakeholder is frequent and mainly through meetings and events, in any case at the frequency required by the different international, national, regional and local public institutions and organisations. The most relevant matters for this stakeholder, in addition to climate change, are integrity, air quality, circular economy and equal opportunities.

Media: Climate change adaptation is the most relevant Sustainability issue to them, followed by integrity. Another fundamental matter for the media is transparency and stakeholder dialogue channels, in addition to air quality and water management. Repsol is regularly in contact with this stakeholder through press releases, interviews, articles, etc.

Customers: Repsol maintains a constant dialog dialogue og with these stakeholders through its extensive commercial network, participation at specialist fairs and events, technical assistance services, customer service and the points of sale network. For this group, the most important Sustainability issues are associated with products and services: customer satisfaction, quality of these products and services, access to affordable energy and advertising and marketing.

Shareholders, investors and financial institutions: Repsol engages in continuous communication and dialogue with this group. The CEO of the Company, Josu Jon Imaz, leads senior management roadshows with investors to respond to their requests for information in this field. And for the fourth year in a row, he led the Sustainability Day in its sixth edition, with the assistance of Mariano Marzo, lead independent Director and chairman of the Sustaianabiliy Committee. The total number of investors visited during the year accounts for 92% of all the socially responsible shareholders, which at year end represents 31.4% of the Company's institutional shareholders.

Suppliers and contractors: Many members of this stakeholder group work at assets operated by Repsol and, therefore, share their interest in matters relating to safety: safe operation, incident management, emergency management and safety leadership. To them, it is also essential that the company manages its business relations in a responsible manner and maintains transparent communication with stakeholders. It has also been detected that for this stakeholder, matters relating to ethics and compliance and, in particular, integrity are important. Repsol maintains a regular engagement with this stakeholder throughout all the management process, from procurement to operations.

Society: This stakeholder group includes local communities, (including indigenous populations), trade unions, NGOs, academia, civil society and citizens. In addition to its concern for GHG emissions, energy transition strategies and climate change adaptation, they demand that the companies to prevent and mitigate the main environmental and social impacts of their activities and place great importance on business ethics. Contact and dialogue channels. with these stakeholders take on many forms, including meetings, social programs, commercial activities, social media, etc. Besides, the Sustainability information that Repsol publishes, the Company responds to requests for information and actively participates in cross-sectorial taskforces, presentations, conferences and debates on this matter.

Corporate governance

[102-23] Chair of the highest governing body

Since 2014, Repsol has separated the roles of Chairman of the Board of Directors and Managing Director, with Antonio Brufau Niubó serving as the non-executive Chairman of the Board of Directors and Josu Jon Imaz serving as the Managing Director of the Company and, therefore, heading up the Executive Committee.

On May 31, 2019, the Annual General Meeting of Shareholders resolved to re-elect the Chairman of the Board of Directors, Antonio Brufau Niubó, and the Chief Executive Officer, Josu Jon Imaz San Miguel, to their posts for the bylaw-mandated period of four years, so that both may continue to carry out the functions they have been entrusted with until now and which they have been performing in an outstanding manner. Mr. Imaz shall focus on executive tasks and Mr. Brufau on the tasks of supervision 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. At the General Meeting of May 31, 2019, the report received wide support, as it was approved by a majority of the 95.6% of the capital attending the meeting.

Furthermore, and with the aim of assisting shareholders in understanding the information in the official model of the Report on Remuneration, and to continue increasing the transparency of remuneration schemes, the Company has also published an additional voluntary report in recent years on this topic that contains more detailed, comprehensive information on the remuneration of Executive Directors. With regard to 2019, the Company adhered to the option set out in Circular 2/2018 of the Spanish Securities Exchange Commission and chose to prepare a single, free-format Annual Remuneration Report, along with a statistical appendix, providing its shareholders and stakeholders with all the information corresponding to Executive Director remuneration.

Also, the General Shareholders' Meeting of Saturday, May 31, 2019 approved, with 95.4% 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.

The average remuneration of Directors, by gender, is shown below:

Average remuneration paid to Directors, by gender (€)

	2019		2018	
	Women	Men	Women	Men
Director average	291,025.61	330,378	278,311	325,151
Chairman	N.A.	2,500,000	N.A.	2,500,000

For more information, please see the Annual Remuneration Report.

Climate change

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. In 2018, a contract was signed to install PPI technology at the KOWL (Kincardine) project in Scotland; currently, 2 MW of this is now online and a further 5 additional turbines of 9.5 MW are also due to be installed.

In 2019, the construction phase of the Windfloat Atlantic project (3 wind turbines with a total power of 25 MW) on the Portuguese coast was completed. Specifically, the manufacture of the wind turbines and the platforms was completed, although only one of them was connected to the grid. The other two platforms will come online during the first quarter of 2020. The project comes under a remuneration scheme approved by the Portuguese Government and attracts aid from the European Union, through the NER 300 programme, and the Portuguese Environment Agency (APA). In addition, the project has obtained a €60 million loan from the European Investment Bank under the InnovFin Program. Repsol's contributions to this project in 2019 came to 7.6 million euros.

Repsol Electricidad y Gas, S.A. is undertaking a wide range of renewable energy projects (see Section 5.2.5.4 of the Report).

Total investment in renewable energy, by type of technology

Technology	Investment (€ thousands)
Offshore wind power	7,600.0
R&D Biofuels 1st generation	585.3
R&D Advanced biofuels	1,636.5
Total	9,821.8

Total amount of renewable energy generated, by source

Source	Power generation (MWh)
Hydro < 10 MW	97,012
Hydro > 10 MW	910,436
Total	1,007,447.8

[302-5] Reductions in energy requirements of products and services

Repsol invests in sustainable mobility through electric mobility projects, automotive gas and energy diversification. Furthermore, it is committed to developing new products with less energy requirements for the end user.

Electric-mobility

Since 2010, Repsol has promoted electric mobility through **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. Between 2012 and 2019, this project saw a decrease of 1,297.36 tCO₂.

In 2019, Repsol acquired the recharging network and energy marketing services for electric vehicles from **IBIL**. As a result, Repsol's public recharging network now consists of more than 230 points, which represents one of the biggest infrastructures of its kind in Spain. Of these, 35 are quick charge points located at the company's service stations, positioning Repsol as a leader in electric vehicle recharging. Furthermore, Repsol has set up the first two ultra-fast recharging points for electric vehicles on the Iberian Peninsula at its Repsol service stations.

In 2018, Repsol invested in the US firm **Ample Inc**, which designs and sells robotized battery exchange systems for electric vehicles, which allows for the quick, automated replacement of dead batteries with charged batteries.

Digitization in mobility

The **Westmartpark** project is a Spanish company that has set up and manages a network of low-cost collaborative parking where customers can park with savings of up to 50%, and owners of the spaces can monetize them during hours of off-peak use through an online platform and IoT technology sensors.

The **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.

AutoGas

AutoGas is the most widely used alternative fuel for vehicles because it enables fuel savings of up to 40%. Repsol currently has 745 AutoGas supply points and is gradually expanding this network.

AutoGas with bifuel vehicles are fitted with two tanks: one for gasoline and another for AutoGas, thus doubling the vehicle's autonomy. At Repsol we have taken a step further in the use of LPG. The company has launched a technology development project with the Spanish company **Begas Motor S.L.** to develop engines for heavy vehicles (buses) fueled with autogas (LPG), so that they can be certified as ECO vehicles. In 2019, a significant milestone was reached in terms of the approval of the engine, meaning it can now be listed in the ECO category of the Euro VI Directive.

Distributed generation

The Company has launched **Solify**, an integrated photovoltaic energy solution for individuals and companies that supplies 100% renewable energy, savings on electricity bills and efficient digital management.

Furthermore, with a view to applying this self-consumption solution to its service stations and other facilities, the Company has rolled out a project to equip its service stations with solar facilities to supply them with their own electricity. The project's pilot phase involves 30 facilities spread across the Iberian Peninsula, six of which are already up and running. This project will be expanded to other Repsol service stations throughout 2020.

New polyolefins with lower energy requirements

In 2019, the Chemicals business developed the following products:

- Three new grades of medium density metallocene polyethylene within the Repsol Resistex range, which contributes to reducing the thickness of flexible packaging and, therefore, less energy consumption per package, given the reduction in weight.
- Change in the degree of high density polyethylene for milk bottles to achieve an increase in density that allows for a reduction in the thickness of packages, thus reducing the weight per package and therefore, consuming less energy.

[G4-OG14] Volume of biofuels produced, shared and sold

As part of its medium-term vision, Repsol helps to reduce CO₂ emissions released during transport 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) with a strong technological content and high reduction of the carbon footprint. Work is currently under way at the Technology Hub.

To guarantee the sustainability of its biofuels, Repsol has signed up to international frameworks that certify compliance with the sustainability parameters defined in the Renewables Directive (RED I) and the traceability of the raw materials employed throughout the chain of production, from their origin to the finished product. Specifically, at its industrial plants and centers, the Company's operations follow the ISCC sustainability frameworks¹ and they have been certified under the National Sustainability Verification System (SNVS). The percentage of

biofuels physically incorporated into gasoline and diesel fuel in 2019 is higher than the minimum limits mandated by law.

It is worth noting that during 2019, biofuels manufactured using raw materials recovered from waste have been included in the portfolio, thus reducing emissions even further than is normally the case with conventional or first generation biofuels.

The total volume of biofuels incorporated into the fuels marketed by Repsol in 2019 came to 1,498,275 m³, of which 576,953 m³ were produced at the Group's refineries and the remaining 921,322 m³ have been purchased from external companies and mixed in the appropriate proportion to respond to the specifications of gasolines and diesel fuels and the requirements of our customers. These biofuels have reduced emissions released during transport by 2.8 M of CO₂. Repsol's biofuel production capacity is 871,000 m³/year, divided up between BioETBE (429,000 m³/year) and hydrogenated vegetable oil (GVO, 442,000 m³/year).

1. ISCC: *International Sustainability & Carbon Certification*. An international certification framework that covers all possible sustainable inputs for the production of biofuels, including agricultural raw materials, forestry biomass and other circular materials or renewable biological materials.

People

Employment¹

At year-end 2019 the Company had 25,228 employees. The total workforce at December 31, 2019, was 27,389 and the total managed workforce was 24,876 (26,818 and 24,485 at December 31, 2018, respectively). The accumulated average managed workforce in 2019 was 24,681 (24,679 in 2018). Unlike the number of employees, FTE is calculated based on the percentage of occupation of each employee. The distribution of employees in the countries where the Company operates is shown below:

Nationalities by country

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

Destination country ⁽¹⁾	2019	2018
Spain	66	62
Canada	19	20
US	26	24
Algeria	16	17
Singapore	15	13
Portugal	11	12
Norway	12	12
Brazil	10	11
Malaysia	8	9
Libya	3	9
United Kingdom	8	7

(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.

Number of people by country

Country	2019	2018	País	2019	2018
Algeria	89	98	Luxembourg	3	4
Angola	1	8	Malaysia	390	487
Aruba	0	2	Mexico	110	72
Belgium	2	3	Morocco	1	1
Bolivia	248	275	Norway	254	248
Brazil	115	128	Papua New Guinea	1	1
Canada	538	722	Peru	3,032	2,991
Colombia	52	60	Portugal	1,412	1,293
Ecuador	419	430	Russia	58	59
France	16	16	Singapore	43	45
Gabon	0	1	Spain	17,496	17,316
Germany	4	2	Switzerland	2	1
Greece	2	1	The Netherlands	11	12
Guyana	1	1	Trinidad and Tobago	10	10
Indonesia	76	87	United Kingdom	18	18
Iraq	6	6	US	535	559
Italy	43	41	Venezuela	141	153
Libya	41	62	Vietnam	58	75

1. Figures for total workforce and accumulated average workforce relate to companies where Repsol sets policies and guidelines for people management, including Societat Catalana de Petrolis, S.A. (Petrocat).

[102-8] Information about employees and other workers

Number of employees by contract type and gender

		2019	2018
Permanent contract	Men	14,486	14,669
	Women	8,316	8,112
	Total	22,802	22,781
Temporary contract	Men	1,316	1,397
	Women	1,110	1,110
	Total	2,426	2,507
Total		25,228	25,288

There were no significant variations with respect to 2018.

Number of permanent employees by job type and gender

		2019	2018
Full time	Men	14,458	14,639
	Women	8,247	8,050
Part time	Men	28	30
	Women	69	62
Total		22,802	22,781

The data published reflect the number of permanent employees, irrespective of their percentage of employment.

Number of employees by region and gender

		2019	2018
Africa	Men	112	146
	Women	20	24
	Total	132	170
Asia	Men	424	518
	Women	208	241
	Total	632	759
Europe	Men	12,319	12,312
	Women	6,944	6,643
	Total	19,263	18,955
Latin America	Men	2,174	2,222
	Women	1,844	1,828
	Total	4,018	4,050
North America	Men	773	868
	Women	410	485
	Total	1,183	1,353
Oceania	Men		
	Women		1
	Total		1
Total employees	Men	15,802	16,066
	Women	9,426	9,222
Total		25,228	25,288

Average annual number of contracts

Professional classification	<30				30-50				>50				Full time 2019	Part time 2019	Full time 2018	Part time 2018
	Permanent		Temporary		Permanent		Temporary		Permanent		Temporary					
	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time	Full time	Part time				
Executives	0.00	0.00	0.00	0.00	100.66	0.00	1.25	0.00	159.61	0.00	3.75	0.00	265.26	0.00	258.00	0.00
Women	0.00	0.00	0.00	0.00	25.30	0.00	0.00	0.00	26.07	0.00	0.00	0.00	51.37	0.00	48.12	0.00
Men	0.00	0.00	0.00	0.00	75.36	0.00	1.25	0.00	133.54	0.00	3.75	0.00	213.89	0.00	209.88	0.00
Technical managers	1.49	0.00	1.00	0.00	1,600.61	5.72	16.17	0.00	902.93	2.81	8.25	0.00	2,530.45	8.53	2,424.66	9.91
Women	0.00	0.00	0.00	0.00	549.98	5.72	2.00	0.00	212.54	0.69	1.00	0.00	765.52	6.41	720.15	7.34
Men	1.49	0.00	1.00	0.00	1,050.63	0.00	14.17	0.00	690.39	2.12	7.25	0.00	1,764.93	2.12	1,704.51	2.57
Technicians	1,192.89	0.00	256.04	1.02	8,134.55	19.71	239.55	1.00	2,074.26	6.57	10.68	0.00	11,907.95	28.30	11,659.70	21.65
Women	676.52	0.00	95.66	0.41	3,394.99	18.74	48.78	1.00	496.71	6.57	1.91	0.00	4,714.58	26.72	4,516.73	21.29
Men	516.36	0.00	160.37	0.61	4,739.56	0.97	190.76	0.00	1,577.55	0.00	8.77	0.00	7,193.38	1.58	7,142.97	0.36
Administrative staff	16.90	0.00	18.30	0.10	594.70	3.96	61.61	0.48	273.23	0.00	9.31	0.00	974.05	4.54	974.31	4.34
Women	6.69	0.00	9.76	0.10	418.57	3.21	36.14	0.00	167.04	0.00	8.54	0.00	646.74	3.30	663.90	2.65
Men	10.21	0.00	8.54	0.00	176.13	0.75	25.47	0.48	106.19	0.00	0.77	0.00	327.31	1.23	310.41	1.69
Manual workers junior personnel	364.59	2.19	669.32	76.17	4,685.04	32.62	1,035.52	95.97	1,755.42	10.42	130.29	11.42	8,640.19	228.80	8,669.73	210.12
Women	130.05	1.24	281.64	36.31	1,439.39	22.75	546.58	62.23	402.32	6.13	69.82	6.26	2,869.81	134.93	2,714.98	120.90
Men	234.54	0.95	387.67	39.86	3,245.65	9.87	488.95	33.74	1,353.10	4.29	60.48	5.16	5,770.38	93.87	5,954.75	89.21
2019 General total	1,575.87	2.19	944.66	77.29	15,115.56	62.01	1,354.09	97.46	5,165.45	19.81	162.28	11.42	24,317.90	270.17	23,986.40	246.01
2018 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				

There were no significant variations with respect to 2018.

[202-2] Proportion of top executives hired from local community

Country	% Executives, Managers and Technical Managers from the local community ⁽¹⁾	
	2019	2018
Algeria	6.25%	8.11%
Bolivia	86.36%	88.89%
Brazil	55.88%	50.00%
Canada	83.33%	58.39%
Colombia	64.71%	75.00%
Ecuador	94.12%	90.48%
Indonesia	54.55%	65.22%
Libya	60.00%	28.57%
Malaysia	80.00%	75.32%
Mexico	55.00%	50.00%
Norway	69.23%	67.80%
Peru	86.03%	79.46%
Portugal	89.04%	90.77%
Russia	47.06%	53.85%
Spain	89.46%	88.39%
US	65.68%	23.30%
Venezuela	93.75%	87.10%
Vietnam	66.67%	45.15%

(1) Includes Executive and Technical Managers: excluded from certain aspects of the collective agreement for matters that are governed by the individual contract applicable to these groups (except in Brazil, where no filter is 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.

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Retaining talent	2019	2018
Voluntary turnover rate ⁽¹⁾	6%	6%
Total executive turnover rate ⁽²⁾	7%	8%

(1) Number of voluntary terminations to total number of employees at year-end.

(2) Total number of terminations executives to total executive personnel.

[401-1]: New employee hiring and staff turnover⁽¹⁾**Number and percentage of new hires**

Region		<30				30-50				>50			
		2019		2018		2019		2018		2019		2018	
		No	%	No	%	No	%	No	%	No	%	No	%
Africa	Women	0	0%	1	100%	2	12%	1	5%	0	0%	0	0%
	Men	0	0%	1	50%	4	4%	1	1%	0	0%	0	0%
	Total	0	0%	2	67%	6	6%	2	1%	0	0%	0	0%
Asia	Women	6	40%	0	0%	6	3%	9	4%	2	10%	0	0%
	Men	4	17%	2	7%	11	3%	6	1%	0	0%	0	0%
	Total	10	26%	2	5%	17	3%	15	2%	2	2%	0	0%
Europe	Women	573	87%	445	79%	699	14%	640	13%	61	5%	50	5%
	Men	637	73%	599	71%	599	8%	586	8%	83	2%	53	1%
	Total	1,210	79%	1,044	74%	1,298	10%	1,226	10%	144	3%	103	2%
Latin America	Women	385	64%	427	70%	201	17%	316	28%	1	1%	2	3%
	Men	269	63%	310	68%	179	13%	218	16%	7	2%	14	3%
	Total	654	64%	737	69%	380	15%	534	40%	8	2%	16	4%
North America	Women	5	21%	12	41%	11	4%	26	8%	6	5%	7	5%
	Men	13	22%	11	14%	32	6%	66	11%	4	2%	7	3%
	Total	18	21%	23	22%	43	6%	92	11%	10	3%	14	4%
Total	Women	969	75%	885	73%	919	14%	992	15%	70	5%	59	4%
	Men	923	67%	923	65%	825	8%	877	9%	94	2%	74	2%
TOTAL	Total	1,892	70%	1,808	69%	1,744	10%	1,869	11%	164	3%	133	2%

(1) Calculated as the number of first-time hires divided by the total number of employees at December 31, 2019.

The rate reflects the new hires with no previous working relationship with company compared to the origin population of the tranche analyzed.

33,3% of these new hires have permanent contracts and, of these, 60,5% are in Peru.

Voluntary employee turnover

Region		<30				30-50				>50			
		2019		2018		2019		2018		2019		2018	
		No	%	No	%	No	%	No	%	No	%	No	%
Africa	Women	0	0%	1	100%	2	12%	3	15%	0	0%	0	0%
	Men	1	0%	0	0%	4	4%	2	2%	0	0%	0	0%
	Total	1	100%	1	33%	6	6%	5	4%	0	0%	0	0%
Asia	Women	3	20%	7	50%	20	12%	14	7%	0	0%	4	24%
	Men	5	22%	10	36%	30	9%	116	29%	4	6%	11	13%
	Total	8	21%	17	40%	50	10%	130	21%	4	4%	15	14%
Europe	Women	114	17%	96	17%	191	4%	166	3%	14	1%	16	1%
	Men	134	15%	113	13%	174	2%	159	2%	10	0%	13	0%
	Total	248	16%	209	15%	365	3%	324	3%	24	0%	29	1%
Latin America	Women	217	36%	247	40%	170	15%	161	14%	2	3%	4	5%
	Men	140	33%	138	29%	108	8%	155	11%	18	4%	21	5%
	Total	357	35%	385	35%	278	11%	316	12%	20	4%	25	5%
North America	Women	2	8%	6	21%	20	8%	33	11%	6	5%	4	3%
	Men	10	17%	9	12%	50	10%	34	6%	1	1%	5	2%
	Total	12	14%	15	14%	70	9%	67	8%	7	2%	9	2%
Total	Women	336	26%	357	29%	403	6%	376	6%	22	2%	28	2%
	Men	290	21%	270	19%	366	4%	466	5%	33	1%	50	1%
TOTAL	Total	626	23%	627	23%	769	5%	843	5%	55	1%	78	1%

The employee turnover rate in Latin America is concentrated in the Marketing business and is in line with economic and occupational growth in the country.

Total employee turnover

Region		<30				30-50				>50			
		2019		2018		2019		2018		2019		2018	
		No	%	No	%	No	%	No	%	No	%	No	%
Africa	Women	0	0%	1	100%	3	18%	5	20%	0	0%	0	0%
	Men	1	0%	0	0%	7	8%	4	3%	2	9%	0	0%
	Total	1	100%	1	33%	10	9%	9	5%	2	8%	0	0%
Asia	Women	3	20%	7	50%	43	25%	18	9%	2	10%	5	29%
	Men	8	35%	10	36%	75	23%	127	32%	18	26%	35	40%
	Total	11	29%	17	40%	118	23%	145	24%	20	22%	40	38%
Europe	Women	648	98%	520	91%	1150	23%	1,200	24%	202	17%	199	17%
	Men	735	84%	642	75%	932	12%	1,025	13%	442	12%	697	19%
	Total	1,383	90%	1,162	81%	2,082	16%	2,225	18%	644	13%	895	19%
Latin America	Women	246	41%	300	47%	197	17%	202	17%	7	9%	6	8%
	Men	170	40%	192	40%	167	12%	234	17%	64	16%	43	10%
	Total	416	40%	492	44%	364	15%	436	17%	71	15%	49	9%
North America	Women	4	17%	7	24%	62	24%	62	20%	40	31%	37	25%
	Men	12	20%	11	14%	112	22%	73	13%	50	26%	44	20%
	Total	16	19%	18	17%	174	22%	135	15%	90	28%	81	22%
Oceania	Women	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
	Men	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%
	Total	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%
Total	Women	901	69%	835	67%	1,455	22%	1,487	22%	251	17%	247	18%
	Men	926	67%	855	59%	1,293	13%	1,463	14%	576	13%	818	19%
TOTAL	Total	1,827	68%	1,690	64%	2,748	16%	2,950	18%	827	14%	1,065	19%

Number of dismissals

	<30		30-50		>50		General total 2019	General total 2018
	2019	2018	2019	2018	2019	2018		
Men	20	20	142	99	83	251	245	370
Administrative staff	0	0	3	3	0	2	3	5
Technical managers	0	0	30	16	31	21	61	37
Technicians	5	7	70	45	40	175	115	227
Manual workers junior personnel	15	13	38	32	12	52	65	97
Executives	0	0	1	3	0	1	1	4
Women	16	20	104	78	20	39	140	137
Administrative staff	1	0	9	6	0	11	10	17
Technical managers	0	0	10	3	2	0	12	3
Technicians	11	16	62	41	14	19	87	76
Manual workers junior personnel	4	4	23	28	4	8	31	40
Executives	0	0	0	0	0	1	0	1
Total	36	40	246	177	103	290	385	507

Remuneration and benefits

[102-38] and [102-39] Ratios of annual total compensation and percentage increase in annual total compensation

Repsol analyzes salary markets in the countries and business sectors in which the Company operates and sets its internal objectives on the average salary positioning of its employees with these external market wage benchmarks. The criteria for establishing the sought-after salary 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 salary dispersion of the country and business sector in which the Company operates.

On an annual basis, the budgets for salary increases are decided by employee group, and criteria are established for maximum individual increases. The increase of the average salary of the

entire workforce reflects the salary bills of the workforce of each professional group and the salary 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 salary remains unchanged.

In general there have been no substantial changes with respect to the previous year. In Bolivia, however, the increase was affected by variations in the variable remuneration of the highest-paid person.

Country	Annual total compensation of the highest-paid ⁽¹⁾ individual /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	
	2019	2018	2019	2018
Bolivia	3.43	1.99	(0.69)	(2.08)
Ecuador	11.14	11.09	1.17	(0.26)
Peru	13.50	13.23	0.58	(3.14)
Portugal	5.18	4.98	(2.36)	20.46
Repsol S.A. ⁽³⁾	39.73	38.70	0.23	19.02
Spain ⁽³⁾	13.94	14.41	(3.90)	3.21

(1) The highest-paid individual has been identified without taking into account expatriate staff or employees who departed prior to December 31 of the year in question.

(2) Cash compensation has been considered as total compensation. The following items of personnel costs have been included: Base salary and fixed supplements, seniority, variable supplements in cash or shares, 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.

[202-1] Ratio of standard entry level salary by gender to local minimum salary

Country ⁽¹⁾	Country minimum salary (local currency/ month)		Repsol minimum salary ⁽²⁾ (local currency/ month)		Repsol/national minimum wage	
	2019	2018	2019	2018	2019	2018
Bolivia	2,122	2,060	10,000	12,568	4.71	6.10
Ecuador	394	386	979	878	2.49	2.28
Spain	900	736	1,137	1,124	1.26	1.53
Peru	930	930	930	930	1.00	1.00
Portugal	600	580	620	590	1.03	1.02

(1) Data includes those countries that are most representative in terms of turnover, headcount and availability of the required information.

(2) The Repsol minimum salary reflected in the table includes only base salaries and fixed allowances, excluding other remuneration such as variable bonuses or incentives or remuneration in kind.

In accordance with Repsol's equal opportunities policy, salaries are established for a position without taking into account the gender of the person holding the position, including entry-level salaries.

Repsol's fixed minimum wage is above the local minimum salary in all countries except Peru.

Considering Repsol's total annual remuneration, Peru also exceeds the country's minimum salary.

[401-2] Benefits for full-time employees that are not granted to part-time or temporary employees

Social benefits by region (thousands of euros)

Country	Life insurance		Medical insurance		Pension fund		Food allowances		Subsidized loans		Study assistance		Social Assistance	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Africa	75.8	50.6	97.8	260.6	15.4	0.0	146.5	150.0	0.0	0.0	127.5	155.7	9.8	(1.3)
Asia	817.0	176.6	1,722.4	1,470.8	4,135.3	5,349.0	68.3	63.2	0.0	0.0	1,122.7	1,034.1	0.0	0.0
Europe	2,684.5	3,726.8	13,865.3	13,368.2	42,511.6	33,396.9	11,426.4	10,758.1	696.9	159.0	2,257.0	2,375.6	257.1	294.4
Latin America	571.1	808.1	6,307.8	6,100.7	1,546.8	1,404.3	2,776.2	2,706.1	0.0	0.0	12.9	(46.8)	77.9	75.3
North America	250.4	539.5	6,374.9	6,855.6	13,945.9	14,786.2	199.1	109.5	0.0	0.0	372.0	(0.6)	1,113.9	92.4
Total	4,398.8	5,301.4	28,368.2	28,055.9	62,154.9	54,936.5	14,616.5	13,386.9	696.9	159.0	3,892.1	3,519.1	1,458.7	460.8

The information shows the benefits for all employees (full-time, part-time, temporary and permanent).

The different agreements address the differences between benefits for full time, part time and temporary employees.

[405-2] Ratio of basic salary and remuneration of women to men

Ratio of basic salary of women to men ^{(1) (2)}

Country	Executive personnel ⁽³⁾		Technical manager		Technicians		Technicians II		Administrative staff		Manual workers junior personnel	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Bolivia	N.A.	N.A.	N.S.	1.01	1.03	1	N.S.	-	N.A.	N.D.	N.S.	N.D.
Ecuador	N.A.	N.A.	N.S.	N.S.	0.85	0.74	N.S.	-	N.A.	N.D.	N.A.	N.D.
Spain	0.94	0.89	0.93	0.93	0.98	0.93	N.A.	-	0.85	N.D.	0.70	N.D.
Peru	N.S.	N.S.	0.94	0.82	0.87	0.89	0.75	-	1.03	N.D.	0.74	N.D.
Portugal	N.S.	N.A.	0.94	0.99	0.91	0.93	0.89	-	0.89	N.D.	0.55	N.D.

(1) Data includes those countries that are most representative in terms of turnover, headcount and availability of the required information.

(2) In categories with a non-representative female or male workforce (fewer than 5), the ratio is not given, as it is considered statistically non-significant (N.S.).

Where there is no employee in either gender, we indicate "not applicable" (N.A.).

Where there is no data available, we indicate "non data" (N.D.)

(3) Includes all executives, except the two Executive Directors.

Although there have not been significant changes in the values of the reported ratios, change with respect to 2018 is generally positive.

In the case of the manual workers in Spain, Peru and Portugal –a data point reported for the first time this year– the joint ratio

that results from grouping the different businesses with their different salary realities shows a greater difference than each of the companies/businesses analyzed separately. For example, in Portugal the company with the highest difference among the various companies shows a 0.7 ratio.

The following shows the ratio of women's average pay to men's average pay, and data on the pay gap. The required data have been prepared maintaining the criteria and segmentation of the standard GRI indicators and following the requirements of the Spanish legislation RDL 11/2018.

Clarification figures in salary table		Exchange rates at€	
-	No female employees, or no male employees.	0.89346	USD
IC	Confidential information (would reveal the remuneration of an individual employee).	0.26565	PES
		0.13019	BOB

Average compensation by occupational category ⁽¹⁾

Occupational category	Average compensation ⁽¹⁾											
	Executives ⁽²⁾		Technical managers		Technicians		Technicians Manual workers		Administrative staff		Manual workers and junior staff	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Spain	279,853	320,230	93,909	99,284	51,341	58,029	-	-	40,043	52,601	26,259	40,307
Peru	IC	289,111	101,058	104,197	34,937	43,806	5,651	8,114	21,545	29,069	16,284	13,416
Portugal	-	IC	84,922	88,749	37,800	49,738	21,275	28,953	31,828	42,915	11,832	29,726
Ecuador	-	IC	114,435	128,513	38,248	48,813	21,274	28,109	-	25,278	-	25,499
Bolivia	-	-	142,553	144,231	70,835	72,064	-	42,979	-	-	65,612	57,357

Compensation broken down by age range ⁽¹⁾

Age	Average compensation ⁽¹⁾					
	<30		30-50		>50	
	Women	Men	Women	Men	Women	Men
Spain	32,610	37,499	47,571	54,529	56,417	69,019
Peru	8,493	18,400	15,417	35,685	46,324	56,934
Portugal	15,897	21,503	21,058	35,755	34,375	53,247
Ecuador	22,350	26,765	39,746	41,490	101,008	65,909
Bolivia	33,931	39,224	73,789	75,394	96,155	110,208

Gender gap

Occupational category	Executives ⁽²⁾	Technical managers	Technicians	Technicians Manual workers ⁽³⁾	Administrative staff ⁽³⁾	Manual workers and junior personnel ⁽³⁾	Adjusted gap in country ⁽⁴⁾
	Women / Men	Women / Men	Women / Men	Women / Men	Women / Men	Women / Men	Women / Men
Spain	0.88	0.95	0.93	-	0.96	0.92	0.95
Peru	1.08	0.99	0.86	0.78	1.04	1.56	0.95
Portugal	-	1.00	0.84	0.76	0.90	0.84	0.92
Ecuador	-	0.89	0.78	0.76	-	-	0.82
Bolivia	-	0.99	0.98	-	-	1.14	0.99

(1) Includes all compensation items extracted from the company's accounting systems, stated in euros.

(2) Includes senior management and other executives except the two Executive Directors, whose remuneration is disclosed in section 30.1. of the consolidated Financial Statements, in detail and in itemized form, both for their executive and Board functions.

(3) Repsol operates in Spain, Peru and Portugal in different sectors and through different corporate entities that are subject to different collective bargaining agreements, which means widely different salaries, depending on the company and the sector. Most employees in these categories are paid salaries directly determined by the relevant collective bargaining agreements, which in no case set gender-based differences in pay. A combined analysis of the pay realities of different sectors under different agreements might be misleading. The gap reflected in the table is therefore the weighted average gap of the different companies operating in these three countries.

(4) To state a value that represents all employees in a country together and allows a more meaningful comparison, we have taken into account three differentiating factors: business/collective bargaining agreement concerned, occupational category and employee age. This adjusted gap is reported here, calculated as the weighted average ratio of women's average pay to men's average pay, segmented by company, occupational category and age range. Considering together the employees of these countries, without any segregation, the average remuneration of all women divided by the average remuneration of all men would offer a gross gap of 0.74.

As to remuneration history, due to the change in approach only data from Spain (recalculated according to the new criteria) can be presented, representing the majority of the workforce.

Average compensation by occupational category

Occupational category	Spain (2019)		Spain (2018)	
	Women	Men	Women	Men
Executives	279,853	320,230	284,856	319,688
Technical managers	93,909	99,284	95,361	104,842
Technicians	51,341	58,029	51,074	57,257
Skilled manual workers				
Clerical staff	40,043	52,601	40,253	43,139
Manual workers and junior staff	26,259	40,307	26,276	40,051

Compensation broken down by age range

Age	Spain (2019)		Spain (2018)	
	Women	Men	Women	Men
< 30 years	32,610	37,499	32,660	37,421
30-50 years	47,571	54,529	48,311	55,064
> 50 years	56,417	69,019	57,461	69,398

Gender gap

Gender gap	Spain (2019)	Spain (2018)
	Women/Men	Women/Men
Executives	0.88	0.88
Technical managers	0.95	0.92
Technicians	0.93	0.93
Skilled manual workers	-	-
Clerical staff	0.96	0.99
Manual workers and junior staff	0.92	0.93
Adjusted gap in country	0.95	0.95

For comparison with 2018 figures in Spain, values for 2018 were recalculated by applying the segmentation and calculation criteria adopted in 2019 to the data for that year.

For the remaining countries, indicator 405-2 in this report provides a comparison of 2018 and 2019 data.

Variations with respect to 2018 in average remuneration and the gender gap are not very significant, and are mainly due to the incorporation of the Electricity and Gas business in 2019 and the workforce turnover.

Employment framework, health and safety at work

[102-41] Collective bargaining agreements

Repsol has employees under collective bargaining agreements in Spain, Brazil, Italy, France, Norway, Peru and Portugal. More than 86.95% (85% in 2018) of employees in these countries are covered by collective agreements.

The detail for each country is shown below:

- In Brazil, more than 93.97% of the regional workforce is covered by a collective bargaining agreement, corresponding to 100% of the local workforce of Repsol Sinopec Brazil.
- 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 France, 100% of the workforce is covered by the industry-wide collective bargaining agreement.
- In Italy, 100% of the workforce comes under the industry-wide collective bargaining agreement.
- In Norway, more than 23% of the regional workforce is covered by collective bargaining agreements for workers on offshore platforms.
- In Peru, 10.57% of the regional workforce is covered by a collective bargaining agreement, corresponding to 43% of the La Pampilla refinery's workforce.
- In Portugal, 99.47% of the regional workforce comes under a collective bargaining agreement.

The Company has a **strategic framework for Health and Well-Being** matters that is being rolled out internationally to raise awareness and help employees take care of themselves. Specifically, initiatives are being launched to accompany employees in the management of their occupational and personal circumstances, with a greater emphasis on health. The following initiatives are worth particular mention:

- International health and well-being campaigns, adapting to the specific needs of the country, such as campaigns to raise awareness of colon, breast and prostate cancers, heart disease, etc.
- Benefits of early diagnosis and raising awareness of health habits that affect the likelihood of suffering from the disease by 30%-50%. Minimize absenteeism, boost employee satisfaction and quality of life.
- Detection of individual and collective risk factors by analyzing the data obtained through health examinations.
- Training in needs-based skills: training, workshops, talks, online resources and light bites on the online learning platform (for example, stretching videos, relaxation audio exercises and mindfulness).

- Working with the Businesses to design and implement well-being plans adapting to their needs and the type of activity, focusing on the most relevant aspects based on the health information available.

[403-1]: Representation of workers in formal worker-company 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. In total, 86.70% of the Company's workers are represented on these committees.

These committees' general areas of action are: 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	Committees
Algeria	In November 2019, a Health and Safety Committee was set up on which workers from the office in Algiers sit. Workers on international secondment are represented on the Campus Health and Safety Committee.
Bolivia	Currently, there is no formally existing Joint Committee for Occupational Health, Safety and Welfare. The remit of the Santa Cruz committee is limited to administrative offices, the central archive and central warehouse in Santa Cruz; the Caipipendi and Mamoré committees are also limited to their geographical scope
Colombia	Joint Committee on Health and Safety in the workplace COPASST: meets once a month, with workers accounting for 15% of its members (8/53 people); management representatives and employee representatives are represented in the same proportion. Occupational Cooperation Committee CCL: meets once a quarter and workers account for 23% of its members (12/53 people). This body is responsible for monitoring the actions for preventing psychosocial risk factors.
Ecuador	Central Committee in Quito and two subcommittees in Block 16 (NPF and SPF). Each committee or subcommittee has 6 employer representatives (Repsol) and 6 worker representatives. The information managed in the committees must be sent annually to the authorities. The number of workers represented comes to 430.
Italy	Workers are represented by one representative chosen by them. An annual meeting is held to discuss health and safety topics and to plan prevention activities. All workers are represented.
Malaysia	Main Company-wide Health and Safety Committee, divided into 12 committees that represent the business units and facilities. All workers are represented.
Mexico	The Occupational Health and Safety Committee was set up in February 2019. This Committee represents 80% of workers (office workers).
Norway	2 Committees, one onshore and another offshore. Constituted by the same number of company and worker representatives. All workers are represented.
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. All workers are represented.
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.
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).
Venezuela	Internal committee with three delegates representing workers. 75,5% of workers are represented.

[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

Repsol recorded no occupational illnesses in 2019, as documented in almost all countries by certificates issued by health insurance or medical care services. Only in some countries, due to data protection/privacy rules, it was not possible to access employees' health information.

In 2019, 1,640,064.92 hours of absence were recorded, compared to 1,247,096 hours in 2018. The 31% variation is due to the inclusion of data from Brazil, Bolivia, the United States and Canada, the companies Repsol Gas y Electricidad and Sesema, and an increase of absenteeism at Campsared. Hours of absenteeism caused by occupational accidents or professional illnesses are not included in the calculation of hours of absenteeism reported at the company's discretion.

[403-3] Workers with high incidence or high risk of diseases related to their occupation

Repsol generally carries out occupational risk assessments by job position. The specific procedure includes an analysis of risks, and assessment of them and corrective/mitigating measures with their corresponding periodic controls. Ergonomic and psychosocial risks are also assessed.

The assessments did not identify job positions carrying a high risk of occupational diseases. In some units and positions there is a risk assessed as tolerable due to exposure to noise, physical stress and/or repetitive movements, use of data display screens or exposure to chemical risks. To minimize these risks, we plan preventive activities, including technical improvements, health checks, worker health tracking, training and information, and emergency action plans.

In some locations we also consider a risk of contracting infectious illnesses, such as dengue fever, malaria, yellow fever, leishmaniasis, among others). Repsol provides vaccination programs, fumigation and pest control, continuous monitoring of vectors with these biological studies, among other relevant preventive measures.

One of the most significant general actions performed in 2019 in terms of specific risks was the unification of health information for each country: level of health risk, most frequent illnesses, general prevention advice, preventive advice for specific illnesses, vaccination advice, malaria prevention guidelines. Thanks to this initiative, the updating of information on changes to illness rates has been streamlined.

In addition to these general actions, the Company undertake various activities, by country:

Country	Activity
Algeria	Specific sessions on health, focusing on medicine in the workplace for both BU employees and visitors.
Bolivia	Annual medical check-up and immunization campaigns.
Colombia	Smart musculoskeletal epidemiological, cardiovascular and psychosocial risk prevention systems.
Ecuador	Flu vaccination campaigns and worming campaigns for all staff in Quito - Bloque. Talk to prevent the physical risk caused by noise, measurements in workplaces. Nutritional talks, food health and food handling by catering staff. Safety talks: working at heights. Health week in Quito for staff and their family members.
Malaysia	Risk mitigation through health monitoring, control of exposure to noise and chemical products (mercury-vapor lamps).
Mexico	Informative prevention talks: ergonomics, active guidelines and fatigue when driving.
Venezuela	Prevention talks: Mental health, postural hygiene, prevention of illnesses transmitted by water, visual hygiene, stroke prevention, immunization, prevention of diarrhea and prevention of thrombosis when traveling.
Vietnam	Medical emergency drills. Update of emergency response protocols.

[403-4] Health and safety topics covered in formal agreements with labor unions

The Company uses specific instruments in each country where it operates to track the implementation of occupational health and safety policies, standards and procedures.

Health and safety-related agreements with unions:

- **Spain:** An Occupational Health and Safety Committee comprising three members of Management and three representatives of each of the unions with a presence on the Negotiating Committee for the 9th Repsol Group Framework Agreement. The Committee examines the underlying philosophy and lines of action of prevention plans and general policies on occupational health and safety, and promotes measures to improve risk prevention performance at Repsol Group companies in Spain, covering 100% of relevant topics.
- **Norway:** Agreement whereby the Occupational Health Department, in partnership with the Health and Environment Committee and the Norwegian authorities will implement a two-year health and lifestyle advisory program. The program will run independently from health measures implemented in response to identified and assessed workplace risks. The aim of the initiative is prevention and early detection of health disorders, based on the Recommendations for Clinical Preventive Services (RCPS) produced by the American Academy of Family Physicians (AAFP).
- **Peru:** Agreement of the Occupational Health and Safety Committee to approve the Annual Safety Program, as well as, the Annual Occupational Health Plan in La Pampilla Refinery.

Training and development

[404-1] Average hours of training per year per employee

Average training hours per year by person and by gender

Job category	Hours of training/year	Total 2019	Total 2018
Executives	Hours of training/year	18,642	10,071
	Person	70	39
	Women	81	51
	Men	68	37
Technical managers	Hours of training/year	109,662	112,641
	Person	43	47
	Women	49	54
	Men	41	44
Technicians	Hours of training/year	406,352	561,832
	Person	34	48
	Women	33	46
	Men	34	50
Clerical staff	Hours of training/year	15,686	24,319
	Person	16	27
	Women	17	23
	Men	14	36
Manual workers junior personnel	Hours of training/year	334,151	358,518
	Person	38	42
	Women	18	19
	Men	48	53
Total	Hours of training/year	884,493	1,067,380
	Person	36	45
	Women	29	36
	Men	40	50

(*) Data obtained from the average accumulated workforce,

[404-2] Programs for upgrading employee skills and transition assistance programs

Learning in Repsol aims to develop the professional capacities needed for effective performance in pursuit of the company's strategic goals.

Programs carried out in 2019 were based on initiatives designed to acquire knowledge, develop skills and encourage the commitment of everyone in the company to its plans, culture and values throughout their working lives:

Area	Subject
General	In Repsol's culture and career development model, leaders play a fundamental role; therefore, efforts are ongoing to strengthen inspirational leadership and an entrepreneurial attitude: organization of internal events with relevant figures from the academic and business worlds; active participation in internal training programs for leaders or strategic meetings for executive personnel (87% have participated) to share points of view on the challenges facing the company and sector.
Health, Safety and Environment	An ambitious safety leadership program was launched company-wide with a view to taking the company one step further in raising awareness of risks and preventing any possible complacencies in the absence of incidents. The goal is to roll out this program (in the form of an 8-hour face-to-face workshop) over the course of 2019 and 2020, reaching all levels of leadership at the company (around 4,000 employees).
Master Programs	In June, the E&P Master 18-19 came to an end, with 32 professionals joining the sector. And in September, the new 19-20 edition was launched with 23 new participants. Given the success of the last edition, the same content and timeline has been preserved for the new program. For the first time in 30 years, parity has been achieved in terms of gender diversity. In the case of the Industrial Master, this year, the approved design changes are being implemented, with new professionals starting in their roles at the Industrial Complexes as a first point of contact with the Company. At these locations, they are developing the basic knowledge of security and organization of the function and will continue with their training in person at our Advanced Training Center (Móstoles) once they complete this initiation program. From that moment on, the program features the same content as previous editions, including project development and resolving practical cases.
Upstream	Stimulus of soft skills (effective communication, impact and influence, fast teams, innovation, continuous improvement) and new methodologies (agile, lean, etc.) to transform groups of people into high-performing teams. Continuous training in maintenance and update of technical knowledge.
Refining and Chemical	In terms of Industrial Safety, a focus has been placed on actions deriving from the strategic plan with a significant emphasis on process safety, through functional workshops for all areas involved. Training in risk analysis has also been carried out, in addition to the remediation of soil contamination and actions relating to product safety. Continuous training in technical knowledge and the development of training pathways that go hand in hand with the technical course in Process Optimization and Control. Promotion of skills required by specific groups, such as negotiation skills for the Chemicals salesforce.
Marketing and LPG	Launch of an expert University program adapted to the new market environment and Digital and Relational Marketing program (3 editions for different areas). New Working Methods for 200 professionals and senior members of staff from the Commercial Division. Road Safety and Welfare Workshops for more than 1,500 people from across the Commercial Division. Management transformation plan for managers at the LPG factory. And training for more than 150 managers and supervisors at the Stop&Go franchise who have signed a contract with Repsol.
Training for Occupational Integration and Employability Programs	Repsol is committed to professional integration programs at all levels, becoming a European Ambassador for the FP Dual program. In addition, during 2019 we had 34 students in this field (ex Petronor) 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: 7 editions. No. of beneficiaries: 65 people.

[404-3] Percentage of employees receiving regular performance and career development reviews

Performance and career development reviews	2019 ⁽¹⁾			2018		
	Women	Men	Total	Women	Men	Total
Executives	49	197	246	50	195	245
Technical managers	758	1,709	2,467	712	1,648	2,360
Technicians	2,773	5,257	8,030	2,742	5,222	7,964
Clerical staff	557	218	775	575	227	802
Manual workers junior personnel	360	2,553	2,913	296	2,428	2,724
Total	4,497	9,934	14,431	4,375	9,720	14,095

(1) Information regarding 2019 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 opportunities

Repsol has an **Equal Opportunities Plan** in place at Repsol Group companies in Spain, whose goal is to improve the occupational position of women in terms of their employment and career (see Chapter 6.2. People). With a view to strengthening Repsol's commitments to Equality, the following initiatives are worth particular mention:

- Renewal of the "Equality at the Company" certificate awarded to companies that are particularly committed to the application of equality policies.
- Adhesion to the Ministry of Equality and Social Affairs' anonymous curriculum protocol, designed to eliminate any possible gender bias that could occur in staff selection processes.

- Design of female talent maps in areas of business with specific initiatives to boost female leadership by 2020.
- In addition, we are members of the ClostinGap cluster, whose objective is to analyze the opportunity cost of the gender gap, the sixth edition of the "Women On the Way to Employment" program, the sponsorship of the "Hay Salida" race against gender violence, and the launch of REPSOL Digital Girls, an initiative to awaken STEM (science, technology, engineering, and mathematics) vocations in girls and young women.

With a view to enhancing inclusion, the Group has signed up to RED!, a reference forum dedicated to diversity and the inclusion of LGBTI+ employees.

[405-1] Diversity in governing bodies and employees

Number of employees by category, age and gender

Job category		2019			2018		
		<30	30-50	>50	<30	30-50	>50
Executives	Women	-	26	25	-	28	24
	Men	-	78	135	-	81	139
	Total	-	104	160	-	109	163
	% F	-	25%	16%	-	26%	15%
Technical managers	Women	-	551	207	1	562	195
	Men	3	1,047	690	8	1,061	720
	Total	3	1,598	897	9	1,623	915
	% F	-	34%	23%	11%	35%	21%
Technicians	Women	821	3,473	513	788	3,409	494
	Men	702	4,954	1,803	702	4,902	1,811
	Total	1,523	8,427	2,316	1,490	8,311	2,305
	% F	54%	41%	22%	53%	41%	21%
Clerical staff	Women	19	457	200	29	520	200
	Men	21	204	115	26	196	95
	Total	40	661	315	55	716	295
	% F	48%	69%	63%	53%	73%	68%
Manual workers and junior personnel	Women	460	2,179	495	410	2,099	463
	Men	658	3,771	1,621	690	3,969	1,666
	Total	1,118	5,950	2,116	1,100	6,068	2,129
	% F	41%	37%	23%	37%	35%	22%
Total	Women		9,426			9,222	
	Men		15,802			16,066	
	Total		25,228			25,288	
	% F		37%			36%	

The percentage of women in this section includes all employees, including those that have working hours of less than 80%.

[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		2019	2018
Total employees entitled to leave	Women	204	199
	Men	389	376
	Total	593	575
Total employees that took leave	Women	200	192
	Men	377	340
	Total	577	532
Total employees that returned to work after leave	Women	187	186
	Men	359	320
	Total	546	506
Return to work rate ⁽¹⁾	Women	94%	97%
	Men	95%	94%
	Total	95%	95%

Retention		2019	2018
Total number of employees that were still employed 12 months after their return to work	Women	175	210
	Men	315	386
	Total	490	596
Retention rate ⁽²⁾	Women	94%	98%
	Men	98%	97%
	Total	97%	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 the previous year.

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.

Human Rights and Community Relations




Indirect economic effects

[203-1] Investments in infrastructure and services supported and [203-2] Significant indirect economic impacts Figures of social investment

Social investment figures

The Company identifies and strengthens positive impacts and the shared value of regions where it is present. The context determines the scope and focus of the investment. In 2019, the social investment came to €50.78 million, of which €20.49 million (40.4%) consisted of voluntary contributions and €30.28 million (59.6%) were made under a legal or contractual obligation. The following page provides examples of social investment projects.

Monetary contributions to foundations and non-profit entities in 2019 amounted to 8.49 million euros. In 2018, the contribution was 6.97 million euros. This year a new Company tool was implemented to improve the robustness and traceability of reported information.

Country	SDG	Project
Ecuador	 	<p>Yasuní: Leadership School</p> <p>The program is aimed at 20 young people from the Waorani and Kichwa indigenous communities, both close to our operations, who have been nominated by their leaders. The participants are provided with tools for social and cultural awareness, conflict resolution, teamwork and project design, in order to obtain the specialist knowledge required to allow them to design local or community development projects that are technically viable in the short-term. The investment in the project comes to more than €18,000.</p>
Ecuador		<p>Enterprising women enhancing their income</p> <p>The aim of the project is to generate a sustainable source of income for women from the Waorani community close to our operations through the development of businesses that last over time in three categories: community tourism, cocoa and handicrafts. The investment comes to more than €38,000 in 2 years.</p>
Libya		<p>Improving access to water</p> <p>In a country in conflict, where access to water is scarce, 9 projects are taking place to install water pumps and storage tanks for the total sum of €1.6 million. The specifications and requirements were defined by the local authorities, who will now assume responsibility for maintaining this equipment. The project began in 2019 and will last 3 years.</p>
Peru	 	<p>Nuevo Mundo Community Development Fund</p> <p>The project encourages the creation of a multi-stakeholder platform that brings together the State and other private entities together to develop community interventions from a territorial and environmental perspective. This fund undertakes programs and activities in line with the Coordinated Development Plan, which promote development and contribute to the well-being of the Nuevo Mundo Native Community, closing the gap of technical and management skills in the community. With an investment of \$ 2 million over 4 years, the project has been created with a collaborative approach and will benefit 1,200 people in the area surrounding our operations.</p>
United States	 	<p>Collaboration with the Space Center Houston to promote STEM skills and inclusion</p> <p>Repsol collaborates with the Space Center Houston to involve students in activities relating to STEM (science, technology, engineering and mathematics) skills, innovation and exploration. Repsol contributes to programs structured around robotics. Sensorial events are also held that offer students with sensorial processing difficulties, such as autism disorders, the opportunity to participate in these programs in a reduced sensorial environment. In total, 1,800 people have benefitted from this project, with an investment of more than €80,000.</p>
Guyana		<p>Cultural support for the Makushi indigenous language through music</p> <p>The project consists in the creation and printing of a songbook in the indigenous Makushi language, including a collection of indigenous songs translated into English and typical Guyanese songs translated into Makushi. The book contributes to the preservation and documentation of the indigenous language and its culture, as no similar project has ever been performed in Guyana. The project has also been organized to coincide with the UN's International Year of Indigenous Languages in 2019.</p>
Colombia	 	<p>Strengthening of community skills to adapt to climate change</p> <p>In the Alta Extrema Guajira, Colombia, a vulnerable area to climate change, spaces have been set up to facilitate communication, awareness raising and the analysis of solutions, encouraging relations between communities and State entities that make it possible to work together on climate change adaptation mechanisms, 320 teachers and students from the Wayuu indigenous community participated in this project.</p>
Malaysia		<p>Projects to diversify the family economy</p> <p>In Malaysia, a range of projects have been performed to diversity and increase the economic activity and source of income of local fishing communities in our area of operations. Fishermen and their families are trained to prepare and market products with a high-added value such as fish preserves and honey or to grow vegetables, increasing their family's income and thus eliminating their exclusive reliance on fishing as a means of sustenance. Repsol has invested more than €20,000 to help 30 families in the area.</p>

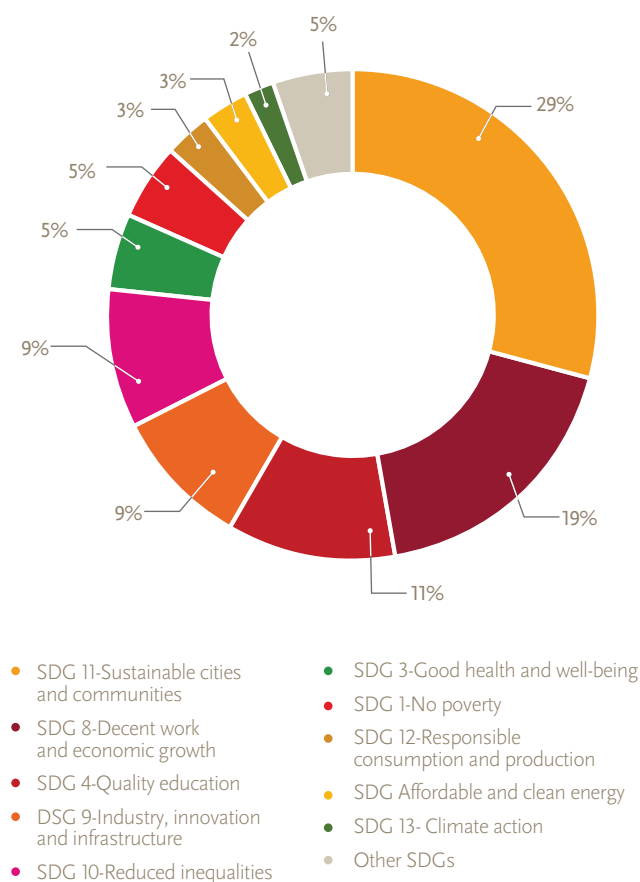
Voluntary social investment

This includes the social programs carried out on a voluntary basis, or which arise from voluntary agreements with communities.

Voluntary social investment (millions of euros)		
	2019	2018
Repsol	10.85	11.57
Repsol Foundation	9.65	9.69
Total	20.49	21.26

Voluntary social investment by type of contribution (millions of euros)		
	2019	2018
Contribution in cash	18.35	17.45
Contributions in time	0.31	0.52
Contributions in kind	1.17	2.65
Management costs	0.66	0.64
Total	20.49	21.26

Contribution of voluntary social investment to the SDGs*



* Management costs without specific allocation to projects are not included: : €0.30 million

Voluntary social investment by country (millions of euros)		
	2019	2018
Bolivia	1.08	1.46
Brazil	0.79	0.63
Canada	0.41	0.86
Colombia	0.85	0.14
Ecuador	1.35	1.03
Greece	0.01	0.06
Guyana	0.11	0.1
Indonesia	0.09	0.1
Libya	0.35	2.67
Malaysia	0.39	0.37
Mexico	0.02	0
Norway	0.33	0.38
Papua New Guinea	0	0.08
Peru	2.91	2.09
Portugal	0.09	0.22
Russia	0.82	0.02
Spain	10.36	10.82
Trinidad and Tobago	0.12	0
United States	0.28	0.12
Venezuela	0.07	0.03
Vietnam	0.06	0.07
Total	20.49	21.26

Mandatory social investment

We make 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 social investment in 2019 amounted to €30.28 million, which was made in:

Mandatory social investment by country (millions of euros)		
	2019	2018
Brazil	14.31	9.24
Ecuador	0.86	1.07
Guyana	0.06	0
Portugal	0.17	0
Russia	0	0.95
United States	12.74	10.77
Venezuela	2.15	0
Total	30.28	22.04

Mandatory social investment is made pursuant to contractual obligations and is usually linked to the volume of activity carried out. In 2019 it increased by 37% over the previous year due to increased activity in Brazil, the United States and Venezuela.

Human rights

[412-2] Training of employees in 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 2019, the course has been taken by a total of 48 employees, which is equivalent to 96 hours of training. The course "Prevention of Harassment" was attended by 39 people, equivalent to 39 hours, and "Overcoming Barriers" was attended by 120 people, equivalent to 120 hours.

[406-1] Cases of discrimination and corrective response¹

In 2019, seven harassment cases were undertaken in Spain pursuant to the protocol for the prevention of harassment of the Repsol Group. Under Spanish legislation, the company is unable to provide any further details on the claims, investigations, handling or resolution of harassment cases for reasons of confidentiality.

Two complaints of discrimination were received the United States. Both were resolved. The discrimination complaint filed in 2017 was also resolved this year.

In Canada, no new cases were recorded in 2019. The complaint about possible discrimination on the grounds of race/nationality filed in 2018 has yet to be resolved. One dispute from 2017 concerning discrimination on the grounds of disability remains pending and has been taken to the Alberta Human Rights Commission and is awaiting a verdict.

In Norway, one case of harassment was filed in 2019. After an analysis performed by an external agent, a conclusion was reached that there was no discrimination and therefore the case has been closed.

Of cases reported in 2019, two cases of harassment were confirmed at by year-end, and none of discrimination, corruption or human rights violations.

Of cases reported in 2018, one case of harassment was confirmed, and none of typologies hereby mentioned.

[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 fourteen operations in seven countries (Bolivia, Canada, Colombia, Ecuador, Indonesia, 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. For cases of harassment of employees at Spanish companies included in the scope of application of the Repsol Group's Framework Agreement, the Harassment Prevention Protocol defined for Spain is applied; in other jurisdictions, the legal requirements at local level apply. In any case, the Code of Ethics and Conduct contains the general principles applicable to workplaces free from harassment.

Country	Description	Participation strategy
Bolivia	Margarita: Caipipendi and Huacaya. 5 indigenous communities pertaining to the Guarani people of Itaka Guasu. Mamoré, Monteagudo and Cambeiti: 1 indigenous community belonging to the Guarani people in Cambeiti.	Process of prior consultation for environmental license in new projects and ongoing dialog with communities in active projects. Impacts are assessed and monitored. Continuous execution of action plans and continuous contact with communities through participative dialog. Monthly meetings with communal and community leaders. Operational level formal grievance mechanisms in place. Social investment projects carried out with communities and in conjunction with municipality of Huacaya and Entre Rios.
Canada	Greater Edson, North Duvernay & South Duvernay, Chauvin. 16 indigenous communities of First Nations and Metis.	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 2019, 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 Waiti project, and permanent voluntary cooperation via a cooperation agreement pursuant to "Waemo Kewingi" (Good Living) with the Waorani Nationality of Ecuador (NAWE), the representative body of the entire Waorani ethnic group. Projects are governed by Ecuadorian legislation and by the Environmental Management Plan. Plans are being made for community development, emergency plans, environment and an anthropological contingency plan. Strategy based on continuous participation of communities through dialog plans that identify key stakeholders, frequency of contacts and periodic meetings, etc. In addition, local development projects are carried out, such as specific training courses for farmers and women, and social investment projects.
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.
Peru	Block 57: 8 native communities in the area of direct influence.	Operations being carried out are covered during three stages of community relations (insertion, residence and departure) through participation strategies, which are carried out in accordance with the Community Relations Plan under social impact management programs (community monitoring and citizen vigilance; compensations and indemnities; grievance register; promotion of local employment; community communication and relations) and social investment and contribution to local development. Community relations are conducted with respect for the cultural patterns of 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, although not in the operating area.

Local communities

[413-2] Operations with significant negative effects - actual and potential - on local communities

Activity	Potential impacts identified
Downstream Industrial complexes and Repsol Gas and Electricity	Smells, noise, gas emissions into the atmosphere, dust, visual impacts and, to a lesser extent, discharges.
Onshore exploration and production	<p>Potential health effects on the people living locally as a result of the inhalation of gases associated with exploration activities</p> <p>Temporary use of land to carry out the exploration work.</p> <p>Hiring of local manpower to carry out the exploration work</p> <p>Migratory movements toward operations they may cause on use of local services.</p>
Offshore exploration and production	<p>Temporary change in fishing routes to accommodate the presence of boats and other equipment related to oil and gas operations.</p> <p>Temporary change in fishing sector revenue due to the installation of equipment and facilities for offshore exploration purposes.</p> <p>Economic activity related to tourism.</p> <p>Hiring of local manpower to carry out the exploration work.</p>

[OG-11] Sites dismantled and in the process of being dismantled

At the end of a facility's useful life, the Company establishes dismantling plans to ensure that the necessary measures are taken to minimize the impact on the environment. Repsol also collaborates with the corresponding authorities to transfer the necessary responsibilities, once the Company no longer has a presence in the area.

The company has internal regulations on asset integrity and risk management, which ensure that any serious accident scenarios that may occur during dismantling are identified and evaluated, including those that may arise from interference with assets in operation. For each scenario identified, measures are implemented that seek to preferably eliminate or minimize these dangers, and when this not possible, control and/or mitigate them, so that the risks to health and the environment are tolerable.

In 2019, 50 service stations and 1 LPG factory (San Fernando de Henares) were dismantled in Spain, and the thermal power stations at Escucha, Puertollano and Tarragona are in the process of being dismantled.¹ In the Exploration and Production business, work has been done in 2019 on the dismantling of 7 Lots. In the dismantling of Lot 57 in Peru, which affects the Mapi and Mashira regions, an environmental restoration plan is being carried out in both regions in agreement with the indigenous organization Eco Asháninka. The dismantling and reforestation work was

¹For the first time, the numbers reported considers the Downstream businesses, including Repsol Gas y Electricidad,

completed in 2019. Between 2020 and 2021, maintenance and monitoring of the reforestation work will continue, as will the social investment plan provided for in the exit strategy.

In 2018, there was no dismantling activity in the Exploration and Production business.

Environment

Non-GHG emissions

[305-7] Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions,

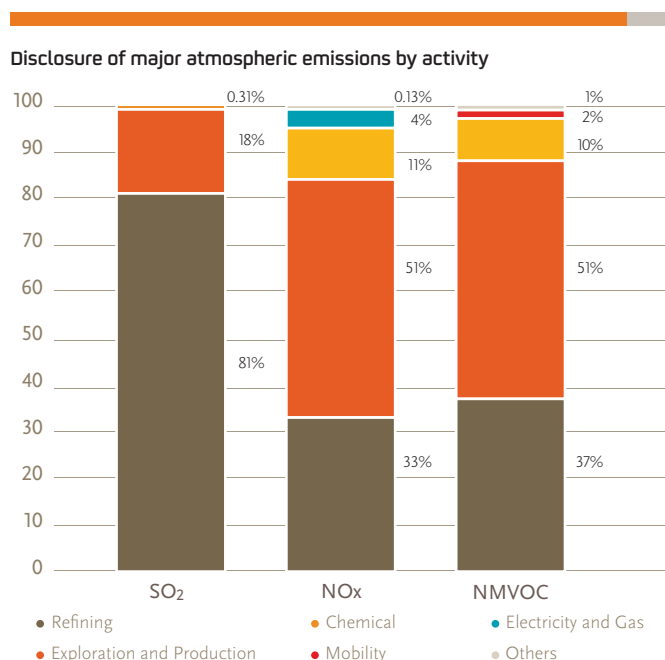
SO ₂ , NO _x and NMVOCs emissions (t)	2019	2018
SO ₂	26,949	29,924
NO _x	19,876	20,603
NMVOC	31,747	35,890

SO₂ and NO_x emissions in the Refining and Chemicals businesses are measured with continuous concentration and smoke flow analyzers. When there is no continuous analyzer, internal environmental parameter guideline are applied, where the methodology for calculating these emissions is established.

In the rest of the businesses, the environmental parameters guidelines are applied when the applicable regulations do not define a direct calculation or measurement methodology.

In the case of NMVOC emissions, it is estimated using the methodology established in the environmental parameter guidelines in cases where there is no applicable local regulation.

Disclosure of major atmospheric emissions by activity



SO₂ emissions were down by 10% compared to 2018; NO_x emissions were down by 4% and NMVOC emissions by 12%. Mainly in the Refining business due to several maintenance shutdowns and emission factor updates.

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	2019	2018
Tons of SO ₂ /thousands of tons of processed crude oil	0.50	0.53
Tons of NO _x /thousands of tons of processed crude oil	0.15	0.18
Tons of NMVOC/thousands of tons of processed crude oil	0.26	0.28

Exploration and production ⁽¹⁾	2019	2018
Tons of SO ₂ /thousands of boe produced	0.027	0.030
Tons of NO ₂ /thousands of boe produced	0.055	0.062
Tons of NMVOC/thousands of boe produced	0.088	0.115

(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.

[G4-OG8] Benzene, lead and sulfur content in fuels

At the Company's refineries, processes are being improved to ensure compliance with the required technical specifications at all times. Furthermore, both the commercial businesses and industrial facilities are working within the environmental limit established as a preventive measure for professional exposure. This involves contributing to improving the environment by reducing the release of volatile components into the atmosphere. All our facilities have been improved to limit the content in compounds, such as aromatics, sulfur and benzene; our most recent investment was in the construction of new units in Peru to produce diesel and gasolines with a 0.005% sulfur mass with additional limits on the content of aromatics and benzene. The Commercial businesses are also reducing the release of volatile organic compounds through the installation of operating procedures and systems.

The fuel that Repsol markets meets the current quality specifications applicable. Repsol sells mainly in Spain, Portugal, France, Italy, Peru and Mexico. Where fuel was not produced at Repsol's facilities, the Company has agreements with independent laboratories that carry out product analysis to ensure compliance.

Maximum content	Europe	Mexico ⁽¹⁾	Peru ⁽²⁾
Sulfur mg/kg	10	30	50
Benzene %v	<1	<1 or <2	⁽²⁾

(1) The maximum benzene content depends on the region of Mexico in which the fuel is marketed.

(2) Repsol specifications: National gasolines: 1% max vol. Export gasoline: not specified, Engine gasolines: 2% max vol.

(3) The maximum sulfur content depends on the type of fuel.

Repsol fuels have a safety sheet and a technical sheet, where consumers can consult information on the benzene and sulfur content in gasolines and diesel fuels. This information is available to customers and/or end consumers when requested.

Effluents and waste

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.

[303-2] Water sources significantly affected by water extraction

There are 13 significantly affected water bodies, of which:

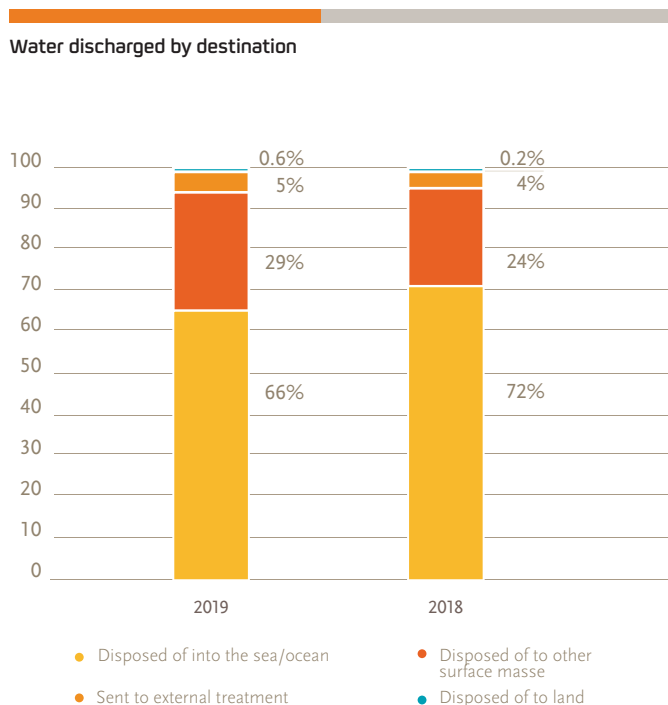
- 7 are rivers and 5 are reservoirs.
- 8 are part of or in the area of influence of regionally, nationally or internationally recognized protected areas, including 2 in Ramsar sites.
- 10 are classified as Key Areas for Biodiversity according to IBAT because of the value they bring to biodiversity.
- None has a use or value that is inconsistent with our activity, so it does not interfere with local communities or indigenous peoples in the area.

The standards, methods and assumptions used:

- % of water collected compared to the average value of the annual volume of the water body
- World Database on Protected Areas (IBAT)
- Ramsar Sites Information Service
- World Database of Key Biodiversity Areas (IBAT)
- IUCN Red list of threatened species

[306-1] Discharge of water according to quality and destination

A total of 39,147¹ tons of water were discharged. (In 2018, 36,813² tons were discharged.) Water discharged by destination is shown below:



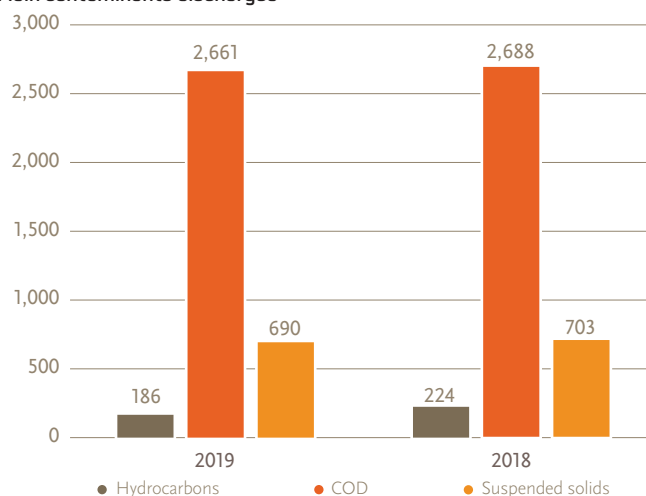
Treatment of discharged water

The fluid effluents from the facilities of the Company are subjected to purification processes to minimize their environmental impact and ensure compliance with legal requirements. The type of wastewater treatment process is specific to the activity and the characteristics of the site. Treatment may be a physical-chemical (primary) process, completed with a biological (secondary) process, or even include more advanced treatment (tertiary process) or other specific processes for contaminants that are non-degradable using non-conventional treatments.

Main contaminants discharged

The main contaminants discharged at Repsol facilities are: hydrocarbons, suspended solids, and organic matter likely to undergo oxidation, measured as chemical oxygen demand (COD).

Main contaminants discharged⁽¹⁾



(1) 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.

Hydrocarbon spills in 2019 by activity

Activity	2019	%	2018	%
Exploration and production	123.54	66.4%	170.9	76.3%
Refining	55.65	29.9%	45.2	20.2%
Chemicals	1.34	0.7%	4.2	1.9%
Mobility	5.14	2.8%	3.3	1.5%
Electricity and Gas	0.00	0.0%	N.A.	N.A.
Other	0.52	0.3%	0.4	100%
Total	186.19	100.0%	224	100.0%

[G4-OG5] Volume and disposal of water

The following is the water produced and injected in the Company's exploration and production assets:

Water	2019	2018
Produced (thousands of tons)	59,198	62,129
Injected (thousands of tons)	51,772	54,431

[306-5] Water bodies affected by water discharges and/or run-offs

There are 12 water bodies significantly affected by discharge, of which:

- 3 correspond to maritime zones, 7 are rivers and 2 are smaller bodies.
- 4 are part of or in the area of influence of regionally, nationally or internationally protected areas, including 1 in Ramsar sites.
- 11 are classified as Key Areas for Biodiversity according to IBAT³ because of the value they bring to biodiversity.
- None has a use or value that is inconsistent with our activity, so it does not interfere with local communities or indigenous peoples in the area.

1. Water discharged does not include data for the Electricity and Gas business, which was incorporated to the Company's reporting in 2019.

2. Refrigeration water in offshore operations is no longer classified as water discharged. The 2018 figure has been amended accordingly.

3. Integrated Biodiversity Assessment Tool

[306-2] Waste by type and method of disposal

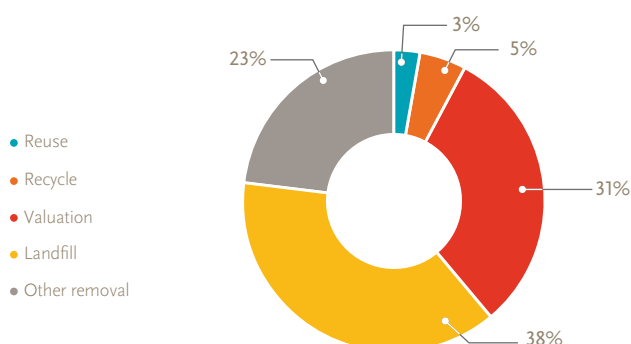
Disclosure of hazardous and non-hazardous waste per activity in 2019.

Activity	Hazardous waste (metric tons)		Non-hazardous waste (tons)	
	2019	2018	2019	2018
Exploration and Production	7,609	24,681	174,126	73,333
Refining	23,116	25,956	48,209	45,810
Chemicals	16,601	15,090	17,535	21,526
Marketing	3,688	4,358	5,534	5,032
Lubricants and Specialist Products	127	131	416	688
LPG	205	29	835	554
gas and electricity	18	-	45	-
Other	70	97	634	496
Total	51,434	70,343	247,334	147,440

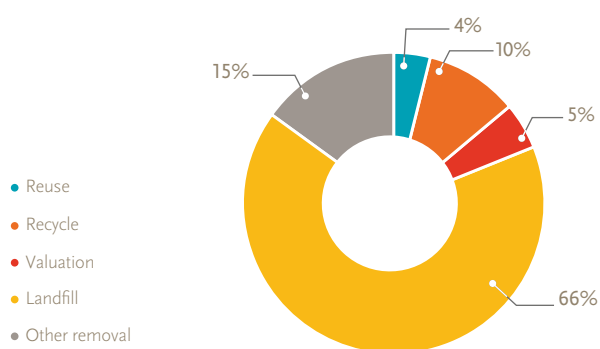
Hazardous waste production decreased 27% mainly because in 2018 we completed a recovery project in the water capture area in Canada. Non-hazardous waste increased 68% as a result of a soil remediation project in Canada

The charts below report the actions carried out in 2019 for each category:

Hazardous waste management



Non-hazardous waste management



[G4-OG7] Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal

These data do not include the amount of waste generated in drilling activities, the figures for which are shown below:

	2019	2018
Water-based cuttings and fluids	31,796	42,605
Non water-based cuttings and fluids ⁽¹⁾	39,614	48,409

(1) The 2018 figure has been corrected because some of the cuttings and non-aqueous-based fluids from exploratory drilling in Bolivia were not accounted.

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] Owned, leased or managed operations centers located within or adjacent to protected areas or areas of high biodiversity value outside protected areas

As in 2018, 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-WCMC¹ 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 IPIECA² and IOGP³ 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.

Of all assets analyzed, those located in areas adjacent to protected areas and/or areas of high biodiversity value were:

Bolivia	Adjacent to an IUCN ⁴ area Cat, Not assigned or published
Ecuador	34% of Block 16 and 100% of the Tivacuno block are in IUCN Cat. I.
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

1. United Nations Environment Programme's World Conservation Monitoring Centre.
 2. The Global Oil and Gas Industry Association for Environmental and Social Issues.
 3. The International Association of Oil&Gas Producers.
 4. International Union for Conservation of Nature.

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 in 2018 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 the 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 steps in the mitigation hierarchy. It consists of a process to assist in the recovery of an ecosystem that has been degraded, damaged or destroyed. Repsol has internal regulations that establish the requirements to be implemented in this connection based on the best practices in the industry. Repsol is implementing asset abandonment plans at its operations that ensure the restoration of habitats. In 2019, Repsol restored 234 hectares of land corresponding to different types of habitats, for example: forests, wetlands, crops, etc.) following the abandonment of its Exploration and Production operations (wells and pipelines, in addition to others). These activities took place at the Business Units in Canada, Ecuador, USA-Marcellus and Peru. The standards and methods employed were supervised by the corresponding independent local organizations and the condition of the areas restored at the end of activities is higher than 90% in all cases.

Country	Size of restored area	Location	Restored habitat type	State of area on restoration completion	Implementation of restoration measures approved by independent experts
Peru	8.4	Block 57 (2 exploration wells)	Tropical rainforest	100% restored	Yes: approved by regulator
Ecuador	8	1 location (AMO A Block 16)	Inland (temporarily/ permanently flooded)	100% restored	Yes: approved by regulator
United States	156.1	Marcellus Pennsylvania (11 wells and 19 pipes) Trenton Black River in New York State (2 wells)	Wetlands, plains, riverbank areas and streams	Wells: 100% restored Pipes: 90% -100% restored	Yes: approved by regulator
Canada	61.2	36 locations (wells and ancillary facilities)	Forest and cultivated land	100% restored	Yes: approved by regulator

(1) Reported data include Exploration and Production activities in 2019.

[304-4] 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 exploration and production operation⁽¹⁾	
Critically endangered species	22
Endangered species	73
Vulnerable species	355
Endangered species	429

(1) The data reported includes species of Exploration and Production assets with activity in 2019. The data are similar with respect to 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% under the assumption that all assets the Company operates have potential biodiversity-related risks. The data are similar with respect to 2018.

Responsible Tax Policy

Result generated and taxes effectively paid in 2019, by countries⁽¹⁾

Millions of euros	Tax burden					Tax collected					
	Profit 2019 ⁽²⁾	Profit 2018 ⁽²⁾	TOTAL	Income tax	Other taxes on profits	TOTAL	VAT	Hydrocarbons tax ⁽³⁾	Other	Total 2019	Total 2018
Spain	881	486	712	243	469	8,375	2,846	5,181	348	9,087	9,700
Portugal	56	60	32	21	11	1,1168	307	841	20	1,200	1,174
Italy	(29)	(12)	26	-	26	102	29	72	1	128	82
Norway	62	97	41	40	1	46	23	-	23	87	89
The Netherlands	102	24	36	36	-	-	-	-	-	36	41
United Kingdom	(212)	678	9	-	9	3	(20)	-	23	12	13
Luxembourg	65	62	-	-	-	-	-	-	-	-	(1)
Germany	-	1	-	-	-	1	1	-	-	1	-
France	-	-	2	1	1	5	5	-	-	7	-
Switzerland	-	-	-	-	-	-	-	-	-	-	-
Romania	(1)	(98)	-	-	-	-	-	-	-	-	-
Greece	(1)	(4)	-	-	-	-	-	-	-	-	-
Ireland	(25)	-	-	-	-	-	-	-	-	-	-
Bulgaria	(238)	(37)	-	-	-	(4)	(4)	-	-	(4)	7
Europe	881	1,257	858	341	517	9,696	3,187	6,094	415	10,554	11,105
Peru	47	69	100	27	73	606	300	290	16	706	621
Brazil	160	193	219	-	219	20	1	-	19	239	266
Colombia	(51)	88	68	67	1	17	-	-	17	85	74
Bolivia	45	66	31	22	9	29	23	-	6	60	67
Venezuela	(11)	(97)	5	4	1	2	1	-	1	7	8
Ecuador	5	88	7	4	3	6	-	-	6	13	77
T&T	(163)	(17)	95	4	91	(43)	(46)	-	3	52	48
Aruba	(6)	(11)	-	-	-	-	-	-	-	-	-
Chile	-	-	-	-	-	-	-	-	-	-	-
Barbados	9	(74)	1	1	-	-	-	-	-	1	-
Guyana	(23)	(2)	-	-	-	-	-	-	-	-	-
Latam & Caribbean	12	303	526	129	397	637	279	290	68	1,163	1,161
Indonesia	96	470	192	192	-	7	3	-	4	199	202
Malaysia	19	89	277	-	277	18	(7)	-	25	295	239
Timor Leste	0	28	-	-	-	-	-	-	-	-	-
Russia	(14)	41	87	13	74	16	15	-	1	103	98
Vietnam	(311)	(6)	41	20	21	(6)	(8)	-	2	35	55
Singapore	10	-	1	1	-	-	(2)	-	2	-	6
Australia	(2)	26	-	-	-	-	-	-	-	-	-
Iraq	(2)	(1)	-	-	-	-	-	-	-	-	-
Kazakhstan	-	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	(127)	(19)	-	-	-	-	-	-	-	-	-
Asia and Oceania	(331)	628	598	226	372	35	1	-	34	633	600
US	(1,790)	(178)	50	1	49	29	-	-	29	79	99
Canada	(2,715)	240	23	-	23	34	3	-	31	57	60
Mexico	(20)	(20)	27	11	16	4	(8)	-	12	31	9
North America	(4,525)	42	100	12	88	67	(5)	-	72	167	168
Libya	162	196	396	361	35	2	-	-	2	398	520
Algeria	(65)	36	132	97	35	5	-	-	5	137	44
Angola	40	(40)	-	-	-	2	-	1	1	2	-
Morocco	1	(16)	-	-	-	1	-	-	1	1	-
Mauritania	-	-	-	-	-	-	-	-	-	-	-
Namibia	11	-	-	-	-	(3)	(3)	-	-	(3)	-
Tunisia	(2)	(65)	-	-	-	-	-	-	-	-	-
Gabon	(1)	-	-	-	-	-	-	-	-	-	-
Sierra Leona	-	-	-	-	-	-	-	-	-	-	2
Africa	146	111	528	458	70	7	(3)	1	9	535	566
TOTAL	(3,816)	2,341	2,610	1,166	1,444	10,442	3,459	6,385	598	13,052	13,600

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

(2) Net profit after tax and minority interests, including the profit of joint ventures and other companies whose operations are managed as if they were (for further information, see Appendix I), in addition to income from discontinued operations.

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

Ethics and Compliance

Anti-corruption

[205-2] Communications and training regarding anti-corruption policies and procedures

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 "Code of Ethics and Conduct Game", a quiz to test and refresh knowledge of the Code.
- "Crime Prevention Model" (available to all employees).
- "Anti-Money Laundering and Terrorist Financing Prevention" (available to employees in Peru).

Public policy

[415-1] Contributions to political parties and/or representatives

In 2019 (as in 2018), Repsol made no political contributions. 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.

Number and percentage of employees that have received training regarding anti-corruption measures by region

Region	Governance Bodies		Executives		Technical managers		Technicians ⁽¹⁾		Clerical staff		Manual workers and junior personnel	
	No.	%	No.	%	No.,	%	No.,	%	No.	%	No.	%
Africa			3	100%	41	98%	79	80%				
Asia			6	55%	150	86%	433	79%	59	82%		
Europe	6	67%	175	79%	1,592	89%	5,880	80%	772	83%	5,400	47%
Latin America			19	100%	296	98%	2,432	52%	21	100%	43	42%
North America			14	82%	261	70%	550	67%	25	63%	138	64%
Total 2019	6	67%	217	80%	2,340	87%	9,374	70%	877	82%	5,581	48%
Total 2018	-	-	217	79%	2,062	80%	8,474	63%	683	60%	5,251	45%

(1) Data obtained from the maximum accumulated average workforce.

Compliance¹²³

[307-1] Non-compliance with environmental law and regulations

As in 2019 (as in 2018), there were no significant fines or sanctions levied against Repsol Group in 2019 as a result of lawsuits or administrative proceedings ending with a final decision.

[206-1] Legal actions related to unfair competition and monopolistic practices and against free competition

Litigation ⁽¹⁾ for anti-competitive practices (Number of cases initiated)

	2019	2018
Cases filed	0	0

(1) Number of lawsuits or administrative procedures initiated during the year that are significant for the Repsol Group.

In order to foster growing awareness and stay permanently abreast of anti-trust legislative developments, the company continued to provide subject-specific training throughout 2019.

[416-2] Cases of non-compliance relating to health and safety effects of product and service categories.

The number of lawsuits and administrative proceedings ending in 2019⁴ with a final decision, imposing significant fines or sanctions levied against the Repsol Group due to its failure to adhere to European Product Safety regulations (REACH and CLP regulations) is 0.

Supply Chain

Management of the supply chain and its impacts where the company operates

[308-2] Negative environmental impacts on the supply chain and measures taken

A total of 2,605 evaluations (3,060 in 2018) were made of environmental aspects on 1,248 suppliers (1,347 in 2018), 45 evaluations (265 in 2018) were found for 41 suppliers (232 in 2018) with an environmental performance score of less than 5 out of 10. Poor scores are associated with, among others, logistics contracts and installation and maintenance of equipment. As in 2018, 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 on the supply chain and measures taken

A total of 2,605 social issue evaluations (3,060 in 2018) were performed on 1,248 suppliers (1,347 in 2018). Some 67 evaluations (120 in 2018) on 53 suppliers (102 in 2018) 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) as in 2018.

Economic Performance

[201-1] Economic value generated and distributed and 201-4 Financial assistance received from the government

Item (Millions of euros)	2019	2018
Direct economic value generated	50,348	51,185
Sales and other operating income	50,053	50,946
Finance income	148	177
Gains on disposal of fixed assets	147	62
Economic value distributed	47,140	47,623
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)	36,491	36,902
Salaries and employee benefits (except training)	1,932	1,859
Payments to capital providers (dividends to shareholders and interest payments to interest providers)	836	768
Public Administrations: Tax accrued in the year and included as expenses in the company's consolidated Financial Statements, including Corporate Income Tax and Excise Duties,	7,881	8,094
Investments in communities (this value is calculated by the CR area)	51	43
Retained economic value	3,260	3,562
Economic aid granted by government entities (subsidies)	19	20

1. The information corresponds to companies operated and controlled by Repsol.

2. Only includes lawsuits filed by competition authorities, excluding those filed by companies or individuals.

3. Only includes lawsuits with a final ruling during the reporting year.

4. Indicator reported for the first time this year.

Appendix IV.

GRI Index

GRI 2016	Indicator description	Reference in Management Report, Reports or website	Page/Omission	Verification
GRI 101	Fundamentals			
GRI 102	General contents			
	Organizational Profile			
102-1	Company Name	2019 Consolidated Financial Statements - Note 2 About the Repsol Group		✓
102-2	Activities, brands, products and services	Section 2.1. Value chain and business segments Section 5.1. Upstream Section 5.2. Downstream		✓
102-3	Location of the headquarters	2019 Consolidated Financial Statements - Note 2 About the Repsol Group	8, 28, 38	✓
102-4	Location of operations	Section 2.2. Repsol around the world Section 5. Our business in 2019		✓
102-5	Property and legal form	2019 Consolidated Financial Statements 2019 - Note 2 About the Repsol Group 2019 Consolidated Financial Statements - Note 7 Equity	10, 28	✓
102-6	Markets served	Section 2.2. Repsol around the world Section 5.1. Upstream Section 5.2. Downstream		✓
102-7	Organizational Size	Section 2.1. Value chain and business segments Section 2.2. Repsol around the world Section 2.6. Corporate Structure	10, 28, 38	✓
102-8	Information about employees and other workers	Section 6.2.1. Our team Appendix III: Further information on Sustainability - People	8, 10, 16	✓(1)
102-9	Supply Chain	Section 6.8. Supply Chain	61, 107	✓(2)
102-10	Significant changes in the organization and its supply chain	2019 Consolidated Financial Statements - Note 2.4 Main changes in the year	82	✓
102-11	Precautionary approach or principle	Section 2.5. Corporate Governance Section 6.1. Climate Change Section 6.3. Safe operation Section 6.4. Environment Appendix II: Risks	14, 51, 66, 70 , 99	✓
102-12	External Initiatives	https://www.repsol.com/en/sustainability/reports-kpis-and-partnerships/memberships-in-global-initiatives/index.cshtml		✓
102-13	Affiliation to associations	https://www.repsol.com/en/sustainability/reports-kpis-and-partnerships/memberships-in-global-initiatives/index.cshtml		✓
	Strategy			
102-14	Statement from senior decision-makers	Message from the Chief Executive Officer	1	✓
102-15	Main effects, risks and opportunities	Section 2.3. Risks Section 6.1. Climate Change Appendix II: Risks	12, 51, 99	✓
	Ethics and integrity			
102-16	Values, principles, standards and norms of conduct	Code of ethics and conduct (https://www.repsol.com/imagenes/global/en/repsol_code_of_ethics_and_business_conduct_en_20190719_tcm14-17053.pdf) Section 6.7. Ethics and Compliance About this Report"	81	✓
102-17	Advisory mechanisms and ethical concerns	Repsol ethics and compliance channel. (ethicscompliancechannel.repsol.com) Section 6.7. Ethics and Compliance	81	✓
	Governance			
102-18	Governance structure	Section 2.5. Corporate Governance Appendix VII: 2019 Annual Corporate Governance Report - B.2 List the direct and indirect holders of significant stakes, excluding directors Appendix VII: 2019 Annual Corporate Governance Report - B.3.1 Members of the Board of Directors Appendix VII: 2019 Annual Corporate Governance Report - B.5 Members of senior management Appendix VII: 2019 Annual Corporate Governance Report - B.4 Committees of the Board of Directors	14, 148	✓

GRI 2016	Indicator description	Reference in Management Report, Reports or website	Page/Omission	Verification
102-19	Delegation of authority	Section 2.5. Corporate Governance Section 6.1. Climate Change	14, 51	✓
102-20	Executive-level responsibility for economic, environmental and social issues	Section 2.5. Corporate Governance Appendix VII: 2019 Annual Corporate Governance Report - B.4.2 Committees of the Board of Directors - Audit and Control Committee Appendix VII: 2019 Annual Corporate Governance Report - B.4.5 Committees of the Board of Directors - Sustainability Committee	14, 148	✓
102-21	Consultation of stakeholders on economic, environmental and social issues	Section 6. Sustainability	48	✓
102-22	Composition of the most senior governance body and its committees	Appendix VII: 2019 Annual Corporate Governance Report - B.3.1 Members of the Board of Directors Appendix VII: 2019 Annual Corporate Governance Report - B.4 Committees of the Board of Directors	148	✓
102-23	President of the most senior governing body	Section 2.5. Corporate Governance	14	✓
102-24	Nomination and selection of the most senior governing body	Policy for the selection of directors: https://www.repsol.com/imagenes/global/en/Politica_Seleccion_Consejeros_EN_tcm14-13033.pdf Appendix VII: 2019 Annual Corporate Governance Report - B.3.1 Procedures for the selection, appointment, re-election, evaluation and removal of Directors"	148	✓
102-25	Conflicts of interest	Appendix VII: 2019 Annual Corporate Governance Report - B.6 Competent body and procedure for the approval of transactions with related and intragroup parties Appendix VII: Annual Corporate Governance Report 2019 - 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 shareholders	148	✓
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		✓
102-27	Collective knowledge of the most senior governing body	Section 2.5. Corporate Governance	14	✓
102-28	Evaluation of the performance of the most senior governance body	Section 2.5. 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: 2019 Annual Corporate Governance Report - B.2.2 Description of the evaluation process and the areas evaluated of the Board of Directors Articles of Association - Article 45d	14, 148	✓
102-29	Identification and management of economic, environmental and social effects	Appendix VII: 2019 Annual Corporate Governance Report - B.8.1 Control and risks management systems Appendix VII: 2019 Annual Corporate Governance Report - B.8.2 Internal control and risks management systems related to the financial reporting process (ICFR)	148	✓
102-30	Effectiveness of risk management processes	Appendix VII: 2019 Annual Corporate Governance Report - B.8.1 Control and risks management systems Appendix VII: 2019 Annual Corporate Governance Report - B.8.2 Internal control and risks management systems related to the financial reporting process (ICFR)	148	✓
102-31	Evaluation of economic, environmental and social issues	Appendix VII: 2019 Annual Corporate Governance Report - B.8.1 Control and risks management systems Appendix VII: 2019 Annual Corporate Governance Report - B.8.2 Internal control and risks management systems related to the financial reporting process (ICFR)	148	✓
102-32	Role of the most senior governance body in sustainability reporting	Appendix VII: 2019 Annual Corporate Governance Report - B.4 Committees of the Board of Directors	148	✓
102-33	Communication of critical concerns	Section 2.5. Corporate Governance	14	✓
102-34	Nature and total number of critical concerns	Section 2.5. Corporate Governance	14	✓
102-35	Remuneration policies	Appendix VII: 2019 Annual Corporate Governance Report - B.4 Committees of the Board of Directors- Remuneration Committee-B.4.4 2019 Annual Report on Directors' Remuneration 2019-2021 Director Remuneration Policy: https://www.repsol.com/imagenes/global/en/2019_2021_remuneration_policy_directors_tcm14-150990.pdf	148	✓
102-36	Process for determining remuneration	2019 Consolidated Financial Statements - Notes 29 and 20. Remuneration of members of the Board of Directors and executive staff Appendix VII: 2019 Annual Corporate Governance Report - B.4 Committees of the Board of Directors - Remuneration CommitteeB.4.4 Annual Report on Directors' Remuneration 2019	148	✓
102-37	Involvement of stakeholders in remuneration	Appendix III: Further information on Sustainability - Corporate Governance	105	✓
102-38	Annual total compensation ratio	Appendix III: Further information on Sustainability - People - Remuneration and benefits	112	✓(3)

GRI 2016	Indicator description	Reference in Management Report, Reports or website	Page/Omission	Verification
102-39	Ratio of percentage increase in total annual compensation	Appendix III: Further information on Sustainability - People - Remuneration and benefits	112	√(4)
Stakeholder engagement				
102-40	List of stakeholders	Appendix III: Further information on Sustainability - Materiality and stakeholder engagement	103	√
102-41	Collective bargaining agreements	Appendix III: Further information on Sustainability - People - Employment framework, health and safety at work	115	√
102-42	Identification and selection of stakeholders	https://www.repsol.com/en/sustainability/our-sustainability-model/our-model/index.cshhtml Appendix III: Further information on Sustainability - Materiality and stakeholder engagement		√
102-43	Approach to stakeholder engagement	Appendix III: Further information on Sustainability - Materiality and stakeholder engagement	103	√
102-44	Key issues and concerns mentioned	Appendix III: Further information on Sustainability - Materiality and stakeholder engagement	103	√
Reporting practices				
102-45	Entities included in the consolidated financial statements	Section 2.6. Corporate Structure 2019 Consolidated Financial Statements - Appendix I: Main companies making up the Repsol Group	16	√
102-46	Definition of the contents of the reports and the Coverage of the topic	Appendix III: Further information on Sustainability - Materiality and stakeholder engagement	103	√
102-47	List of material topics	Appendix III: Further information on Sustainability - Materiality and stakeholder engagement	103	√
102-48	Re-expression of information	No relevant re-expressions in the period.		√
102-49	Changes in reporting	The changes in relevant topics and their coverage is included in the materiality matrix.	103	√
102-50	Reporting period	2019		√
102-51	Date of last report	2018 Integrated Management Report published in February 2019		√
102-52	Reporting cycle	Annual		√
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		√
102-54	Declaration of preparation of the report in accordance with GRI Standards	About this report		√
102-55	GRI Content Index	Appendix IV. GRI Index	125	√
102-56	External verification	See PwC's verification letter at www.Repsol.com		√

Material Themes

GRI 2016	Indicator description	Reference in Management Report, Reports or website	Page/Omission	Verification
Economic dimension				
GRI 201 Economic performance				
103	Management approach	Section 6.1. Climate change Consolidated 2019 report on payments to public administrations for hydrocarbon exploration and production activities Section 6.6. Responsible Tax Policy Appendix III: Further information on Sustainability - Economic performance"	51, 79, 134	✓
201-1	Direct economic value generated and distributed	Appendix III: Further information on Sustainability - Economic performance	134	✓(5)
201-2	Financial implications and other risks and opportunities arising from climate change	Section 6.1. Climate change	51	✓(8)
201-3	Obligations of the defined benefit plan and other retirement plans	Consolidated Financial Statements 2019 - Note 29 Obligations to employees		✓
201-4	Financial assistance received from the government	Appendix III: Further information on Sustainability - Economic performance	134	✓
GRI 202 Presence in the market				
103	Management approach	Appendix III: Further information on Sustainability - People	108, 112	✓
202-1	Ratio of standard entry level salary by gender to local minimum wage	Appendix III: Further information on Sustainability - People - Remuneration and benefits	112	✓
202-2	Proportion of senior executives hired from the local community	Appendix III: Further information on Sustainability - People - Employment	108	✓
GRI 203 Indirect economic effects				
103	Management approach	Section 6.2.2. Respect for Human Rights and Relationship with Communities Section 6.8 Supply Chain Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Indirect economic impacts	64-65, 82, 121	✓
203-1	Investments in infrastructure and supported services	Section 6.2.2. Respect for Human Rights and Relationship with Communities Section 6.8. Supply chain Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Indirect economic impacts	64, 82, 121	✓
203-2	Significant indirect commendable effects	Section 6.2.2. Respect for Human Rights and Relationship with Communities Section 6.8. Supply chain Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Indirect economic impacts	64, 65, 82, 121	✓
GRI 204 Procurement practices				
103	Management approach	Section 2. Our Company Section 5.1. Upstream Section 6.8. Supply Chain	8, 28, 82	✓
204-1	Proportion of expenditure on local suppliers	Section 6.8. Supply Chain	82	✓(2)
OG1	Volume and characteristics of the production estimate and identified reserves	Section 2. Our Company Section 5.1. Upstream"	8, 28	✓
GRI 205 Anti-corruption				
103	Management approach	Section 6.7. Ethics and compliance Appendix III: Further information on Sustainability - Ethics and compliance - Fight against corruption	81, 133	✓
205-1	Operations assessed for corruption-related risks	Section 6.7. Ethics and compliance	81	✓(14)
205-2	Communication and training on anti-corruption policies and procedures	Appendix III: Further information on Sustainability - Ethics and compliance - Fight against corruption	133	✓
205-3	Confirmed corruption cases and measures taken	Section 6.7. Ethics and compliance	81	✓(13)
GRI 206 Unfair competition				
103	Management approach	Appendix III: Further information on Sustainability - Ethics and compliance - Regulatory compliance	134	✓
206-1	Legal actions related to unfair competition and monopolistic practices and against free competition	Appendix III: Further information on Sustainability - Ethics and compliance - Regulatory compliance	134	✓

GRI 2016	Indicator description	Reference in Management Report, Reports or website	Page/Omission	Verification
Environmental dimension				
GRI 301 Materials				
103	Management approach	Section 5. Our business in 2019 Appendix III: Further information on Sustainability - Environment - Non-GHG emissions	41, 127	√
301-1	Materials used by weight or volume	Section 5. Our business in 2019	41	√(6)
301-2	Recycled inputs	N/A		Not verified
OG8	Benzene, lead and sulfur content in fuels	Appendix III: Further information on Sustainability - Environment - Non-GHG emissions	1, 127, 30	√
301-3	Reused products and packaging materials	N/A		Not verified
GRI 302 Energy				
103	Management approach	Section 6.1. Climate change Appendix III: Further information on Sustainability - Climate change - Energy efficiency and climate change	51-60, 105-106	√
302-1	Energy consumption within the organization	Section 6.1. Climate change	58	√(7)
302-2	Energy consumption outside the organization	Section 6.1. Climate change	58	√
302-3	Energy Intensity	Section 6.1. Climate change	59	√(7)
OG2	Total investment in renewable energy	Appendix III: Further information on Sustainability Indicators - Climate change - Energy efficiency and climate change	105	√
OG3	Total amount of renewable energy generated, by type	Appendix III: Further information on Sustainability Indicators - Climate change - Energy efficiency and climate change	105	√(8)
302-4	Reduction of energy consumption	Section 6.1. Climate Change	59	√(7)
302-5	Reduced energy requirements for products and services	Appendix III: Further information on Sustainability Indicators - Climate change - Energy efficiency and climate change	105-106	√(8)
OG14	Volume of biofuels produced, bought and sold	Appendix III: Further information on Sustainability Indicators - Climate change - Energy efficiency and climate change	106	√
GRI 303 Water				
103	Management approach	Section 6.4. Environment Appendix III: Further information on Sustainability Indicators - Environment - Effluents and waste	71-73, 127	√
303-1	Water extraction by source	Section 6.4. Environment	73	√(15)
303-2	Water sources significantly affected by water extraction	Section 6.4. Environment Appendix III: Further information on Sustainability - Environment - Effluents and waste	127	√
303-3	Recycled and reused water	Appendix III: Further information on Sustainability - Environment - Effluents and waste	73	√
GRI 304 Biodiversity				
103	Management approach	Section 6.4. Environment Appendix III: Further information on Sustainability - Environment - Biodiversity	73, 129-131	√
304-1	Owned, leased or managed operations centers located within or adjacent to protected areas or areas of high biodiversity value outside protected areas	Appendix III: Further information on Sustainability - Environment - Biodiversity	129	√ (9)
304-2	Significant effects of activities, products and services on biodiversity	Appendix III: Further information on Sustainability - Environment - Biodiversity	130	√(10)
304-3	Protected or restored habitats	Appendix III: Further information on Sustainability - Environment - Biodiversity	130	
304-4	Species appearing on the IUCN Red List and national conservation listings whose habitats are in areas affected by operations	Appendix III: Further information on Sustainability - Environment - Biodiversity	131	
OG4	Number and percentage of significant operational centers where biodiversity risks have been assessed and monitored	Appendix III: Further information on Sustainability - Environment - Biodiversity	131	
GRI 305 Emissions				
103	Management approach	Section 6.1. Climate change Appendix III: Further information on Sustainability - Environment - Non-GHG emissions	51-60, 126	√
305-1	Direct GHG emissions (Scope 1)	Section 6.1. Climate change	58	√(7)
305-2	Indirect GHG emissions from energy generation (Scope 2)	Section 6.1. Climate change	58	√(7)

GRI 2016	Indicator description	Reference in Management Report, Reports or website	Page/Omission	Verification
305-3	Other indirect GHG emissions (Scope 3)	Section 6.1. Climate change	58	√(11)
305-4	Intensity of GHG emissions	Section 6.1. Climate change	59	√(7)
305-5	Reduction of GHG emissions	Section 6.1. Climate change	59	√(7)
305-6	Emissions of ozone-depleting substances (ODS)	N/A		Not verified
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions	Appendix III: Further information on Sustainability - Environment - Non-GHG emissions	126	√
GRI 306	Effluents and waste			
103	Management approach	Section 6.1. Climate Change Section 6.3. Safe Operation Section 6.4. Environment Appendix III: Further information on Sustainability - Environment - Effluents and waste	58, 67, 73, 128-129	√
306-1	Discharge of water according to its quality and destination	Appendix III: Further information on Sustainability - Environment - Effluents and waste	128	√
306-2	Waste by type and disposal method	Appendix III: Further information on Sustainability - Environment - Effluents and waste	129	√
306-3	Significant spills	Section 6.3. Safe operation	67	√
OG5	Volume and elimination of water	Appendix III: Further information on Sustainability - Environment - Effluents and waste	128	√(16)
OG6	Volume of hydrocarbons sent to flare or vented	Section 6.1. Climate change	58	√
OG7	Amount of drilling waste (drilling muds and cuttings) and treatment strategies	Appendix III: Further information on Sustainability - Environment - Effluents and waste	129	√
306-4	Transport of hazardous waste	N/A		Not verified
306-5	Water bodies affected by water discharges and/or run-offs	Appendix III: Further information on Sustainability - Environment - Effluents and waste	128	√
GRI 307	Environmental compliance			
103	Management approach	Appendix III: Further information on Sustainability - Ethics and compliance - Regulatory compliance	134	√
307-1	Non-compliance with environmental legislation and regulations	Appendix III: Further information on Sustainability - Ethics and compliance - Regulatory compliance	134	√
GRI 308	Environmental evaluation of suppliers			
103	Management approach	Section 6.8. Supply chain Appendix III: Further information on Sustainability - Supply chain	82-85, 134	√
308-1	New suppliers that have passed evaluation and selection filters according to environmental criteria	Section 6.8. Supply Chain	82-85	√
308-2	Negative environmental effects on the supply chain and measures taken	Appendix III: Further information on Sustainability - Supply chain	134	√
	Social dimension			
GRI 401	Employment			
103	Management approach	Section 6.2.1. Our team Appendix III: Further information on Sustainability - People - Employment	61-63, 109, 113, 121	√
401-1	New employee hiring and staff turnover	Appendix III: Further information on Sustainability - People - Employment	109	√
401-2	Benefits for full-time employees that are not given to part-time or temporary employees	Appendix III: Further information on Sustainability - People - Remuneration and benefits	113	√
401-3	Parental leave	Appendix III: Further information on Sustainability - People - Diversity and equal opportunities	121	√
GRI 402	Labor/management relations			
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.		√
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 2016	Indicator description	Reference in Management Report, Reports or website	Page/Omission	Verification
GRI 403	Health and safety at work			
103	Management approach	Section 6.3. Safe Operation Appendix III: Further information on Sustainability - People - Employment framework, health and safety at work	66-68, 116-118	√
403-1	Representation of workers in formal worker-company health and safety committees	Appendix III: Further information on Sustainability - People - Employment framework, health and safety at work	116	√
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: Further information on Sustainability - People - Employment framework, health and safety at work	68, 117	√(17)
403-3	Workers with a high incidence or high risk of diseases related to their activity	Appendix III: Further information on Sustainability - People - Employment framework, health and safety at work	117	√
403-4	Health and safety issues addressed in formal agreements with trade unions	Appendix III: Further information on Sustainability - People - Employment framework, health and safety at work	118	√
OG13	Number of process safety claims and near misses by type of activity	Section 6.3. Safe operation	67	√
GRI 404	Training and teaching			
103	Management approach	Section 6.2.1. Our team Appendix III: Further information on Sustainability - People - Training and development	63, 118-119	√
404-1	Average hours of training per year per employee	Appendix III: Further information on Sustainability - People - Training and development	118	√
404-2	Employee skills improvement programs and transition assistance programs	Appendix III: Further information on Sustainability - People - Training and development	118-119	√
404-3	Percentage of employees receiving periodic performance and professional development evaluations	Appendix III: Further information on Sustainability - People - Training and development	119	√(18)
GRI 405	Diversity and equal opportunities			
103	Management approach	Section 2.5. Corporate Governance Appendix III: Further information on Sustainability - People - Diversity and equal opportunities	15-16, 113, 120	√
405-1	Diversity in governing bodies and employees	Section 2.5. Corporate Governance Appendix III: Further information on Sustainability - People - Diversity and equal opportunities	15-16, 120	√
405-2	Ratio of basic salary and remuneration of women versus men	Appendix III: Further information on Sustainability - People - Remuneration and benefits	113	√(19)
GRI 406	Non-discrimination			
103	Management approach	Section 2.5. Corporate Governance Section 6.2.1. Our team Appendix III: Further information on Sustainability - People - Diversity and equal opportunities	15-16, 61-62, 113, 120	√
406-1	Cases of discrimination and corrective actions taken	Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Human rights	124	√(12)
GRI 407	Freedom of association and collective bargaining			
103	Management approach	Section 6.8. Supply chain Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Human rights	82-85, 124	√
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: Further information on Sustainability - Respect for Human Rights and Community Relations - Human rights	85, 124	√(8)
GRI 408	Child labor			
103	Management approach	Section 6.8. Supply chain Appendix III: Further information on Sustainability Indicators - Respect for Human Rights and Community Relations - Human rights	82-85, 124	√
408-1	Operations and providers at significant risk of child labor cases	Section 6.8. Supply chain and product safety Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Human rights	85, 124	√(8)

GRI 2016	Indicator description	Reference in Management Report, Reports or website	Page/Omission	Verification
GRI 409	Forced or compulsory labor			
103	Management approach	Section 6.8. Supply Chain Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Human rights	82-85, 124	✓
409-1	Operations and suppliers with significant risk of forced or compulsory labor cases	Section 6.8. Supply chain and product safety Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Human rights	85, 124	✓(8)
GRI 410	Safety practices			
103	Management approach	Section 6.2.2. Respect for Human Rights and Relationship with Communities	65	✓
410-1	Security personnel trained in human rights policies or procedures	Section 6.2.2. Respect for Human Rights and Relationship with Communities	65	✓
GRI 411	Rights of indigenous peoples			
103	Management approach	Section 6.2.2. Respect for Human Rights and Relationship with Communities Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Human rights	64-65, 124-125	✓
411-1	Cases of violations of the rights of indigenous peoples	As was the case in 2018, in 2019 there have been no incidents related to violations of indigenous people's rights reported to the Company's whistleblower channel.		✓
OG9	Operations at sites where indigenous communities are present, or in areas affected by activities, and percentage of these sites covered by specific engagement strategies	Appendix III: Further information on Sustainability Indicators - Respect for Human Rights and Community Relations - Human rights	124-125	✓
GRI 412	Human Rights Assessment			
103	Management approach	Section 6.2.2. Respect for Human Rights and Relationship with Communities Section 6.8. Supply Chain Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Human rights	64-65, 82-85, 124	✓
412-1	Operations subject to human rights impact reviews or assessments	Section 6.2.2. Respect for Human Rights and Relationship with Communities	64	✓
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: Further information on Sustainability - Respect for Human Rights and Community Relations - Human rights	65, 124	✓
412-3	Significant investment agreements and contracts with human rights clauses or subject to human rights assessment	Section 6.2.2. Respect for Human Rights and Relationship with Communities Section 6.8. Supply Chain	64-65, 84-85	✓
GRI 413	Local communities			
103	Management approach	Section 6.2.2. Respect for Human Rights and Community Relations Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Local communities	64-65, 126	✓
413-1	Operations with local community participation, impact assessments and development programs	Section 6.2.2. Respect for Human Rights and Relationship with Communities	64-65	✓
413-2	Operations with significant negative effects - actual and potential - on local communities	Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Local communities	126	✓
OG10	Number and description of significant disputes with local communities and indigenous peoples	As was the case in 2018, in 2019 there were no significant disputes with local communities and indigenous peoples		✓(20)
OG11	Sites dismantled and in the process of being dismantled	Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Local communities	126	✓
OG12	Cases of involuntary resettlement necessary for the activities of the organization	As was the case in 2018, in 2019, there were no cases of involuntary resettlements as a result of the activities of the organization.		✓
GRI 414	Social evaluation of suppliers			
103	Management approach	Section 6.8. Supply chain Appendix III: Further information on Sustainability - Supply chain and product safety	82-85, 134	✓
414-1	New suppliers that have passed selection filters according to social criteria	Section 6.8. Supply Chain	84-85	✓
414-2	Negative social effects on the supply chain and measures taken	Appendix III: Further information on Sustainability - Supply chain	134	✓

GRI 2016	Indicator description	Reference in Management Report, Reports or website	Page/Omission	Verification
GRI 415	Public policy			
103	Management approach	Appendix III: Further information on Sustainability - Ethics and compliance - Public policy	133	✓
415-1	Contributions to political parties and/or representatives	Appendix III: Further information on Sustainability - Ethics and compliance - Public policy	133	✓
GRI 416	Customer health and safety			
103	Management approach	Section 6.8. Supply Chain	83, 85, 134	Not verified
416-1	Assessment of health and safety effects of product or service categories	Section 6.8. Supply Chain	83, 85	Not verified
416-2	Cases of non-compliance relating to health and safety effects of product and service categories	Appendix III - Additional Sustainability Indicators - Ethics and compliance - Regulatory compliance	134	Not verified
GRI 417	Marketing and labelling			
103	Management approach	Non-material		Not verified
417-1	Requirements for information and product and service labelling	Non-material		Not verified
417-2	Cases of non-compliance related to information and labelling of products and services	Non-material		Not verified
417-3	Cases of non-compliance related to marketing communications	Non-material		Not verified
GRI 418	Customer privacy			
103	Management approach	Non-material		Not verified
418-1	Substantiated complaints regarding violations of customer privacy and loss of customer data	Non-material		Not verified
GRI 419	Socio-economic compliance			
103	Management approach	2019 Consolidated Financial Statements - Note 15.2 Lawsuits and Note 23.4 Government and legal proceedings with tax implications		✓
419-1	Non-compliance with laws and regulations in the social and economic spheres	2019 Consolidated Financial Statements - Note 15.2 Lawsuits and Note 23.4 Government and legal proceedings with tax implications		✓

✓ 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 analysed. 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 14064-1 are carried out.
- (8) It is reported qualitatively.
- (9) The value for biodiversity outside protected areas is not reported.
- (10) Nature of effects not reported.
- (11) Scope 3 emissions do not include upstream transport categories in E&P as well as fixed asset and investee categories.
- (12) Incidents of discrimination against own staff are reported.
- (13) Sanctions or warnings derived from breaches of the Code of Ethics are reported.
- (14) The information included refers to the number of ICSFR controls.
- (15) Only information on water withdrawal is reported on except for the Electricity and Gas business, which also includes non-fresh water withdrawn.
- (16) The volume of hydrocarbons discharged into water produced is not reported on.
- (17) Information is not provided on absenteeism rates or loss of days. Nor are accidents rates broken down by gender or region.
- (18) Information is not provided as a %.
- (19) Information is not provided on the % of employees on governing bodies by gender and age.
- (20) Incidents related to violations of indigenous peoples rights received through the Company's whistleblower channel are reported on.

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 in Management Report, Reports or website	Comments
0. General contents			
a) Business model: 1) business environment, 2) organization and structure, 3) markets in which it operates, 4) objectives and strategies, 5) the main factors and trends that may affect its future evolution.	102-2, 102-6	Section 2.1. Value chain and business segments Section 2.2. Repsol around the world Section 2.4. Strategy Section 2.6. Corporate Structure Section 3. Context Section 5.1. Upstream Section 5.2. Downstream Section 7. Outlook	
b) Policies	103	Section 6. Sustainability	
c) Policy outcomes. KPIs	103	About this report Section 6. Sustainability Appendix III. Further information on Sustainability	
d) Risks at ST, MT and LT	102-15, 205-1, 413-1, 407-1, 408-1, 409-1	Section 2.3 Risks Section 6.1 Climate change Appendix II: Risks Appendix VII: Annual Corporate Governance Report - Section 8: Control and risks management	
e) KPIs	102-54	About this report	
1. Environmental issues			
a) General: • Real and foreseeable effects of the company on the environment • Environmental assessment or certification procedures • Resources dedicated to the prevention of environmental risks • Principle of precaution, provisions and environmental guarantees	103, 102-11, 201-2, 307-1, 308-1, 308-2	Section 2.5. 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: Further information on Sustainability - Supply chain Appendix III: Further information on Sustainability - Regulatory compliance	The data on resources dedicated to foreseeing environmental risks and provisions are provided in Note 31 of the 2019 Consolidated Financial Statements. The data on environmental guarantees are provided in Note 27.2 of the 2019 Consolidated Financial Statements. Furthermore, Repsol has ISO14001 Environmental Management Systems that it uses to ensure that the limits in the regulations in force are not broken and that help to prevent and improve the management of environmental impacts, risks and opportunities at the Company.
b) Pollution	103, 305-5, 305-7	Section 6.1. Climate change Appendix III: Further information on Sustainability - Environment - Non-GHG emissions	Light contamination is not reported on as it is not considered a material issue (see Materiality Matrix on page 103).
c) Circular economy and waste prevention and management	103, 306-2	Section 6.4. Environment Appendix III: Further information on Sustainability - Environment - Effluents and waste	The actions taken to combat food waste are not reported on as this is not considered a material issue (see Materiality Matrix on page 103).
d) Sustainable use of resources			
• The water consumption and water supply according to local limitations	103, 303-1, 303-2, 303-3	Section 6.4. Environment	
• Consumption of raw materials and measures taken to improve the efficiency of their use	103, 301-1, 301-2	Section 5. Our business in 2019	The improved efficiency in the use of raw materials is not reported on as it is not considered a material issue (see Materiality Matrix on page 103).
• Direct and indirect consumption of energy, 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, 305-4, 305-5, 305-6, 305-7, 201-2	Section 2.3. Risks Section 2.4. Strategy Section 6.1. Climate change Appendix III: Further information on Sustainability - Environment - Non-GHG emissions	

Contents	GRI Standards	Reference in Management Report, Reports or website	Comments
f) Protection of biodiversity	103, 304-1, 304-2, 304-3, 304-4, 306-5	Section 6.4. Environment Appendix III: Further information on Sustainability - Environment - Biodiversity	
2. Social and personnel matters			
a) Employment			
• Total number and distribution of employees by gender, age, country and professional classification	103, 102-8, 405-1	Section 2.5. Corporate Governance Section 6.2. People - Our team Appendix III: Further information on Sustainability - People - Employment Appendix III: Further information on Sustainability - People - Diversity and equal opportunities	
• Total number and distribution of employment contract types	102-8	Section 6.2. People - Our team Appendix III: Further information on Sustainability - People - Employment	
• Average annual number of contracts, temporary contracts and part-time contracts by gender, age and professional classification	102-8, 405-1	Section 2.5. Corporate Governance Section 6.2. People - Our team Appendix III: Further information on Sustainability - People - Employment	
• Number of dismissals by gender, age, country and professional classification	401-1	Appendix III: Further information on Sustainability - People - Employment	
• Average remunerations and their development broken down by gender, age and professional classification or equal value	405-2	Section 6.2. People - Our team Appendix III: Further information on Sustainability - People - Remuneration and benefits	
• Salary gap, remuneration of equal or average jobs in society	405-2	Section 6.2. People - Our team Appendix III: Further information on Sustainability - People - Remuneration and benefits	
• The average remuneration of directors and executives, including variable remuneration, plus expenses, indemnities, payment to long-term savings pension systems and any other payment broken down by gender	103, 102-35, 102-36	Appendix III: Further information on Sustainability - Corporate Governance Appendix VII: Annual Corporate Governance Report. Remuneration of directors and senior management Annex VII: Annual Corporate Governance Report. Committees of the Board of Directors - Remuneration Committee	Remuneration of members of the Board of Directors and executive staff is included in Note 30 to the 2019 Consolidated Financial Statements
• Implementation of labor right to disconnect policies	103	Section 6.2. People - Our team	
• Employees with disabilities	405-1	Section 6.2. People - Our team Appendix III: Further information on Sustainability - People - Diversity and equal opportunities	
b) Organization of work	103, 403-2	Section 6.2. People Appendix III: Further information on Sustainability - People - Employment framework, health and safety at work"	
c) Health and safety	103, 403-1, 403-2, 403-3, 403-4, 407-1	Section 6.3. Safe Operation Section 6.8. Supply Chain Appendix III: Further information on Sustainability - People - Employment framework, health and safety at work	Repsol does not break down occupational accident rates by gender
d) Social relations	103, 102-41, 407-1, 403-4	Section 6.8. Supply Chain Appendix III: Further information on Sustainability - People - Employment framework, health and safety at work	
e) Training	103, 404-1, 404-2	Appendix III: Further information on Sustainability - People - Training and development	
f) Universal accessibility for disabled persons	103	Section 6.2. People	
g) Equality	103	Section 6.2. People Appendix III: Further information on Sustainability - People - Diversity and equal opportunities	
3. Human rights	103, 102-16, 102-17, 412-1, 412-2, 412-3, 410-1, 406-1, 407-1, 408-1, 409-1	About this report Section 6.2.2. Respect for Human Rights and Relationship with Communities Section 6.7. Ethics and Compliance Section 6.8. Supply Chain Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations	

Contents	GRI Standards	Reference in Management Report, Reports or website	Comments
4. Corruption and bribery			
<ul style="list-style-type: none"> Measures taken to prevent corruption and bribery 	103, 102-16, 102-17, 205-1, 205-2, 205-3	About this report Section 6.7. Ethics and compliance Appendix III: Further information on Sustainability - Ethics and compliance - Fight against corruption	
<ul style="list-style-type: none"> Measures to combat money laundering 	205-2	Section 6.7. Ethics and compliance Appendix III: Further information on Sustainability - Ethics and compliance - Fight against corruption	
<ul style="list-style-type: none"> Contributions to foundations and non-profit entities 	413-1	Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Indirect economic impacts	
5. Company			
a) The company's commitment to sustainable development	103, 102-12, 102-13, 102-43, 202-1, 202-2, 203-1, 203-2, 204-1, 411-1, 413-1, 413-2	Section 6.2.2. Respect for Human Rights and Relationship with Communities Section 6.8. Supply Chain Appendix III: Further information on Sustainability - Materiality and stakeholder engagement Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Indirect economic impacts Appendix III: Further information on Sustainability - Respect for Human Rights and Community Relations - Local communities	
b) Subcontracting and suppliers	103, 102-9, 308-1, 308-2, 414-1, 414-2	Section 6.8. Supply Chain	
c) Consumers	103, 416-1, 416-2	Section 6.8. Supply Chain Appendix III: Further information on Sustainability - Ethics and compliance - Regulatory compliance	
d) Tax information			
<ul style="list-style-type: none"> Profits obtained country by country. Tax on profits paid 	103, 201-1	Section 6.6. Responsible Tax Policy Appendix III: Further information on Sustainability - Economic performance	
<ul style="list-style-type: none"> Public grants received 	201-4	Appendix III: Further information on Sustainability - Economic performance	
6. Other significant information			
a) Other information on the Company's profile	102-1 TO 102-7, 102-9, 102-10, 102-14, 102-15	Section 2.1. Value chain and business segments Section 2.2. Repsol around the world Section 2.6. Corporate Structure Section 5.1. Upstream Section 5.2. Downstream Section 6.8. Supply Chain	
b) Corporate Governance	102-18 TO 102-34; 102-37	Section 2.5. Corporate Governance Appendix III: Further information on Sustainability - Corporate Governance	
c) Stakeholder engagement	102-40, 102-42 TO 102-44	Appendix III: Further information on Sustainability - Materiality and stakeholder engagement	
d) Other useful information on the preparation of the document	102-45 A 102-55, 201-3, 206-1, 306-1, 306-3, 401-3, 402-1, 404-3, 415-1, 419-1, OG1 to OG14	See Appendix IV: GRI Index	

Appendix VI: table of conversions and abbreviations

			Oil				Gas		Electricity
			Liters	Barrels	Cubic meters	tep	Cubic meters	Cubic feet	kWh
Oil	1 barrel ⁽¹⁾	bbl	158.99	1	0.16	0.14	162.60	5,615	1,7X10 ³
	1 cubic meter ⁽¹⁾	m ³	1,000	6.29	1	0.86	1,033	36,481	10,691.5
	1 ton of oil equivalent ⁽¹⁾	tep	1,160.49	7.30	1.16	1	1,187	41,911	12,407.4
Gas	1 cubic meter	m ³	0.98	0.01	0.001	0.001	1	35.32	10.35
	1,000 cubic feet = 1.04x10 ⁶ Btu	ft ³	27.64	0.18	0.03	0.02	28.3	1,000	293.1
Electricity	1 megawatt hour	MWh	93.53	0.59	0.10	0.08	96.62	3,412.14	1,000

(1) Measurement of reference: 32.35° API and relative density 0.8636

			Meter	Inch	Foot	Yard
Length	Meter	m	1	39.37	3.281	1.093
	Inch	in	0.025	1	0.083	0.028
	Foot	ft	0.305	12	1	0.333
	Yard	yd	0.914	36	3	1

			Kilogram	Pound	Ton
Mass	Kilogram	kg	1	2.2046	0.001
	Pound	lb	0.45	1	0.00045
	Ton	t	1,000	22.046	1

			Cubic foot	Barrel	Liter	Cubic meter
Volume	cubic foot	ft ³	1	0.1781	28.32	0.0283
	Barrel	bbl	5,615	1	158.984	0.1590
	Liter	l	0.0353	0.0063	1	0.001
	cubic meter	m ³	35.3147	6.2898	1,000	1

Term	Description	Term	Description	Term	Description
bbl / bbl/d	Barrel/ Barrel per day	kbb	Thousand barrels of oil	Mm³/d	Million cubic meters per day
Bcf	Billion cubic feet	kbb/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 2019 Corporate Governance Report is included as an Appendix and forms an integral part of this report, as required by Article 538 of the Spanish Companies Act.



Management Report

Information on the Group's business, results and financial position (sustainability), and the main risks and uncertainties it faces

Financial Statements

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

Information on oil and gas exploration and production

Information on acreage, exploration and development activities, proven net reserves, future cash flows, production, results and investment

Report on payments to government bodies for oil and gas exploration and production activities

Information on payments to government bodies as a result of Extraction operations, by country, by project and by government body

Annual Corporate Governance Report

Information on the Company's corporate governance structure and practices

Annual Board Remuneration Report

Detailed information on the application of the Board remuneration policy

Audit and Control Committee activity report¹

Membership and main activities of the Audit and Control Committee

Audit and Control Committee Report on the independence of the external auditor

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

¹. Published alongside the notice convening the Annual General Meeting.

REPSOL S.A.

2019 Annual Corporate
Governance Report

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



DETAILS OF ISSUER

Dated end of year 31/12/2019

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

The aim of our good governance practices is to ensure that both the Company's management model and the decisions of the Board of Directors and its Committees are focused on preserving the long-term interest of our stakeholders and guaranteeing the group's sustainability. Our corporate governance system is in a constant review and improvement process, incorporating the main recommendations of the international markets and the latest trends in this area.

Our Board is composed of Directors with broad professional experience and diversity in terms of training, origin, gender and age. Following the latest appointments, the percentage of women has risen to 33%, 13% higher than in 2018. Among the main developments of 2019, it should be highlighted that the agreement at the General Shareholders Meeting on 31 May to reduce the number of Directors to 15 in line with the recommendation established in the Good Governance Code for listed companies.

Throughout 2019, the Board and the Committees have continued working on the oversight of the most significant matters for the Company and on making decisions on relevant matters, such as the monitoring of the Strategic Plan, sustainability action plans or aligning the Company with the objectives of the Paris Agreement to have zero net emissions in 2050.

In this year, we will continue to work on the constant improvement of our Good Governance system, supported by the continued dialogue and the engagement with our interest groups under our principles of efficiency, respect, anticipation and value creation, involving them in the future of Repsol.

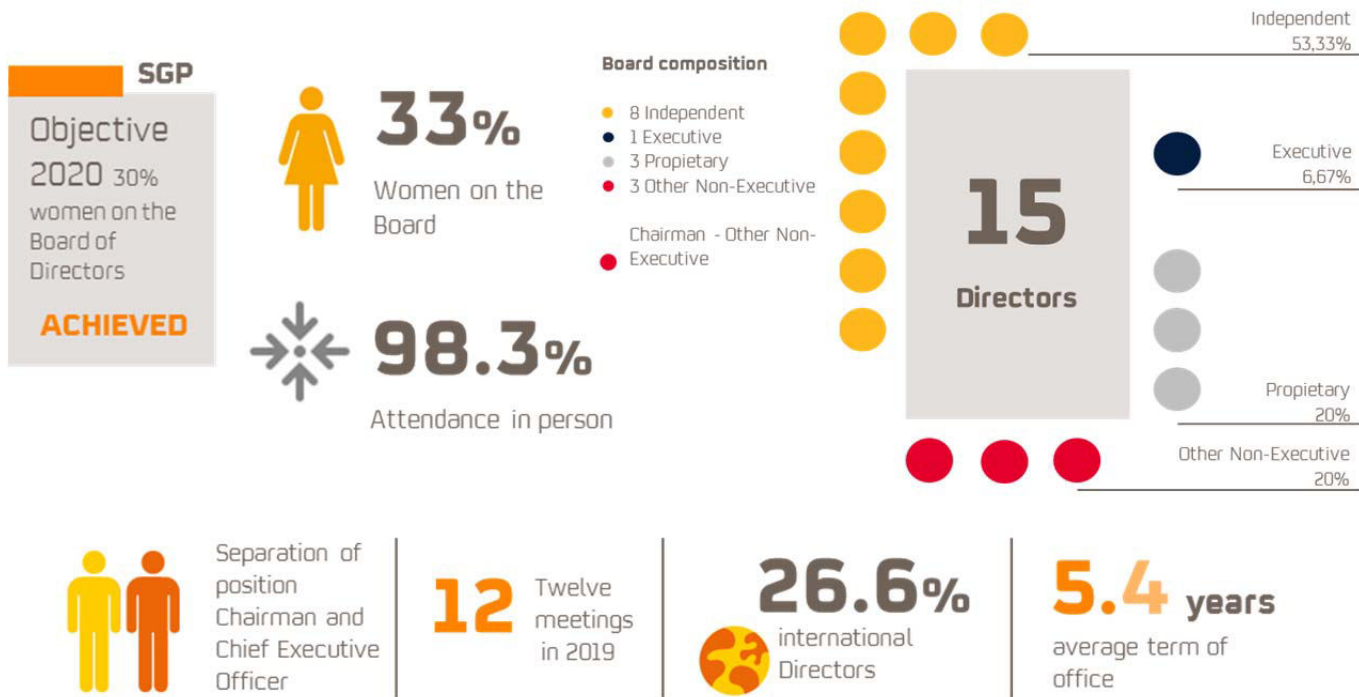
Antonio Brufau

Chairman of the Board of Directors



2. At a glance

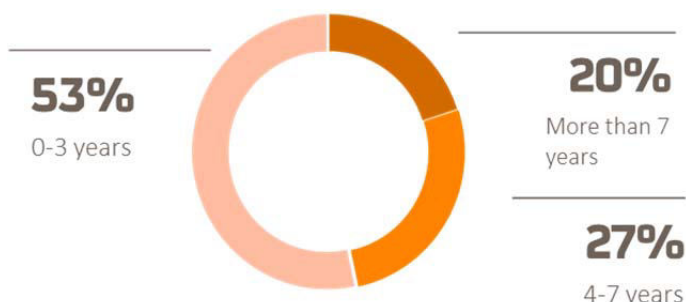
Board of Directors



Board of Directors' skills



Years of Service of Directors



Compliance with the recommendations of the Good Governance Code



Separated roles and responsibilities



Chairman of the Board of Directors

The Chairman has overall responsibility for the effective functioning of the Board of Directors.



Chief Executive Officer (CEO)

The CEO is the chief executive and responsible for the management of the business and the Company and as such has all the functions of the Board of Directors delegated to him, except those that cannot be delegated pursuant to law or the Articles of Association.



Lead Independent Director

The Lead Independent Director is responsible for coordinating, gathering and echoing the opinions of the External Directors. He heads the Board in the absence of the Chairman and Vice-Chairman and may ask the Chairman to call a meeting of the Board. He is also in charge of liaising with investors and shareholders to ascertain their views, particularly in relation to the corporate governance of the Company.

Renewal of Independent Directors



Ms. Arantza Estefanía Larrañaga

Appointed on 2019.
Independent



Ms. Teresa García-Milá Lloveras

Appointed on 2019.
Independent.



Ms. Carmina Ganyet i Cirera

Nombrada en 2018.
Independent



Mr. Ignacio Martín San Vicente

Appointed on 2018.
Independent



Ms. Maite Ballester Fornés

Appointed on 2017.
Independent



Mr. Mariano Marzo Carpio






Appointed on 2017.
Independent



Ms. Isabel Torremocha Ferrezuelo

Appointed on 2017.
Independent

Board Committees

Delegate Committee		Chairman: External Director			8 Meetings in 2019
8 Members	12.5% Executives	25% Proprietary	37.5% Independents	25% Other external	98% Personal attendance
Audit and Control Committee		Chairwoman: Independent Director			10 Meetings in 2019
4 Members	100% Independents			97.7% Personal attendance	
Nomination Committee		Chairwoman: Independent Director			7 Meetings in 2019
4 Members	100% Independents			100% Personal attendance	
Compensation Committee		Chairwoman: Independent Director			5 Meetings in 2019
4 Members	25% Proprietary	75% Independents		100% Personal attendance	
Sustainability Committee		Chairman: Independent Director			4 Meetings in 2019
4 Members	25% Proprietary	75% Independents		92.9% Personal attendance	

Our Corporate Governance



Effective commitment to our shareholders:

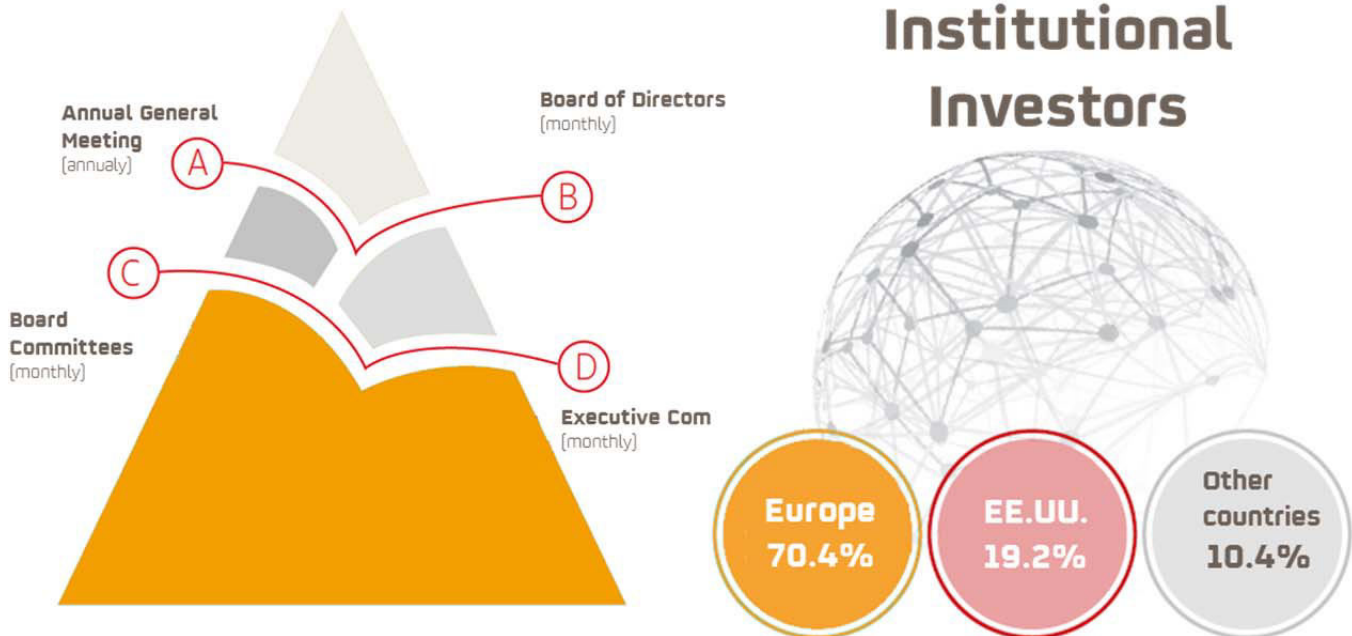
- In-person General Shareholders Meetings.
- High engagement.
- Commitment to the quality of the information.
- Transparent remuneration with performance metrics aligned with the interests of the shareholders and sustainability.



Effective board of directors:

- Majority of independent directors.
- Balanced, qualified and diverse composition.
- Separate and complementary roles of Chairman, CEO and Lead Independent Director.
- Good practices of the Good Governance Code for the listed companies integrated in our internal regulations.

Shareholders have a relevant role in the decision-making process

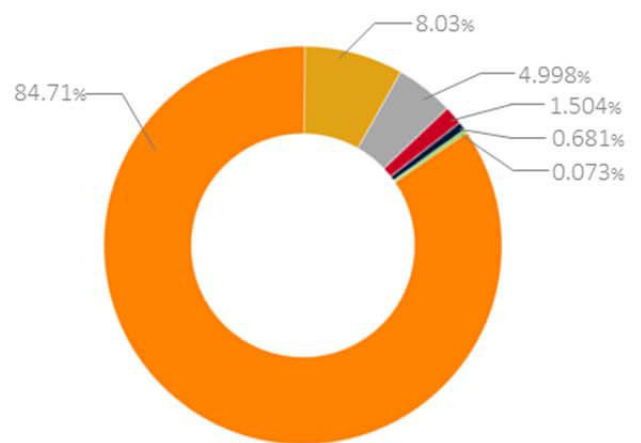
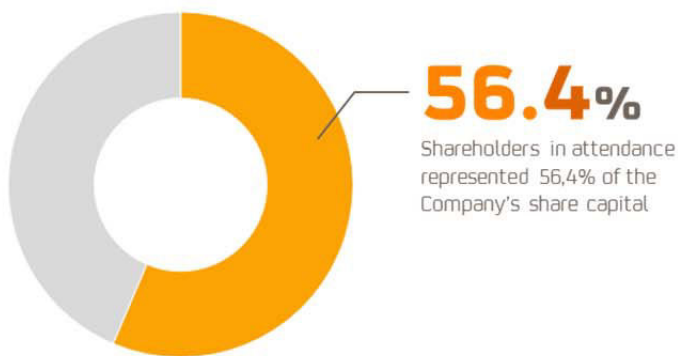


General Shareholders Meeting

May 5, 2019

Shareholder composition

Percentage of voting rights



All proposals submitted were **approved**

20

The proposals were approved with an average of **97.618%** votes in favor of the share capital in attendance

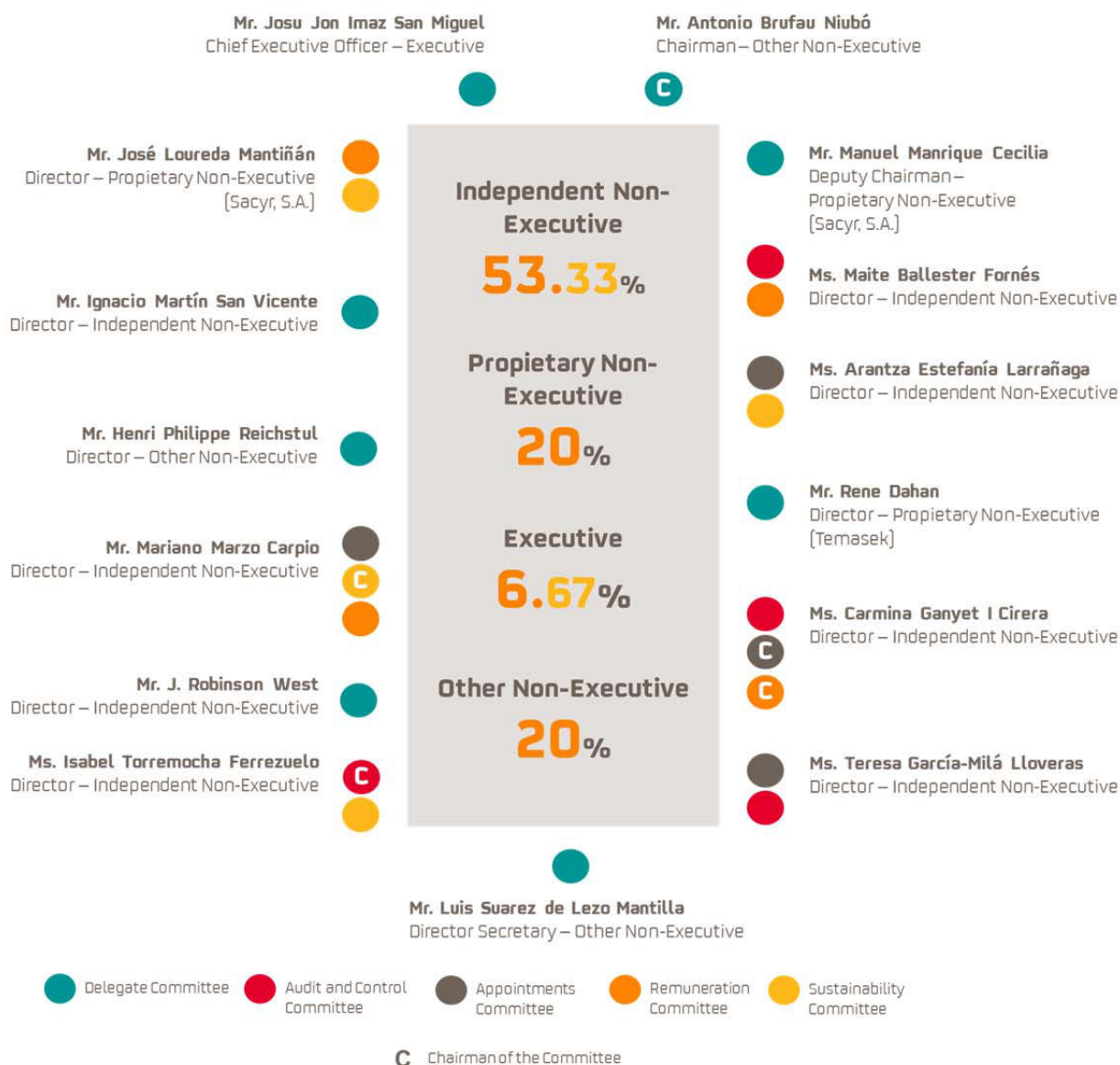
97.618%

- Free float
- Sacyr, S.A.
- Blackrock, Inc.
- Temasek Holdings (Private) Limited
- Treasury shares
- Shares owned by the Board

3. The Board of Directors

The Company’s corporate governance system, established in accordance with the best national and international reference standards, guides the functioning of the Board of Directors based on the principles of efficiency, respect, anticipation and value creation.

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 as well as the geographical distribution and complexity of their business. Its composition was determined based on criteria of complementarity, balance, and diversity of knowledge, professional experience, nationality and gender¹.



All shareholders with significant shareholder and with the right to proportional representation are represented on Repsol's Board of Directors.

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.

² With effect from 31 December 2019, when Mr. Luis Suárez de Lezo Mantilla concluded his executive functions as General Secretary of the Company, he has been reclassified as “External Director” by the Board.

A. Executive summary

3. The Board of Directors



Executive Directors

Name of director	Position in company's organization
------------------	------------------------------------

Mr. Josu Jon Imaz San Miguel	Chief Executive Officer
------------------------------	-------------------------

Proprietary Directors

Name of director	Name of significant shareholder represented or that proposed appointment
------------------	--

Mr. Manuel Manrique Cecilia	Sacyr, S.A.
Mr. José Manuel Loureda Mantiñán	Sacyr, S.A.
Mr. Rene Dahan	Temasek Holdings (Private) Limited

Independent Directors

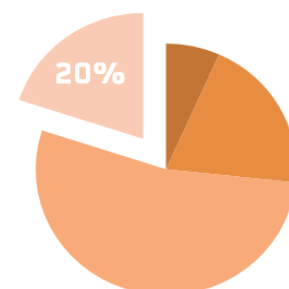
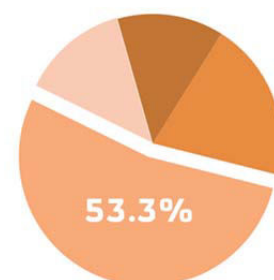
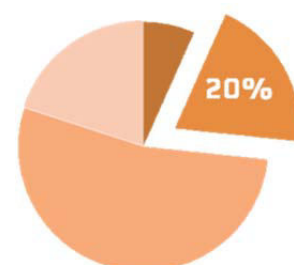
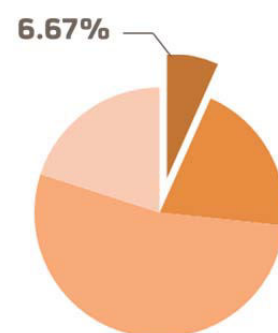
Name of director

Ms. Maite Ballester Fornés
Ms. Arantza Estefanía Larrañaga
Ms. Carmina Ganyet i Cirera
Ms. Teresa García-Milá Lloveras
Mr. Ignacio Martín San Vicente
Mr. Mariano Marzo Carpio
Ms. Isabel Torremocha Ferrezuelo
Mr. J. Robinson West

Other Non-Executive Directors

Name of director and reasons	Company, executive or shareholder with which the director is related
------------------------------	--

Mr. Antonio Brufau Niubó ³	Repsol, S.A.
Mr. Henri Philippe Reichstul ⁴	Repsol, S.A.
Mr. Luis Suárez de Lezo Mantilla ⁵	Repsol, S.A.



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 General Shareholders's Meeting held on 31 May 2019 approved the number of members of the Board of Directors at fifteen (15).

³ 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.

⁴ 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.

⁵ Mr. Suárez de Lezo was Executive Managing Director of Repsol until December 31, 2019 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

- Appointments of Ms. Arantza Estefanía Larrañaga and Ms. Teresa García-Milá Lloveras at the General Meeting of May 31, 2019.
- Expiry of the term of office of Mr. Luis Carlos Croissier Batista and of Mr. Ángel Durández Adeva.

Structure

- Wide majority of **Non-Executive Directors 93.33%**
- More than half of **Independent Directors 53.33%**
- The term of office of the Director is for **4 years**.
- Independence of the Committees.

Diversity

- Presence of women of the Board of **33%**
- Repsol's commitment to increase the percentage of women of the Board of Directors to 30% by 2020 **ACHIEVED**.
- **International representation** of the Board of **26.6%**: Rene Dahan (Dutch), Robinson West (American) y Maite Ballester (Spanish and American passport) and Henri Philippe Reichstul (Brazilian). Additionally, other Directors have a broad international experience.

Separation of the role of chairman and CEO

- Since April 2014, the positions of Chairman of the Board of Directors have been **separated**. **Josu Jon Imaz** is the **Chief Executive Officer** and discharges executives 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.

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)⁶ 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 2019 Repsol held the 6th Sustainability Day with ESG investors, 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.

Activity with institutional investors and shareholders in 2019



Interaction with shareholders that hold



⁶ Environmental, Social and Governance. These investors apply sustainability criteria when making decisions.

Activity with ESG investors and shareholders in 2019



97 investor contacted⁷



4 specialized Conferences



12 roadshows



7 cities visited

Interaction with shareholders that hold

≈+220M shares of the Company's total shares

≈92% of ESG shareholders

Presence on ESG indexes

Corporate Human Rights Benchmark (CHRB)

With a score of 70.1/100 in 2019, Repsol is a global leader of oil and gas in Human Rights performance, in accordance with the assessment conducted by CHRB.

Standard & Poors ESG rating

In 2019, Repsol participated in the new ESG rating developed by Standard & Poor's. With a score of 68/100, S&P places Repsol among the companies in its sector with a more advanced sustainability strategy and it welcomes the diversification of its business and its firm commitment to the Paris Agreement.

Transition Pathway Initiative (TPI)

In 2019, this initiative, supported by 60 of the largest international investors, recognised Repsol as one of the only two companies in its sector to have managed to align themselves with the Paris Agreement before 2050.

CDP Cambio Climático

It recognises the companies with best management of energy and carbon. Repsol has featured as one of the best companies in its sector since 2006. In 2019, Repsol reached the leadership band in the fight against climate change, with a score of A-. Positioning itself within this band implies an "absolute integration" (under CDP's criteria) of the risks and opportunities related to climate change in the management of the company, as well as the formulation and implementation of strategies to mitigate or capitalise these risks and opportunities.

ISS-ESG Corporate Rating

Repsol has a "Prime" rating in the ISS ESG Corporate Rating. This analyses the sustainability performance from a best-in-class viewpoint, awarding the "Prime" rating to the leading companies in its sector that comply with the assessed sustainability performance requirements.

⁷ 25 investors have been visited for the first time in 2019.

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.

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")

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. Among others, according to the provisions of article 540 of the Corporate Enterprises Act, includes 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.

CNMV Circular 5/2013, of June 12 ("Circular 5/2013"), amended by CNMV Circular 2/2018, of June 12 ("Circular 2/2018")

This Annual Corporate Governance Report, corresponding to 2019, is prepared pursuant to section 540 of the Spanish Corporate Enterprises Act (Ley de Sociedades de Capital), following the instructions established in Circular 2/2018 of the Spanish National Securities Market Commission.

In accordance with the option offered by Circular 2/2018, Repsol has decided to select the free format model, including the minimum content required by the regulations and the statistical appendix included in Circular 2/2018. This Report therefore responds to Repsol's desire to remain at the forefront in the transparency of its corporate governance system as well as to facilitate the shareholders' understanding of that information.

This Annual Corporate Governance Report has been approved by unanimous vote by the Board of Directors at its meeting on 19 February 2020

Good Governance Code for Listed Companies, approved by resolution of the Board of the CNMV on February 18, 2015 (the "GGC")

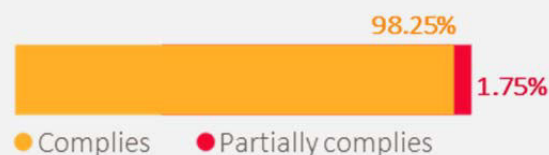
This is the reference framework in Spain on best practices regarding corporate governance. It is voluntary and follows the "comply or explain" principle.

With regard to the structure of the GGC, it should be noted that 25 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.

Degree of compliance with good governance recommendations



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 on general meetings, 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 2019 (January 9, July 10 and November 14, 2019), 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.

⁽¹⁾ The specific regulation of the Board Committees is in Articles 33, 34, 35, 36 and 37 of the Board of Directors

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 February 4, 2020.

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 internal regulations already mentioned, the Board of Directors has approved the following policies:
 - Policy of communication and contact with shareholders, institutional investors and proxy advisors.
 - Sustainability policy.
 - Anti-corruption policy.
 - Tax Policy
 - Risk Management Policy
 - Directors selection Policy

2. Ownership structure of the Company

2.1. OWNERSHIP STRUCTURE

Share capital structure

SHARE CAPITAL AT DECEMBER 31, 2019 **€1,527,396,053**

In 2019 share capital was altered on three occasions:

January 11, 2019	Closing of the paid-up capital increased approved as item 5 of the agenda for the General Shareholders Meeting held on May 11, 2018.
July 8, 2019	Closing of the paid-up capital increase approved as item 5 of the agenda for the General Shareholders Meeting held on May 31, 2019.
November 7, 2019	Execution of the reduction of capital reduction through cancelation of own shares approved as item 7 of the agenda for the General Shareholders Meeting held on May 31, 2019.

Likewise, on January 9, 2020, the second Repsol's paid-up capital increase approved as item 6 of the agenda of the General Shareholders Meeting held on May 31, 2019 were declared completed, bringing the Company's share capital to €1,566,043,878, divided into 1,566,043,878 shares and 1,566,043,878 voting rights.

At December 31, 2019

1,527,396,053

Shares

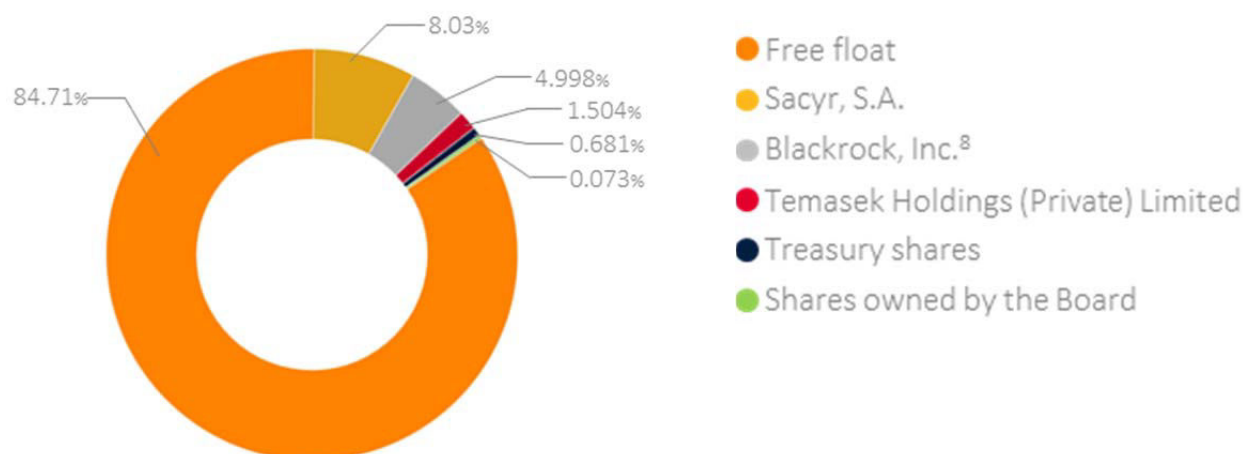
[par value of shares €1]

- They are listed on the continuous market of the Spanish Stock Exchanges (Madrid, Barcelona, Bilbao and Valencia)
- Of the same class and series. There are no shares that are not represented in the share capital.
- Same voting and dividend rights
- They are represented by book entries
- Fully subscribed and paid
- One share, one vote

Repsol 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.

Share capital

At December 31, 2019, the share capital, with the free float representing 84.71% 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, 2019, 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.	--	8.034	--	--	8.034
BLACKROCK Inc. ⁽¹⁾	--	4.762	--	0.236	4.998
TEMASEK HOLDINGS (PRIVATE) LIMITED	--	1.504	--	--	1.504

In February 2020, Norges Bank informed the CNMV that it had exceeded 3% of the voting rights of Repsol, S.A.

⁸ In order to calculate the shareholder composition, in the case of Blackrock, Inc. the percentage of voting rights attributed to the shares and the percentage of voting rights through financial instruments were taken into account.

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.	1.964	--	
	SACYR INVESTMENTS II, S.A.	4.760	--	8.034
	SACYR SECURITIES, S.A.	1.309	--	
BLACKROCK, INC.	ENTITIES CONTROLLED BY BLACKROCK	4.762	0.236	4.998
TEMASEK HOLDINGS (PRIVATE) LIMITED	CHEMBRA INVESTMENT PTE, LTD.	1.504	--	1.504

(1) The information relating to BlackRock, Inc. is based on the statement filed by this entity with the CNMV on December 10, 2019

The details set out in this section, as of December 31, 2019, 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 2019

Name of significant shareholder	Date of transaction	Description of the transaction
CAIXABANK,S.A.	February 28, 2019	Interest has fallen below 3% of share capital
AMUNDI ASSET MANAGEMENT S.A.	December 13, 2019	Interest has risen above 3% of share capital
AMUNDI ASSET MANAGEMENT S.A.	December 16, 2019	Interest has fallen below 3% of share capital
BLACKROCK, INC.	July 8, 2019	Interest has risen above 5% of share capital
BLACKROCK, INC.	July 10, 2019	Interest has fallen below 5% of share capital
BLACKROCK, INC.	September 27, 2019	Interest has risen above 5% of share capital
BLACKROCK, INC.	October 30, 2019	Interest has fallen below 5% of share capital
BLACKROCK, INC.	November 20, 2019	Interest has risen above 5% of share capital
BLACKROCK, INC.	November 26, 2019	Interest has fallen below 5% of share capital
BLACKROCK, INC.	November 29, 2019	Interest has risen above 5% of share capital
BLACKROCK, INC.	December 9, 2019	Interest has fallen below 5% of share capital

Company voting rights held by Board members

As of December 31, 2019 the total voting rights held by the Company's Directors amounted to **0.073%**.

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 that may be transferred through financial instruments	
	Direct	Indirect	Direct	Indirect	Direct	Indirect			Direct	Indirect
Antonio Brufau Niubó ⁹	550,133	--	0.034	--	--	--	550,133	0.034	--	--
Manuel Manrique Cecilia	149	1,327	0.000	0.000	--	--	1,476	0.000	--	--
Josu Jon Imaz San Miguel	310,504	--	0.020	--	--	--	310,504	0.020	--	--
Maite Ballester Fornés	--	--	--	--	--	--	--	--	--	--
Rene Dahan	64,810	--	0.004	--	--	--	64,810	0.004	--	--
Arantza Estefanía Larrañaga	--	--	--	--	--	--	--	--	--	--
Carmina Ganyet i Cirera	19	--	0.000	--	--	--	19	0.000	--	--
Teresa García-Milá Loveras	2,071	--	0.000	--	--	--	2,701	0.000	--	--
José Manuel Loureda Mantifián	89	96,286	0.000	0.006	--	--	96,375	0.006	--	--
Ignacio Martín San Vicente	7,237	--	0.000	--	--	--	7,237	0.000	--	--
Mariano Marzo Carpio	--	--	0.000	--	--	--	--	0.000	--	--
Henri Philippe Reichstul	50	--	0.000	--	--	--	50	0.000	--	--
Isabel Torremocha Ferrezuelo	10,009	--	0.001	--	--	--	10,009	0.001	--	--
J. Robinson West	--	--	0.000	--	--	--	--	0.000	--	--
Luis Suárez de Lezo Mantilla	74,334	--	0.005	--	--	--	74,334	0.005	--	--

Breakdown of direct holders with indirect interests (mentioned above)

	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
José Manuel Loureda Mantifián	PRILOU, S.L.	0.006	--	0.006	--
Manuel Manrique Cecilia	CYMOFAG, S.L.U.	0.000	--	0.000	--

⁹ Mr. Brufau is the individual with mayor number of shares of Repsol.

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 8.1% 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
		SACYR, S.A.	Indirect holder of 1.358% 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 Sacyr Finance, S.A.		

In accordance with the notice submitted to the CNMV on September 13, 2018, the shareholding of Temasek Holdings (Private) Limited reduces its stake under the 3% of share capital. Therefore, the Board of Directors on October 30, 2018, following a report from the Nomination Committee, agreed that Mr. Dahan should remain as Director based on his experience, knowledge, prestige and contribution.

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 Decree-Law 6/2000")

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 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.

Law 3/2013, of June 4, on the creation of the Spanish National Markets and Competition Commission ("Law 3/2013, 4 of June")

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 2019 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 2019 year-end, the Company directly held:

10,408,231	0,681%
Treasury shares	% of voting rights

Significant variations during the year

The purchases of shares made for retirement under the Redemption Programme, initiated on 30 August and ending on 5 November, in which 70,368,868 shares were acquired, should be highlighted.

Moreover, on 7 November, a share capital reduction was executed by means of the retirement of 71,394,987 treasury shares, each with a par value of one euro, approved by Repsol's General Shareholders Meeting held on 31 May 2019, within point seven 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.I) 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:

- 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

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.

Article 22 of the Company Bylaws

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.

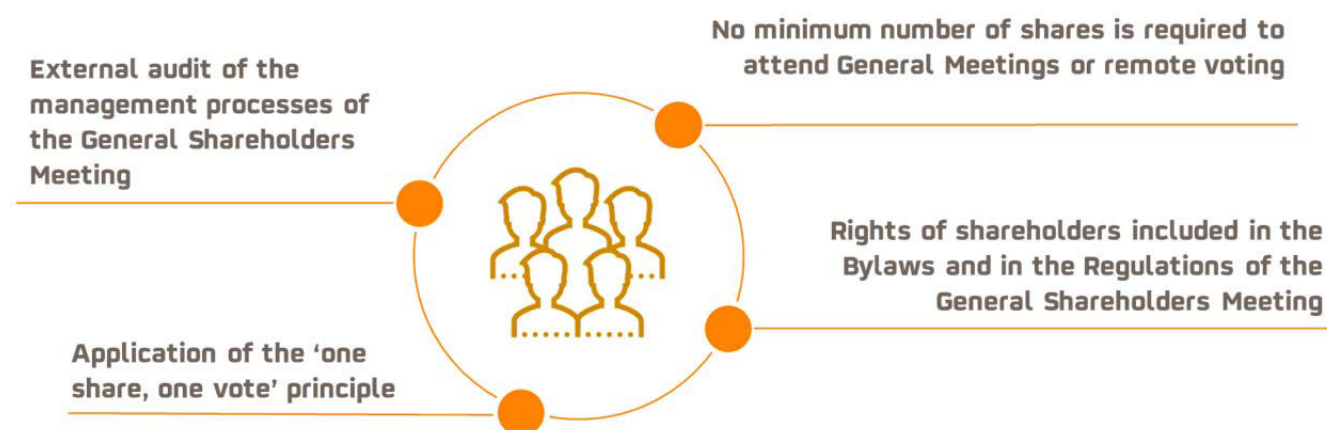
However, and in accordance with that indicated above, a special requirement is established with regard to the regime set forth in the Corporate Enterprises Act for the amendment of Article 22 bis (“Related party transactions”) and Article 44 bis (“Prohibition of competition”) of the Bylaws, and the amendment 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:

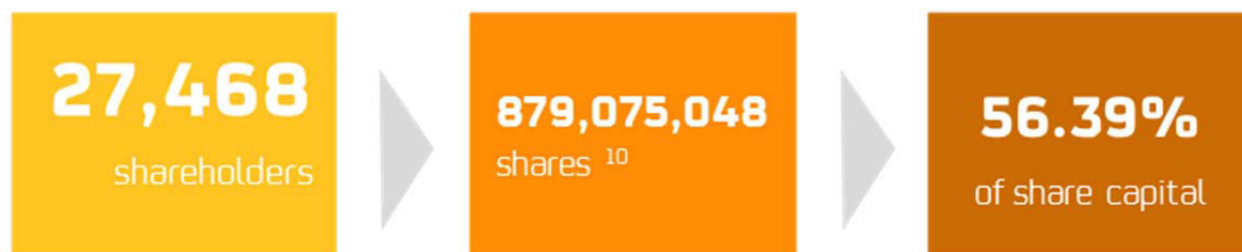
- facilitate the compiling of the attendance list;
- exercise voting rights, and
- exercise other shareholders' rights.

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 31, 2019, 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 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%
May 31, 2019	8.042%	47.572%	0.032%	0.745%	56.392%
Of which is free float:	0.114%	47.427%	0.32%	0.745%	48.318%

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 31, 2019, the Chairman and the Chief Executive Officer notified shareholders, among other matters, of the following: (i) the macroeconomic environment; (ii) the energy

¹⁰ The total attendance is 879,075,048 shares, of which 2,257,282 belongs to the Company's treasury shares, and therefore 876,817,766 shares were represented by those attending the General Shareholders' Meeting.

B. The Repsol Corporate Governance System

2. Ownership structure of the Company



transition; (iii) compliance with strategic obligations; (iv) the results of 2018 and the first quarter of 2019; and (v) the main goals for 2020.

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 2019 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 ¹¹	% of share capital in attendance ¹²
First. Review and approval, if appropriate, of the Annual Financial Statements and Management Report of Repsol, S.A. and the Consolidated Annual Financial Statements and Consolidated Management Report, for fiscal year ended 31 December 2018.	For	874,101,076	99.434%
	Against	1,877,869	0.214%
	Abstained	838,821	0.095%
Second. Review and approval, if appropriate, of the Statement of Non-Financial Information for fiscal year ended 31 December 2018.	For	875,563,313	99.601%
	Against	404,712	0.046%
	Abstained	849,741	0.097%
Third. Review and approval, if appropriate, of the proposal for the allocation of results in 2018.	For	874,460,386	99.475%
	Against	2,181,179	0.248%
	Abstained	176,201	0.020%
Fourth. Review and approval, if appropriate, of the management of the Board of Directors of Repsol, S.A. during 2018.	For	838,561,458	95.460%
	Against	32,120,735	3.657%
	Abstained	5,501,559	0.626%
Fifth. Increase of share capital in an amount determinable pursuant to the terms of the resolution, by issuing new common shares having 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 free-of-charge allocation rights to the Company itself or on the market, Delegation of authority to the Board of Directors or, by delegation, to the Delegate Committee or the CEO, to fix the date the increase is to be implemented and the terms of the increase in all respects not provided for by the General Meeting, all in accordance with article 297,1,(a) of the Companies Act, Application for official listing of the newly issued shares on the Madrid, Barcelona, Bilbao and Valencia stock exchanges through the Spanish Automated Quotation System (Sistema de Interconexión Bursátil), as well as on any other stock exchanges or securities markets where the Company's shares are or could be listing.	For	870,462,507	99.020%
	Against	160,408	0.018%
	Abstained	6,194,851	0.705%

¹¹ 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.

¹² 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.

B. The Repsol Corporate Governance System

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Sixth. Second capital increase in an amount determinable pursuant to the terms of the resolution, by issuing new common shares having 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 free-of-charge allocation rights to the Company itself or on the market, Delegation of authority to the Board of Directors or, by delegation, to the Delegate Committee or the CEO, to fix the date the increase is to be implemented and the terms of the increase in all respects not provided for by the General Meeting, all in accordance with article 297,1,(a) of the Companies Act, Application for official listing of the newly issued shares on the Madrid, Barcelona, Bilbao and Valencia stock exchanges through the Automated Quotation System (Sistema de Interconexión Bursátil), as well as on any other stock exchanges or securities markets where the Company's shares are or could be listing.	For	870,442,081	99.018%
	Against	162,694	0.019%
	Abstained	6,212,991	0.707%
Seventh. Approval of a reduction of share capital for an amount to be determined in accordance with the resolution, through the cancellation of the Company's own shares, Delegation of powers to the Board of Directors or, as its replacement, to the Delegate Committee or the CEO, to set the other terms for the reduction in relation to everything not determined by the General Meeting, including, among other matters, the powers to redraft articles 5 and 6 of the Company's Articles of Association, relating to share capital and shares respectively, and to request the delisting and cancellation of the accounting records of the shares that are being cancelled.	For	874,676,121	99.500%
	Against	1,925,076	0.219%
	Abstained	216,569	0.025%
Eight. Delegation to the Board of Directors of the power to issue fixed rate securities, debt instruments, promissory notes, hybrid instruments and preference shares in any manner permitted by Law, simple or exchangeable for issued shares or other pre-existing securities of other entities, and to guarantee the issue of securities by companies within the Group, leaving without effect, in the portion not used, the twenty-second resolution (first section) of the Annual General Shareholders' Meeting held on April 30, 2015.	For	861,586,923	98.011%
	Against	9,011,625	1.025%
	Abstained	6,219,218	0.707%
Nine. Fix on fifteen the number of members of the Board of Directors.	For	873,749,755	99.394%
	Against	2,749,257	0.313%
	Abstained	318,754	0.036%
Ten. Re-election as Director of Mr. Antonio Brufau Niubó.	For	818,382,058	93.163%
	Against	50,056,379	5.698%
	Abstained	7,745,315	0.882%
Eleven. Re-election as Director of Mr. Josu Jon Imaz San Miguel.	For	860,040,720	97.835%
	Against	11,854,181	1.348%
	Abstained	4,922,865	0.560%
Twelve. Re-election as Director of Mr. Jose Manuel Loureda Mantiñan.	For	813,976,662	92.595%
	Against	56,582,360	6.437%
	Abstained	6,258,744	0.712%
Thirteen. Re-election as Director of Mr. John Robinson West.	For	863,439,231	98.221%
	Against	6,694,077	0.761%
	Abstained	6,684,458	0.760%
Fourteen. Ratification of the appointment by co-optation and re-election as Director of Mr. Henri Philippe Reichstul.	For	847,197,614	96.374%
	Against	22,569,837	2.567%
	Abstained	7,050,315	0.802%

B. The Repsol Corporate Governance System

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Fifteenth. Appointment of Ms. Aránzazu Estefanía Larrañaga as Director.	For	858,324,714	97.640%
	Against	11,845,165	1.347%
	Abstained	6,647,887	0.756%
Sixteenth. Appointment of Ms. María Teresa García-Milà Lloveras as Director.	For	869,484,308	98.909%
	Against	663,223	0.075%
	Abstained	6,670,235	0.759%
Seventeenth. Advisory vote on the Repsol, S.A. Annual Report on Directors' Remuneration for 2018.	For	840,209,935	95.648%
	Against	28,839,777	3.283%
	Abstained	7,134,040	0.812%
Eighteenth. Inclusion of a target related to the performance of total shareholder return in the Long-Term Incentive Remuneration Plan of the Executives Directors (ILP 2018-2021 and ILP 2019-2022).	For	860,788,044	97.920%
	Against	9,558,040	1.087%
	Abstained	6,471,682	0.736%
Nineteenth. Examination and approval, if appropriate, of the Remuneration Policy for Directors of Repsol, S.A. (2019-2021).	For	838,381,036	95.440%
	Against	30,566,034	3.480%
	Abstained	7,236,682	0.824%
Twentieth. Delegation of powers to interpret, supplement, develop, execute, rectify and formalize the resolutions adopted by the General Shareholders' Meeting.	For	876,493,906	99.706%
	Against	123,967	0.014%
	Abstained	199,893	0.023%

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 Annual General Meeting held on 31 May 2019 approved the number of members of the Board of Directors at fifteen (15).

The composition of the Board of Directors at December 31, 2019 is shown in the table below:

Director	Profile	Committees	First appointment	Last appointment	Selection procedure	Date of birth
Mr. Antonio Brufau Niubó	Chairman - Other Non-Executive		23/07/1996	31/05/2019	General Shareholders Meeting Resolution	12/03/1948
Mr. Josu Jon Imaz San Miguel	Chief Executive Officer - Executive		30/04/2014	31/05/2019	General Shareholders Meeting Resolution	06/09/1963
Mr. Manuel Manrique Cecilia	Deputy Chairman - Proprietary Non-Executive		25/04/2013	19/05/2017	General Shareholders Meeting Resolution	01/01/1954
Ms. Maite Ballester Fornés	Director - Independent Non-Executive	 	19/05/2017	19/05/2017	General Shareholders Meeting Resolution	13/05/1963
Mr. Rene Dahan	Director - Proprietary Non-Executive		31/05/2013	19/05/2017	General Shareholders Meeting Resolution	26/08/1941
Ms. Arantza Estefanía Larrañaga	Director - Independent Non-Executive	 	31/05/2019	31/05/2019	General Shareholders Meeting Resolution	09/05/1963
Ms. Carmina Ganyet i Cirera	Director - Independent Non-Executive	  	11/05/2018	11/05/2018	General Shareholders Meeting Resolution	08/04/1968
Ms. Teresa García-Milá Lloveras	Director - Independent Non-Executive	 	31/05/2019	31/05/2019	General Shareholders Meeting Resolution	05/07/1955
Mr. José Manuel Loureda Mantiñán	Director - Proprietary Non-Executive	 	31/01/2007	31/05/2019	General Shareholders Meeting Resolution	20/06/1939
Mr. Ignacio Martín San Vicente	Director - Independent Non-Executive		11/05/2018	11/05/2018	General Shareholders Meeting Resolution	04/05/1955
Mr. Mariano Marzo Carpio	Director - Independent Non-Executive ¹³	  	19/05/2017	19/05/2017	General Shareholders Meeting Resolution	08/09/1951
Mr. Henri Philippe Reichstul	Director - Other Non-Executive		30/10/2018	31/05/2019	General Shareholders Meeting Resolution	12/04/1949
Mr. J. Robinson West	Director - Independent Non-Executive		28/01/2015	31/05/2019	General Shareholders Meeting Resolution	16/09/1946
Ms. Isabel Torremocha Ferrezuelo	Director - Independent Non-Executive	 	19/05/2017	19/05/2017	General Shareholders Meeting Resolution	25/01/1964
Mr. Luis Suárez de Lezo Mantilla	Director Secretary - Other Non-Executive ¹⁴		02/02/2005	19/05/2017	General Shareholders Meeting Resolution	25/01/1951

Committees of the Board of Directors

 Delegate Committee	 Remuneration Committee
 Audit and Control Committee	 Sustainability Committee
 Appointments Committee	 Chairman of the Committee

¹³ Mr. Mariano Marzo was appointed as Lead Independent Director by the Board of Directors on this meeting held on March 27th 2018.

¹⁴ With effect from 31 December 2019, when Mr. Luis Suárez de Lezo Mantilla concluded his executive functions as General Secretary of the Company, he has been reclassified as "Other Non-Executive" by the Board.

Resignations from the Board of Directors in 2019

Director	Category when standing down from office	Date of last appointment	Date of retirement	Committees of which they were a member	Comments
MR. ÁNGEL DURÁNDEZ ADEVA	Independent	04/30/2015	31/05/2019	<ul style="list-style-type: none"> Nomination Committee Compensation Committee Audit and Control Committee 	Expiry of the term of office of Mr. Ángel Duráñez Adeva as Director of the Company.
MR. LUIS CARLOS CROISSIER BATISTA	Independent	04/30/2015	31/05/2019	<ul style="list-style-type: none"> Audit and Control Committee Sustainability Committee 	Expiry of the term of office of Mr. Luis Carlos Croissier Batista as Director of the Company.



B. The Repsol Corporate Governance System

3. Repsol's governance body



ANTONIO BRUFAU NIUBÓ

CHAIRMAN OF THE BOARD OF DIRECTORS

Other Non-Executive

Director of Repsol by resolution of the Board of Directors since 23 July 1996, subsequently ratified by the General Shareholders Meeting of 6 June 1997 and re-elected by the General Shareholders Meeting on 24 March 1999, 4 April 2003, 9 May 2007, 15 April 2011, 30 April 2015 and 31 May 2019.

Antonio Brufau Niubó has been Chairman of Repsol since 2004.

Education: Bachelor's degree in Economic Sciences from the Universidad de Barcelona. Honorary Doctorate from the Universidad Ramón Llull de Barcelona.

Experience: He commenced his professional career at Arthur Andersen, where he became Audit Director and Partner. In 1998, he joined the "La Caixa" Group as Deputy Chief Executive Officer, occupying the position of Chief Executive Officer between 1999 and 2004. He was also Chairman of the Gas Natural Group between 1997 and 2004. His broad experience in the business world and his knowledge of the energy sector have allowed him to lead the company's transformation process towards a more global and integrated model in the last decade. Repsol holds assets in 40 countries and is present throughout the oil and gas value chain, from the exploration and production of hydrocarbons to their transformation and marketing.

Other relevant positions: Antonio Brufau is a member of the Business Action Council of the Spanish Confederation of Business Organisations (CEOE), member of the Spanish Executives Association and the Círculo de Economía business organisation, trustee of the private foundation Instituto Ildefons Cerdà, trustee of Spanish Confederation of Directors and Executives (CEDE), Honorary President of the GLOBALleida interinstitutional consortium, trustee of the Real Instituto Elcano think tank, trustee of the Foundation for Energy and Environmental Sustainability (FUNSEAM), trustee of COTEC (Foundation for Technological Innovation) and trustee of the Fundación Princesa de Girona. He is also the Chairman of Fundación Repsol.

Board committees to which he belongs: Chairman of the Delegate Committee.



JOSU JON IMAZ SAN MIGUEL

CHIEF EXECUTIVE OFFICER

Executive

Josu Jon Imaz was appointed CEO of Repsol following Board resolution dated 30 April 2014 and subsequently ratified and re-elected by the General Shareholders Meeting on 30 April 2015 and 31 May 2019.

Education: Josu Jon Imaz has a PhD in Chemical Sciences from the Universidad del País Vasco. He graduated from the Faculty of Chemical Sciences of San Sebastián winning the Award for Excellence in Academic Career. He was also a visiting researcher at the Harvard Kennedy School in the United States.

Experience: Josu Jon Imaz commenced his professional career in research — he was sent by the INASMET Research Centre to the French technological centre CETIM, in Nantes — and the promotion of industrial (Mondragón Group) and business projects connected

to the world of energy. He also held various political responsibilities, notably including the Basque Country Department of Industry, Trade and Tourism in 1999 and the Executive Presidency of the Basque Nationalist Party, EAJ-PNV.

He joined Repsol as Chairman of its subsidiary Petronor in 2008, where he successfully managed the challenges of modernisation, sustainability and environmental relations. From 2010, he combined this position with that of Director of New Energies. In 2012, he joined Repsol's Management Committee and was appointed General Manager of the Industrial and New Energies Area, responsible, among other functions, for coordinating the activities of all the industrial complexes. Since he was appointed CEO in 2014, he has led the transformation process of the company, today consolidated as one of the world's largest in the oil and gas sector. The improvement of efficiency and the management of the asset portfolio are the pillars of the strategy driven by the CEO, with the aim of turning Repsol into a more flexible and competitive company, capable of getting the most from its integrated business model. He was also Vice-Chairman of Gas Natural SDG, S.A. from September 2016 to February 2018.

Other relevant positions: Member of Repsol's Executive Committee and trustee of Fundación Repsol.

Board committees to which he belongs: Member of the Delegate Committee.

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MANUEL MANRIQUE CECILIA

DEPUTY CHAIRMAN

Proprietary Non-Executive (proposed by Sacyr S.A.)

Mr. Manrique was appointed Director of Repsol following Board resolution dated 25 April 2013 and subsequently ratified and appointed by the General Shareholders Meeting on 31 May 2013 and re-elected by the General Shareholders Meeting on 19 May 2017.

Education: Mr. Manrique has a bachelor's degree in Roads, Canals and Ports Engineering from the Escuela Técnica Superior de Madrid.

Experience: He commenced his professional career at Ferrovial. In 1987, he was part of the founding core of Sacyr, becoming its International Officer in the late-90s and Construction General Manager in 2001. In 2003, coinciding with the merger of Sacyr and Vallehermoso, Mr. Manrique was appointed Chairman and CEO of the construction division and Board member of the parent company of the new Sacyr Vallehermoso Group. In November 2004, he was appointed First Vice-Chairman and CEO of Sacyr Vallehermoso, S.A. and a member of the Group's Executive Committee. Since October 2011, Mr. Manrique has also occupied the position of Chairman of the Board of Sacyr, S.A. (previously Sacyr Vallehermoso, S.A.). He has over 35 years' professional experience in the sectors of construction, infrastructure concessions, services, equity, development and energy.

Other relevant positions: Director of other companies of the Sacyr Group and Chairman of the Sacyr Foundation.

Board committees to which he belongs: Member of the Delegate Committee.



MAITE BALLESTER FORNÉS

Independent Non-Executive

Ms. Ballester was appointed Director of Repsol by the General Shareholders Meeting of 19 May 2017.

Education: She graduated cum laude in Finance and Political Sciences from Boston College and holds an MBA from Columbia University in New York.

Experience: She commenced her professional career at GTE Corporation (Verizon) in the United States as a financial executive, subsequently joining Booz, Allen & Hamilton as a strategy consultant for important multinationals in Mexico, the United Kingdom, Spain and Portugal.

She has been CEO of 3i in Spain, where she gained broad experience in the private equity sector at international level, leading multiple investment transactions and divestments and participating in the institutional investors acquisition process for global funds promoted by 3i. She has also led numerous refinancing processes and several IPOs, and she has great experience on boards of different companies, both listed and unlisted.

From 2014 until January 2017, Ms. Ballester rendered services to EY as external adviser of the Transaction Services (TAS) division, to support the firm's positioning in private equity services. She has also been President of the Spanish Association of Venture Capital Entities (ASCRI).

Other relevant positions: She is currently a Director of Promotora de Informaciones, S.A. (PRISA), Prisa Radio, S.A., a member of the Circulo de Empresarios non-profit business owners' organisation, the Instituto de Consejeros y Administradores (ICA), Women Corporate Directors (WCD) and the International Women's Forum (IWF), and she frequently speaks at business schools and professional associations. Furthermore, she is founder and Managing Partner of the private equity fund Nexus Iberia I.

Board committees to which she belongs: Member of the Audit and Control Committee and member of the Compensation Committee.

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RENE DAHAN

Proprietary Non-Executive (proposed by Temasek)

Mr. Dahan was appointed Director of Repsol by resolution of the General Shareholders Meeting on 31 May 2013 and re-elected by the General Shareholders Meeting on 19 May 2017.

Experience: Mr. Dahan has been a Director and Executive Vice-Chairman of ExxonMobil. He commenced his professional career at Exxon in the Rotterdam refinery in 1964. Having occupied several positions in the transactions, engineering and human resources areas, he was appointed head of the 325 kbd Rotterdam refinery. In 1976, he moved to Exxon's central European offices where he was responsible for Exxon's natural gas activity in Europe. After a brief period in Exxon's offices in New York, he was appointed CEO of Esso BV, the subsidiary of the company responsible for all the upstream and downstream activity in Belgium, the Netherlands and

Luxembourg. He moved to New Jersey (United States) in 1990 and, in 1992, he was appointed Chairman of Exxon Company International, responsible for all Exxon's business in North America.

In 1998, he became a member of the Management Committee and Director of Exxon in Dallas, responsible for the whole downstream and chemicals business at global level. In 1999, he led the merger between Exxon and Mobil and was appointed Executive Vice-Chairman of ExxonMobil until his retirement in 2002.

Between 2002 and 2009, he occupied the position of Director on the Supervisory Boards of VNU N.V., TNT N.V. and Aegon N.V., as well as those of CVC (venture capital) and the Guggenheim Group in New York. On 1 October 2013, he resigned from his position as Chairman of the Supervisory Board of Royal Ahold N.V., a position he had held for 10 years.

Other relevant positions: He is a member of the International Advisory Board of the Instituto de Empresa in Madrid and Chairman of the Dahan Family Foundation. He has been Chairman of the Supervisory Board of the Dutch company NRGV Retail Nederland B.V. since 1 January 2016.

Board committees to which he belongs: Member of the Delegate Committee.



ARANTZA ESTEFANÍA LARRAÑAGA

Independent Non-Executive

Ms. Estefanía was appointed Director of Repsol by the General Shareholders Meeting of 31 May 2019.

Education: She graduated in Law with First Class Honours at the Universidad de Deusto winning the Award for Excellence in Academic Career.

Experience: From its foundation in 2000 until January 2019, she was Managing Partner of Uría Menéndez Abogados, S.L.P. in Bilbao. During those years, she performed various roles at the firm, notably including that of Director of the Practical Area of Procedural, Public, Arbitration and Criminal Law. Furthermore, she has been a member of Uría Menéndez's Board of Directors, Professional Practice Management Committee and Criminal Risk Prevention Committee.

She has earned recognised standing in the area of Commercial Law. She has been Secretary of the Board of Directors of several trading companies and entities and she is currently Secretary of the Board of Bilbao Exhibition Centre, S.A. On several occasions, she has been appointed as an Arbitrator by the Court of Arbitration of the Bilbao Chamber of Commerce to resolve commercial conflicts. Over more than thirty years, she has gained vast experience in the area of compliance and criminal risk prevention, as well as environment and security. In recent years, Ms. Estefanía has given multiple lectures with respect to the criminal liability and compliance of legal persons and she has also authored several publications.

Ms. Estefanía has been constantly recognised on an annual basis by Best Lawyer in Spain as leading lawyer in the practices of arbitration and mediation and as lawyer of the year in the procedural area. She also has teaching experience as adjunct lecturer of the Civil law Department of the Universidad de Deusto.

Other relevant positions: Since May 2019, she has formed part of the group of experts of the Basque Country Economic and Social Council, the advisory body of the Basque Government and Parliament, chairing that body's Economic Commission from December 2019.

Board committees to which she belongs: Member of the Appointments Committee and member of the Sustainability Committee.

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CARMINA GANYET I CIRERA

Independent Non-Executive

Ms. Ganyet was appointed Director of Repsol by the General Shareholders Meeting of 11 May 2018.

Education: Ms. Ganyet is an Economic Sciences and Business Administration graduate from the Universitat Autònoma de Barcelona. Furthermore, she has completed postgraduate studies at ESADE business school.

Experience: She is a specialist in "Corporate Finance" and capital markets. She commenced her professional career at Arthur Andersen. In 1995, she was appointed head of Investment and Management Control of the Financial, Property and Insurance Group of Caixa Holding (currently Criteria). In 1999, she led Colonial's IPO and, in 2000, she was appointed CFO, joining its Management Committee.

In January 2009, she was appointed Corporate General Manager. During these years, she has led the international extension through the takeover bid for Société Foncière Lyonnaise (property company listed on the Paris stock exchange) and has led the financial restructuring of Colonial and executed several corporate transactions consolidating Colonial as one of the largest and leading pan-European office property companies. Moreover, Ms. Ganyet has teaching experience as a lecturer in the Faculty of Business Administration of the Universitat Ramon Llull.

Other relevant positions: She is currently Corporate General Manager of Inmobiliaria Colonial and is part of its Management Committee and a Board member of Société Foncière Lyonnaise. She is a member of the Management Board of the Círculo de Economía business organisation, member of the Board of Trustees of Universidad Ramon Llull, member of the Ethos Ramon Llull Ethics and Business Council, member of the ULI Barcelona Council, member of the Management Board of ESADE Alumni and member of the Barcelona Global Organisation. She has been an independent director of ICF (Instituto Catalán de Finanzas) and SegurCaixa Adeslas, and director of SIIC de Paris representing controlling shareholders. Moreover, she has won several awards and recognitions in her professional career.

Board committees to which she belongs: Chairman of the Appointments Committee, Chairman of the Compensation Committee and member of the Audit and Control Committee.



TERESA GARCÍA-MILÁ LLOVERAS

Independent Non-Executive

Ms. García-Milá was appointed Director of Repsol by the General Shareholders Meeting of 31 May 2019.

Education: Ms. García-Milá has a bachelor's degree in Economic Sciences from the Universidad de Barcelona and a PhD in Economics from the University of Minnesota.

Experience: She commenced her professional career as interim tenured lecturer at the Department of Economics of the State University of New York and later at the Department of Economics of the Universitat Autònoma de Barcelona (UAB). She has been a tenured lecturer and is currently a professor at the Department of Economics and Business of the Universidad Pompeu Fabra in Barcelona, where she has occupied several academic roles: Dean of

the Faculty of Economic and Business Sciences, Vice-Chancellor of Science Policy, and Economics and Business Head of Department. Furthermore, among other positions, she has been a Director of Enagás and Vueling, and Economics Coordinator of the National Assessment and Perspective Agency (ANEP).

Other relevant positions: She is currently Director of the Barcelona Graduate School of Economics and a Professor of the Department of Economics and Business at the Universidad Pompeu Fabra in Barcelona. Ms. García-Milá is an External Director of Banco Sabadell and a member of its Audit Committee, Appointments Committee and Risk Committee. Moreover, she is an honorary member of the Spanish Economics Association (of which she has been President), member of the Advisory Board of the Independent Tax Liability Authority (AIReF), member of the Management Board of the Centre de Recerca en Economía Internacional (CREI) research centre, Vice-President of Barcelona Global and of the board of trustees of the Institute for Political Economy and Governance (IPEG). Ms. García-Milá is a regular speaker at workshops and conferences and has authored numerous publications on economic matters. She has received distinctions such as the "Distinguished Member" of the Catalonia Association of Economists and the "Narcís Monturiol" Medal of the Regional Government of Catalonia.

Board committees to which she belongs: Member of the Audit and Control Committee and member of the Appointments Committee.

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JOSÉ MANUEL LOUREDA MANTIÑÁN

Proprietary Non-Executive (proposed by Sacyr S.A.)

Mr. Loureda was appointed Director of Repsol following Board resolution dated 31 January 2007 and subsequently ratified and appointed by the General Shareholders Meeting on 9 May 2007 and re-elected by the General Shareholders Meeting on 15 April 2011 and 30 April 2015 and 31 May 2019.

Education: Mr. Loureda has a bachelor's degree in Roads, Canals and Ports Engineering.

Experience: He commenced his professional career at Ferrovial in 1965, where he occupied several positions. He was a founder of Sacyr, where he was CEO until 2000 and Chairman until 2004. From 2003 to 2004, and after Sacyr's merger with Vallehermoso, he was Chairman of the Sacyr Vallehermoso Group.

Other relevant positions: He is currently a Director of Sacyr, S.A. (representing Prilou, S.L.), Chairman of Valoriza Gestión, S.A.U. and Director of Sacyr Construcciones, S.A.U.

Board committees to which he belongs: Member of the Compensation Committee and member of the Sustainability Committee.



IGNACIO MARTÍN SAN VICENTE

Independent Non-Executive

Mr. Martín was appointed Director of Repsol by the General Shareholders Meeting of 11 May 2018.

Education: Mr. Martín is a graduate of Electrical Industrial Engineering from the Universidad de Navarra.

Experience: He has developed his professional career in several companies, mainly in the industrial sector, such as GKN Automotive International, where he has exercised the positions of Chief Executive Officer, member of the global Executive Committee and CEO, the latter in the United States.

Mr. Martín has also been Deputy Chief Executive Officer and Vice-Chairman of Alcatel España and, after his return to the GKN Driveline Group, in 1999, he was appointed General Manager for Europe, which was GKN's most important region. In 2001, he joined the GSB Group as Executive Vice-President, where he led the merger with Corporación Industrial Egaña, giving rise to CIE Automotive, where he performed the role of CEO until 2012, when he joined Gamesa as Chairman and CEO, until its merger with Siemens Wind Power in May 2017.

Other relevant positions: He currently occupies the position of Director at Bankoa-Credit Agricole, Indra Sistemas, S.A. and Acerinox, S.A.

Board committees to which he belongs: Member of the Delegate Committee.

B. The Repsol Corporate Governance System

3. Repsol's governance body



MARIANO MARZO CARPIO

LEAD INDEPENDENT DIRECTOR

Independent Non-Executive

Mr. Marzo was appointed Director of Repsol by the General Shareholders Meeting of 19 May 2017.

Education: Bachelor's degree in Geology from the Universidad de Barcelona; PhD in Geological Sciences.

Experience: Mr. Marzo has worked in Europe, the United States, South America, the Middle East and North Africa and is a member of the American Association of Petroleum Geologists and the European Association of Petroleum Geoscientists & Engineers.

Furthermore, Mr. Marzo has participated in several advisory boards on energy matters of the central and autonomous community administrations, as well as other institutions, and he has maintained a continuous connection with the oil and gas industry, through the research applied to the exploration sector and the sedimentological characterisation of fields. Mr. Marzo has also formed part of the editorial boards of journals of great international prestige in the field of geology, such as Basin Research, Geology and Sedimentology, and he has published numerous works and worked vastly as a lecturer. His educational activity was rewarded with the "Distinction of the Universidad de Barcelona for the Best Scientific and Humanist Education Activities" in 2014.

Other relevant positions: Since 1989, Mr. Marzo has been a Professor of Stratigraphy and Lecturer of Energy Resources and Oil Geology in the Faculty of Earth Sciences of the Universidad de Barcelona, where he has developed his teaching career as a researcher, academic, columnist and lecturer. He is also a member of the Advisory Board of Club Español de la Energía and was Director of Section 4 (Earth Sciences) of the Reial Acadèmia de Ciències i Arts de Barcelona.

Board committees to which he belongs: Chairman of the Sustainability Committee, member of the Appointments Committee and member of the Compensation Committee.



HENRI PHILIPPE REICHSTUL

Other Non-Executive

Mr. Reichstul was appointed Director of Repsol by co-option in accordance with a resolution of the Board meeting held on 30 October 2018, a position he had already held between December 2005 and May 2017 and ratified and re-elected by the General Shareholders Meeting on 31 May 2019.

Education: Mr. Reichstul has a bachelor's degree in Economic Sciences from the Universidade de São Paulo and has completed postgraduate studies at Hertford College, Oxford.

Experience: He has been Secretary of the State Companies Budgets Office and Brazil's Vice-Minister for Planning. Between 1988 and 1999, he performed the role of Vice-Chairman and CEO of Banco Inter American Express, S.A. Between 1999 and 2001, he was Chairman of Petrolera Estatal Brasileña Petrobras.

Other relevant positions: He is a member of the Advisory Board of Lhoist do Brasil Ltda., Chairman and Oversight Board member of Fives Group, Board member of LATAM Airlines Group, Board member of TAM Linhas Aéreas and Board member of the Brazilian Foundation for Sustainable Development (FBDS).

Board committees to which he belongs: Member of the Delegate Committee.

B. The Repsol Corporate Governance System

3. Repsol's governance body



ISABEL TORREMOCHA FERREZUELO

Independent Non-Executive

Ms. Torremocha was appointed Director of Repsol by the General Shareholders Meeting of 19 May 2017.

Education: Graduate of Chemical Sciences from the Universidad Autónoma de Madrid. Postgraduate Specialisation in Plastics and Rubber course with the Spanish National Research Council (CSIC), Leadership Programme at ISD Business School, Management Development Programme at IESE Business School and Corporate Finance at IE Business School.

Experience: Ms. Torremocha commenced her professional career at Philips Iberia, joining Andersen Consulting (currently Accenture) in 1991, where she has developed her career in the Telecommunications, Media and High Technology sector. She has been Chief Executive Officer at Accenture and a Board member of Accenture España.

During her latest period at Accenture, working as Transformation Opportunities Director, Ms. Torremocha has led the creation and development of opportunities related to strategic transformations in the areas of information technologies, outsourcing of business processes and digital transformation in Spain, Portugal and Africa.

She has previously performed international roles, the most significant being that of Europe, Africa and Latin America Operations Director, with responsibility for the establishment of the business strategy in these geographic areas.

She has also been responsible for diversity and equality in the Telecommunications, Media and High Technology division of Europe, Africa and Latin America, defining the plans for acceleration of the number of professional women in management positions and in succession plans.

Other relevant positions: She currently occupies the position of Director of Inra Sistemas, S.A. and she is also Trustee and Chairman of the Appointments Committee at the Plan International foundation, a member of the Instituto de Consejeros y Administradores (ICA), member of the Asociación Española de Directivos (AED) and member of the Foro de Foros foundation.

Board committees to which she belongs: Chairman of the Audit and Control Committee and member of the Sustainability Committee.



ROBINSON WEST

Independent Non-Executive

Mr. West was appointed Independent Director of Repsol following a Board resolution dated 28 January 2015 and subsequently ratified and re-elected by the General Shareholders Meeting on 30 April 2015 and 31 May 2019.

Education: Mr. West has a bachelor's degree from the university of North Carolina Chapel Hill and a Juris Doctor from Temple University Law School in Philadelphia.

Experience: Mr. West is a recognised international expert in the energy market, particularly in all the areas related to oil and gas. In 1984, he founded PFC Energy, a company of which he was also chairman until 2013. Before founding PFC Energy, he performed

senior positions in the government, in several administrations. Therefore, under the government of Ronald Reagan, as Deputy Secretary of the Interior, he developed and implemented the five-year leasing plan of the external United States continental platform, organising the largest non-financial auction in the world for that purpose.

He previously performed senior positions in the government, in several administrations. Therefore, under the government of Ronald Reagan, as Secretary of the Interior, he developed and implemented the five-year leasing plan of the external United States continental platform, organising the largest non-financial auction in the world for that purpose. During the presidency of Gerald Ford, he worked for the White House and as Deputy Secretary of Defense for International Economic Affairs, and he received the Secretary of Defense Medal for Outstanding Civilian Service

Other relevant positions: He currently leads the "Center for Energy Impact" of "The Boston Consulting Group" and is also a member of the National Oil Council, the External Relations Council, Chairman of the German Marshall Fund of the US and Emeritus President of the United States Institute of Peace.

Board committees to which he belongs: Member of the Delegate Committee.

B. The Repsol Corporate Governance System

3. Repsol's governance body



LUIS SUÁREZ DE LEZO MANTILLA

SECRETARY OF THE BOARD OF DIRECTORS

Other Non-Executive

Mr. Luis Suárez de Lezo Mantilla was appointed Director of Repsol following Board resolution dated 2 February 2005 and subsequently ratified and appointed by the General Shareholders Meeting on 31 May 2005 and re-elected by the General Shareholders Meeting on 14 May 2009, 31 May 2013 and 19 May 2017.

Education: Mr. Suárez de Lezo is an Universidad Complutense Law graduate and State Lawyer (on leave). He specialises in Commercial and Administrative Law.

Experience: He was a Director of Legal Matters at Campsa until the end of the oil monopoly and has worked as an independent professional, particularly in the energy sector.

In 2005, he was appointed Chief Executive Officer of Repsol and Director and Secretary of the Board of Directors. He held the position of Chief Executive Officer until December 2019 when his executive functions ended, remaining as Director and Secretary of the Board.

Furthermore, Mr. Suárez de Lezo was a member of the Board of Directors of Compañía Logística de Hidrocarburos, CLH, S.A. from 2005 to 2010 and of Naturgy Energy Group, S.A. (previously Gas Natural SDG, S.A.) from 2010 to 2018.

Other relevant positions: He is currently Vice-Chairman of Fundación Repsol.

Board committees to which he belongs: Member of the Delegate Committee.



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 Repsol¹⁵.

The Directors that in turn are directors or representatives of Directors that are legal entities of other listed companies are indicated below:

Name of director	Name of listed company	Position
Manuel Manrique Cecilia	SACYR, S.A.	Chairman - Chief Executive Officer
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
Isabel Torremocha Ferrezuelo	INDRA SISTEMAS, S.A.	Director
Maite Ballester Fornés	PROMOTORA DE INFORMACIONES S.A. (PRISA).	Director
Teresa García-Milá Lloveras	BANCO SABADELL, 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.

¹⁵ 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.

Trend in the presence of women on the Board of Directors

In 2015, the Company set the objective of increasing the presence of women on the Board of Directors to 30% in 2020. To fulfil that objective, in recent years, Repsol has been increasing the number of women on the Board, reaching 20% in 2018 with the appointment of Ms. Carmina Ganyet i Cirera and surpassing 30% in 2019 with the appointment of Ms. Arantza Estefanía Larrañaga and Ms. Teresa García-Milá Lloveras as Independent Directors. Therefore, Repsol is above average with respect to the other IBEX-35 companies in terms of the presence of women on the Board, the average being 26.2% in 2019¹⁶.

Women's presence on the Council in 2019

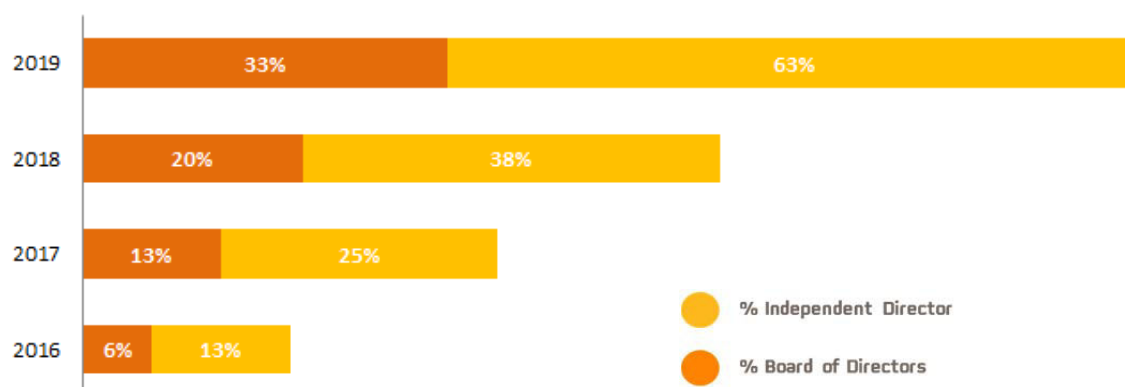


The following table reflects the trend in the presence of women on the Board and the Board Committees over the last four years:

	2019		2018		2017		2016	
	Nº	%	Nº	%	Nº	%	Nº	%
Board of Directors	5	33%	3	20%	2	12.5%	1	6.25%
Delegate Committee	0	-	0	-	0	-	0	-
Audit and Control Committee	4	100%	3	60%	2	40%	0	-
Nomination Committee	3	75%	1	25%	0	-	1	20%
Compensation Committee	2	50%	1	25%	0	-	1	20%
Sustainability Committee	2	50%	0	-	0	-	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 2016 to 62.5% in 2019.

Female Directors



¹⁶ In accordance with the "4th Study on Gender Diversity of Boards of Directors and Management Committees in the IBEX-35" prepared by WomenCEO, 26.2% of the members of the Boards of Directors of IBEX-35 companies in 2019 were women, 2% higher than in 2018. For its part, on 26 June 2019, the Spanish National Securities Market Commission published a press release on the percentage of female directors in the Ibex-35 out of the **total directors on Boards in 2018**, placing the average at 23.9% of the whole Ibex.

Promoting diversity

The Company has a Directors Selection Policy, approved by the Board of Directors on 16 December 2015, which establishes the diversity criteria, in a broad sense, that must be fulfilled with respect to the composition of the Board of Directors. In accordance with that policy, the candidates for Director must be individuals whose appointment favours professional, knowledge, nationality and gender diversity within the Board of Directors.

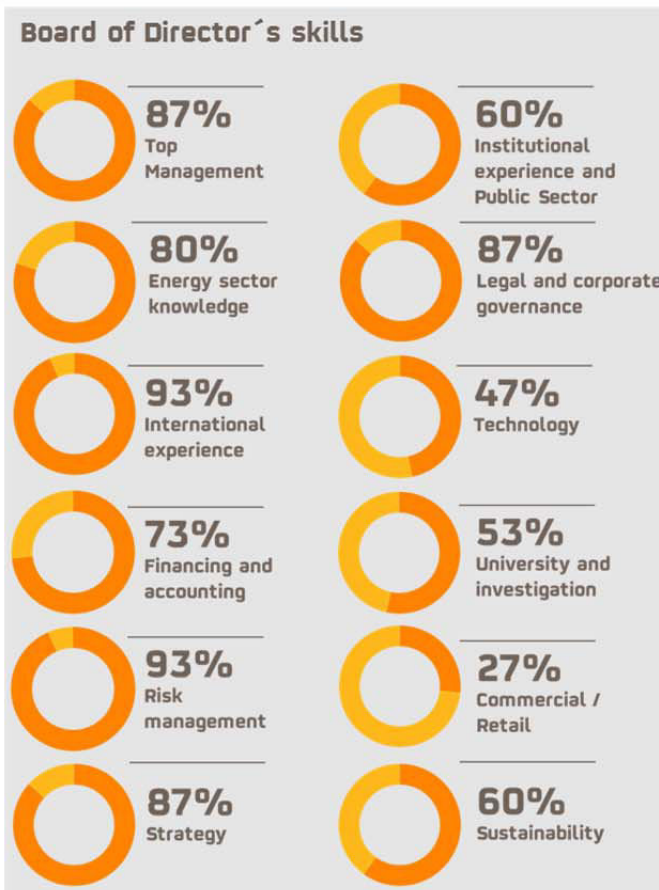
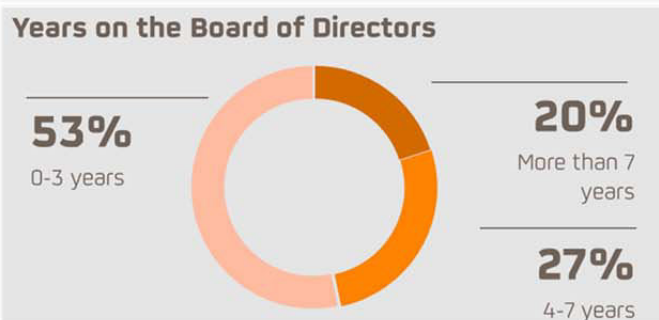
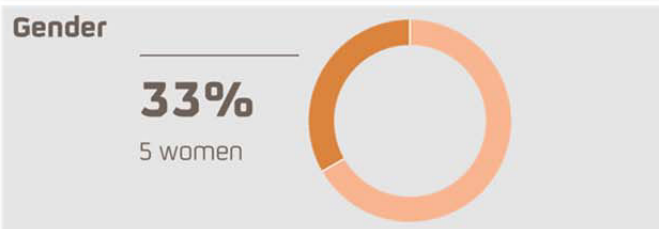
Moreover, the Board Regulations expressly grant the Appointments Committee the function of ensuring, when filling new vacancies or appointing new Directors, that there is no implicit bias in the selection procedures that may entail any discrimination, and women who meet the sought professional profile are deliberately looked for and included within the potential candidates, reporting to the Board on the initiatives adopted in this regard and their results.

Furthermore, article 32 of the Articles of Association establishes that the General Meeting and the Board of Directors, using its power of proposal to the General Meeting and of co-option to cover vacancies, will ensure that professional, knowledge, experience, nationality and gender diversity policies are applied in relation to the composition of the Board of Directors.

The Appointments Committee is responsible for ensuring that the Directors Selection Policy promotes that diversity within the Board of Directors, as well as the establishment of a specific objective relating to the presence of women on the Board. Additionally, it prepares a competence matrix that is updated annually.

Moreover, Repsol's Global Sustainability Plan establishes a series of specific objectives and challenges for 2020, based around core points of the Sustainability model: climate change, people, safe operation, innovation and technology, and ethics and transparency. These objectives include the aforementioned objective relating to the 30% presence of women that was already surpassed in 2019.

Board diversity



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 2019, there were a total of two vacancies on the Board of Directors; both of them corresponded to Independent Directors.

Both vacancies arose at the General Meeting of May 31, 2019, due to the expiry of the term of office of both Independent Directors Mr. Ángel Durández Adeva and Mr. Luis Carlos Croissier Batista, 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.

After analyzing the various profiles presented, confirming their availability and compatibility of the position with their other professional obligations and assessing their suitability to become Directors of Repsol based on 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 Ms. Arantza Estefanía Larrañaga and Ms. Teresa García-Milá Lloveras as Independent Directors of the Company. The General Shareholders' Meeting approved their appointment on May 31, 2019.

By virtue of the above, the General Meeting held on 31 May approved the appointment of Ms. Arantza Estefanía Larrañaga and Ms. Teresa García-Milá Lloveras as Independent Directors. These two appointments **contributed to promote gender diversity in the composition of the Board and to reach the objective contained in the Repsol Directors Selection Policy for 2020, a year before the established objective.**

Director selection process

The director selection process is governed by the Director Selection Policy approved by the Board on December 16, 2015¹⁷.

Selection and appointment process

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.

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 2019 Annual General Meeting are available for consultation on the corporate website through the following link: https://www.repsol.com/imagenes/global/es/propuestas-de-acuerdos-JGA-2019_tcm13-150986.pdf

It should also be noted that in 2019 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.

¹⁷ To access the Director Selection Policy: https://www.repsol.com/imagenes/global/en/00-00538PO_Directors_Selection_Policy_en_tcm14-66877.pdf

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:
 - o 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.
 - o Executive Directors, when they cease to hold the executive positions outside the Board with which their appointment as Director is associated.

B. The Repsol Corporate Governance System

3. Repsol's governance body



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 2019, 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 12 occasions in 2019. 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	12	% of total attendance at meetings	100%
12	No. of meetings with attendance in person or by proxy with specific instructions from all the Directors.	98.3%	Of attendance in person over total votes during the year.
12	No. of meetings with attendance at least 90% of Directors.	100%	Of votes issued with attendance in person and by proxy with specific instructions over total votes during the year.
0	No. of meetings held without the Chairman.		

Attendance at Board of Directors meetings

Director	In person	By proxy	% of attendance in person in 2019
Antonio Brufau Niubó	12	--	100%
Josu Jon Imaz San Miguel	12	--	100%
Manuel Manrique Cecilia	12	--	100%
Maite Ballester Fornés	12	--	100%
Luis Carlos Croissier Batista ⁽¹⁾	5	--	100%
Rene Dahan	12	--	100%
Ángel Duráñez Adeva ⁽²⁾	5	--	100%
Carmina Ganyet i Cirera	12	--	100%
José Manuel Loureda Mantiñán ⁽³⁾	11	1	91.66%
Ignacio Martín San Vicente	12	--	100%
Henri Philippe Reichstul ⁽⁴⁾	11	1	91.66%
Mariano Marzo Carpio	12	--	100%
J. Robinson West ⁽⁵⁾	11	1	91.66%
Luis Suárez de Lezo Mantilla	12	--	100%
Isabel Torremocha Ferrezuelo	12	--	100%
Arantza Estefanía Larrañaga ⁽⁶⁾	7	--	100%
Teresa García-Milá Lloveras ⁽⁷⁾	7	--	100%

(1) Mr. Croissier ended his term as member of the Board of Directors on May 31, 2019.

(2) Mr. Durandez ended his term as member of the Board of Directors on May 31, 2019.

(3) For health reasons, Mr. Loureda was unable to attend personally to the September 25, 2019 meeting of the Board of Directors, although he delegated his representation to Mr. Manrique. The documentation of the meeting was sent to it prior to its celebration, so it conveyed its considerations and precise voting instructions prior to the meeting.

(4) Due to other commitments made prior to the convening of the December 2, 2019 meeting of the Board of Directors, Mr. Reichstul attended the meeting represented by Mr. Brufau. The documentation of the meeting was sent to it prior to its celebration, so it conveyed its considerations on it and precise voting instructions prior to the meeting.

(5) Due to other commitments made prior to the convening of the December 2, 2019 meeting of the Board of Directors, Mr. West attended the meeting represented by Mr. Brufau. The documentation of the meeting was sent to it prior to its celebration, so it conveyed its considerations on it and precise voting instructions prior to the meeting.

(6) Ms. Estefanía was appointed Director of Repsol, S.A. dated May 31, 2019.

(7) Ms. García-Milá was appointed Director of Repsol, S.A. dated May 31, 2019.

Duties of the Directors

The duties of the Directors are included in the Board of Directors Regulations. Article 17 indicates 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 18 to 23 of the Board of Directors Regulations set out the obligations to be met by Directors in accordance with their duties 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 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 2019

In 2019 the Board examined, discussed and issued proposals and reports on those matters reserved for its competence, most notably including the following:

- Preparation of Financial Statements and Management Report, both individual and consolidated, for 2018.
- Approval of quarterly financial statements, of the first and third quarter of the year and the elaboration of the Interim Financial Report corresponding to the first semester 2019, and the annual financial statements of 2018.
- Approval of the Trading Statement.
- Call of the AGM 2019, preparation of the proposals for agreements and reports on said proposals and execution of the agreements adopted.
- Annual Corporate Governance Report for 2018.
- Annual Remuneration Report 2018.
- Board of Directors Remuneration Policy 2019-2021.
- Remuneration of Directors for being part of the Board of Directors and Committees, together with the performance of the Executive Directors for their executive functions.
- Approval of the liquidation of the Long Term Incentive 2015-2018. Proposal of Long Term Incentive 2019-2022.
- Budget monitoring and results of the exploratory activity 2018.
- Information regarding the course of business
- Annual Budget 2019.
- Reports regarding Tax Policies applied by the Company.
- Renewal of the EMTN Program of Repsol International finance, B.V.
- Repsol Flexible Dividend Program.
- Execution of the Share acquisition Plan 2020.
- Follow-up of the strategic commitments.
- Investments and operations of the Company reserved for the approval of the Board of Directors.
- Report on technologies related to climate change.
- Digital Program follow-up
- Biofuel strategy.
- New business models. Connected Energy
- Energy transition and impacts in Repsol: alignment of the Company with the objectives of the Paris Agreement and the market assumptions and implications of all this in the value of the assets and their strategy.
- Risk map and Report on Emerging Risks.
- Approval of operations with significant shareholders.
- Self-evaluation of the functioning of the Board of Directors and its Committees.
- Appointment of the members of the Committees of the Board of Directors.
- Appointment and re-election of trustees of the "Fundación Repsol".
- Organizational evolution of the Top Management.

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

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.
- 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.

Main responsibilities of the Chief Executive Officer

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.

Main responsibilities of the Lead Independent Director

Mariano Marzo Carpio was appointed Independent Coordinating Director following Board resolution dated 27 March 2018 at the proposal of the Appointments Committee. Article 28 of the Board of Directors Regulations attributes him the following functions:

- Request that the Chairman of the Board of Directors call a Board meeting when he considers it appropriate.
- Request the inclusion of new points on the agenda of Board meetings, called or not, in the terms of article 9.3 of these Regulations.
- Coordinate, meet and transmit the opinions of the External Directors.
- Direct the regular appraisal of the Chairman of this body by the Board.
- Call and chair the meetings of the independent Directors he considers necessary or appropriate.
- Chair the Board of Directors meetings in the absence of the Chairman and Vice-Chairmen.
- Maintain contact with investors and shareholders to gauge their viewpoints to form an opinion on their concerns, in particular in relation to the Company's corporate governance.
- Coordinate the Chairman's succession plan.

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.

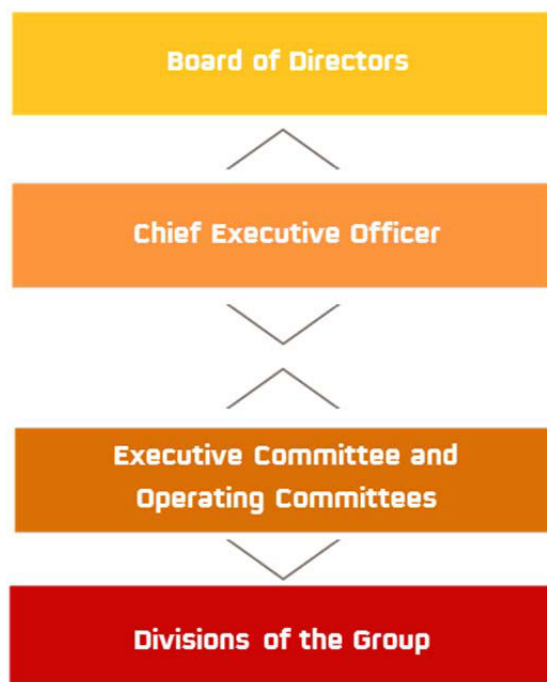
The call notices for Board and Committee meetings will be sent at least 48 hours prior to the meeting and include any documentation related to the agenda and minutes of the previous meeting. This information is accessible through the Director Portal, which is a specific computer application that facilitates 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's 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 responds 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 2019 training and information sessions were carried out in relation to the following content:

Board of Directors

Tax policies applied by the Company, emerging risks, technologies related to climate change, digital agenda, renewable energy generation and storage technology, biofuels strategy, connected energy, energy transition and climate change.

Audit and Control Committee

New accounting standards (IFRS 16), integrated risk management, emerging risks, new Data Protection Regulations and Draft Bill on stimulating the long-term engagement of shareholders and its impact on public financial information.

Sustainability Committee

Emerging and climate change risks map, report on ESG (Environmental, Social and Governance) analysts and investors, results and reporting of the Carbon Disclosure Project (CDP) and progress in the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), culture of safety, progress in energy, climate change, community relations and human rights matters, and main international sustainability standards.

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.

Information pack

- 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

Training sessions

- Functioning of Repsol's main businesses and corporate areas: Exploration and Production, Refining, Chemistry and Marketing
- Economic and energy environment

Specific meetings

- Specific sessions with the various heads of the Company's business and corporate areas
- Visits to the Company's various facilities

Orientation Program for New Directors

External advisory services

The Directors have the power to propose to the Board of Directors 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.

Assessment of the Board of Directors

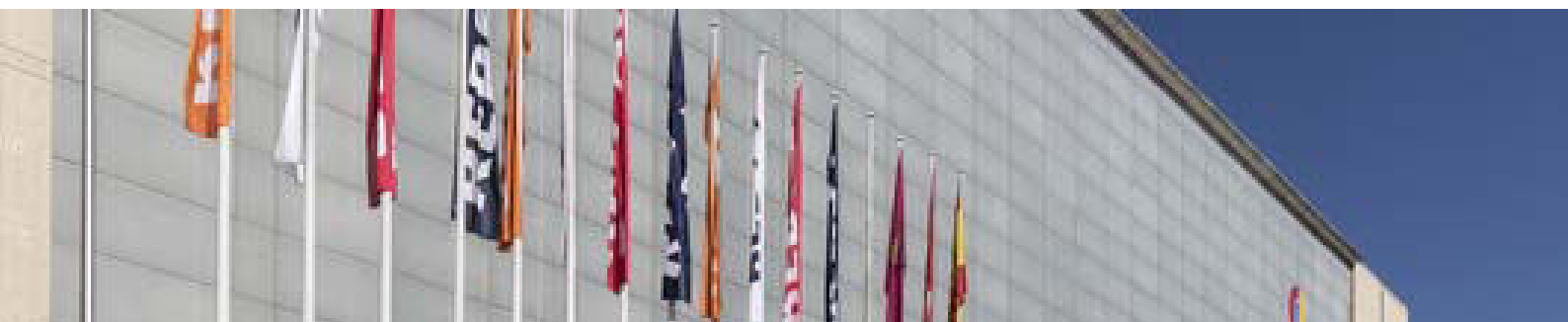
In accordance with the provisions of Article 45 quater of the Company Bylaws and Article 11 of the Board of Directors Regulations, at least once a year the Board will assess its performance and the quality and efficiency of its work. It also annually assesses the work of its Committees, based on the reports they submit. The Chairman of the Board 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 2019 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 2019, 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.

The assessment process was completed with the approval of the conclusions report at the Board and the action plan of Directors meeting on January 28, 2020.

With regard to these initiatives, it was agreed: (i) to prepare and publish an Activity Report of the Sustainability Committee that includes the main functions and activities of this Committee in 2019, and (ii) to continue adapting the Company's practices to the provisions of the CNMV Technical Guide on Nomination and Compensation Committees.



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, Compensation 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.

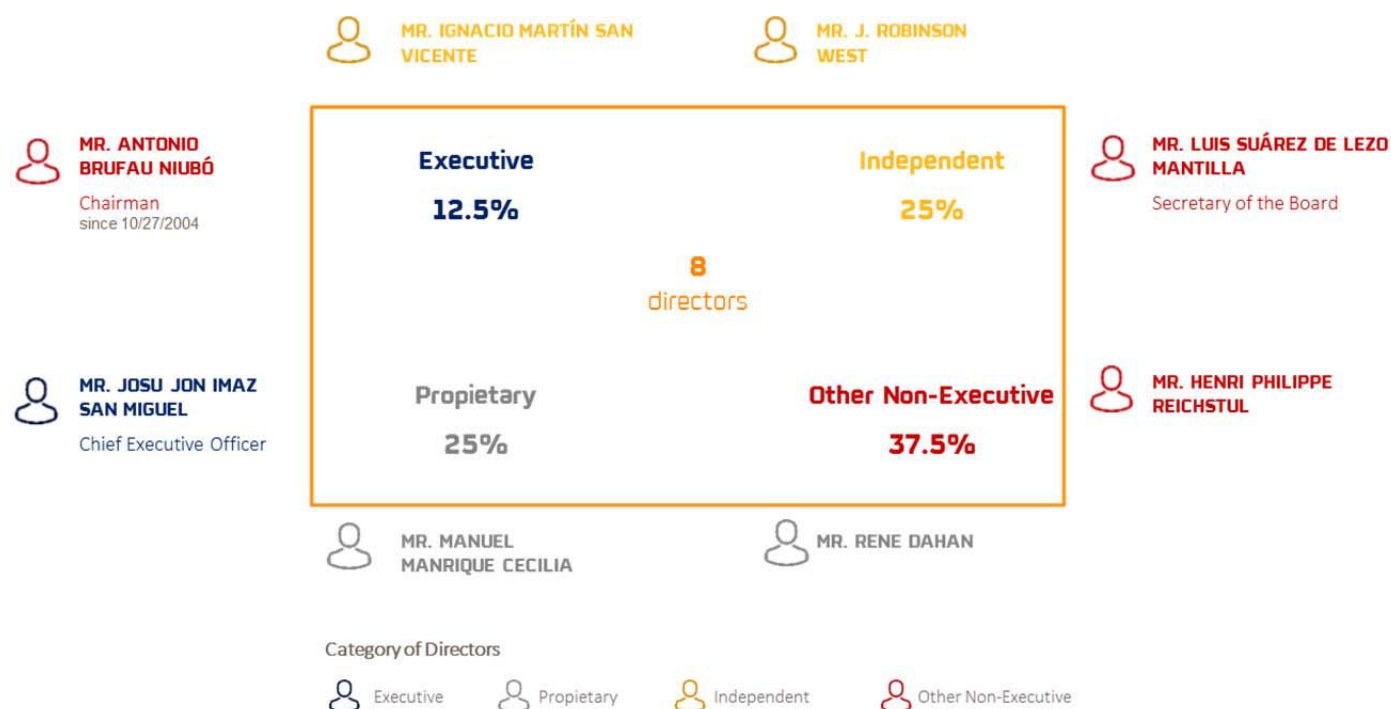
The Committees establishes an annual calendar of meetings, as well as an Action Plan for each year.

4.1. DELEGATE COMMITTEE

Composition

In accordance with the Board of Directors Regulations, the Delegate 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 2019

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.

Number of meetings in 2019: **8**

Main activities

- Approval of investment projects for amounts over EUR 40 million.
- Analysis and monitoring of relevant projects for the Company.
- Exploratory activity.
- Vision of renewable energy.
- Self-evaluation of the functioning of the Committees.

Attendance at Delegate Committee meetings

Director	In person	By proxy	% of attendance in person in 2019
Mr. Antonio Brufau Niubó	8	--	100%
Mr. Josu Jon Imaz San Miguel	8	--	100%
Mr. Manuel Manrique Cecilia	8	--	100%
Mr. Rene Dahan	8	--	100%
Mr. Ignacio Martín San Vicente	8	--	100%
Mr. Henri Philippe Reichstul	8	--	100%
Mr. J. Robinson West	7	--	87.5% ¹⁸
Mr. Luis Suárez de Lezo Mantilla	8	--	100%

4.2. AUDIT AND CONTROL COMMITTEE

This Committee was voluntarily set up on February 27, 1995, although was not mandatory for listed companies until 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.

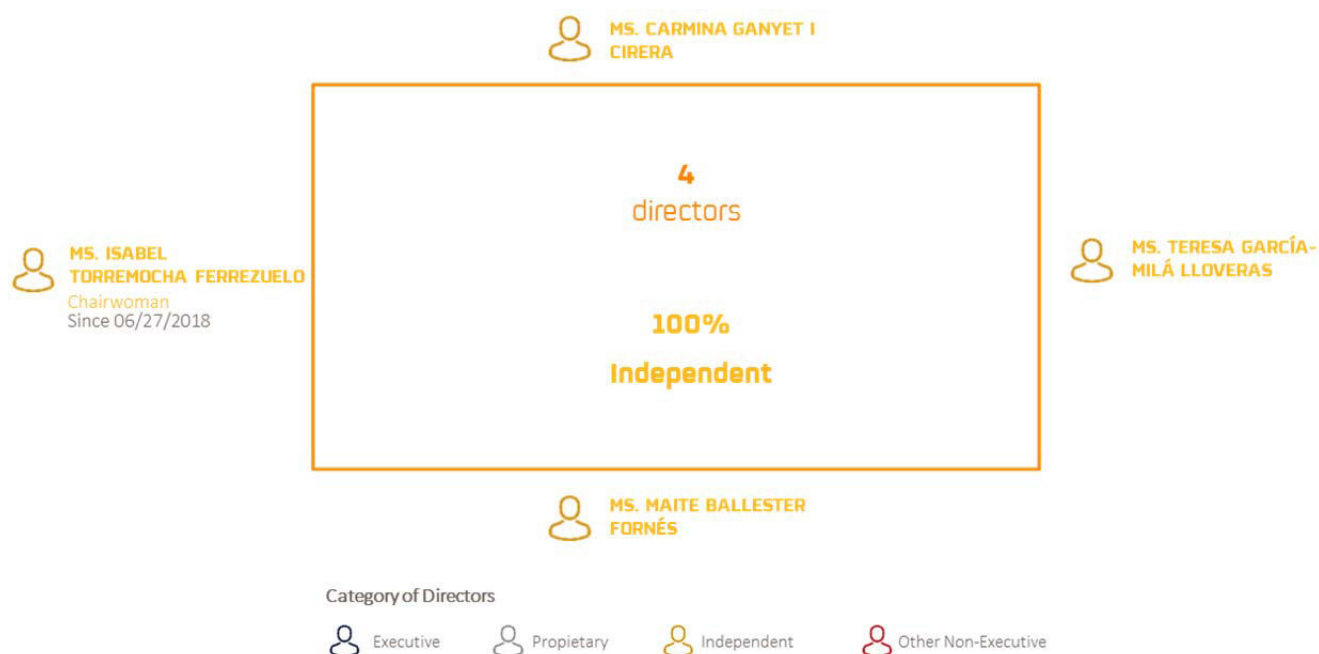
The Committee will also prepare an annual Activities Report that includes all matters discussed by the Committee. This document is made available to shareholders on the corporate website along with the call notice for the Annual General Meeting.

¹⁸ Due to other commitments made prior to his convocation, Mr. West excused his attendance at the Delegate Commission meeting held on November 27, 2019.

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:



All of the Audit and Control Committee 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, corporate economic, risk control and management, energy or the securities market.

In accordance with the Board Regulations, the Chair of the Audit and Control Committee has experience in business and risk management and knowledge of accounting procedures.



Competences and activities in 2019

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.

Number of meetings in 2019: **10**

Main activities

- Monitoring of the financial and non-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.
- 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.
- Analysis of communications received regarding accounting, internal accounting and auditing controls.
- Self-evaluation of the functioning of the Audit and Control Committee.
- Report regarding the compliance with obligations related to the stock market.
- Energy transition and impact on Repsol.

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.

Attendance at Audit and Control Committee meetings

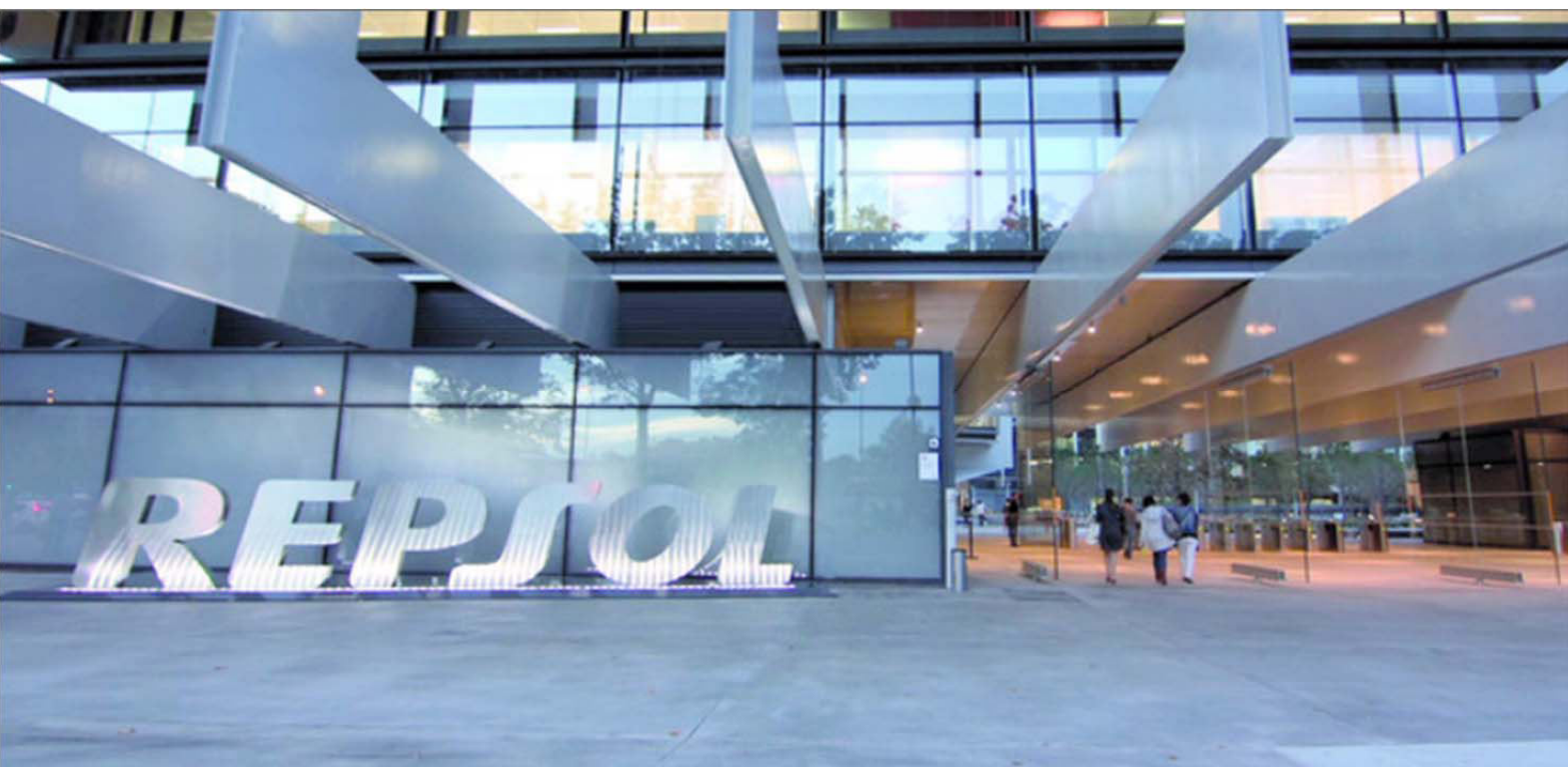
Director	In person	By proxy	% of attendance in person in 2019
Ms. Isabel Torremocha Ferrezuelo	10	--	100%
Ms. Maite Ballester Fornés	10	--	100%
Mr. Luis Carlos Croissier Batista ⁽¹⁾	3	--	75% ⁽²⁾
Mr. Ángel Duráñez Adeva ⁽³⁾	4	--	100%
Ms. Carmina Ganyet i Cirera	10	--	100%
Ms. Teresa García-Milá Lloveras ⁽⁴⁾	6	--	100%

(1) Mr. Luis Carlos Croissier Batista ended his term as Director and member of the Audit and Control Committee on May 31, 2019.

(2) Due to other commitments made prior to the convening of the meeting on April 29, 2019, Mr. Croissier attended the meeting represented by Ms. Torremocha. The documentation of the meeting was sent to it prior to its celebration, so Mr. Croissier transmitted his considerations on it and voting instructions prior to the meeting.

(3) Mr. Ángel Duráñez Adeva ended his term as Director and member of the Audit and Control Committee on May 31, 2019.

(4) Ms. Teresa García-Milá Lloveras was appointed Director and member of the Audit and Control Committee on May 31, 2019.



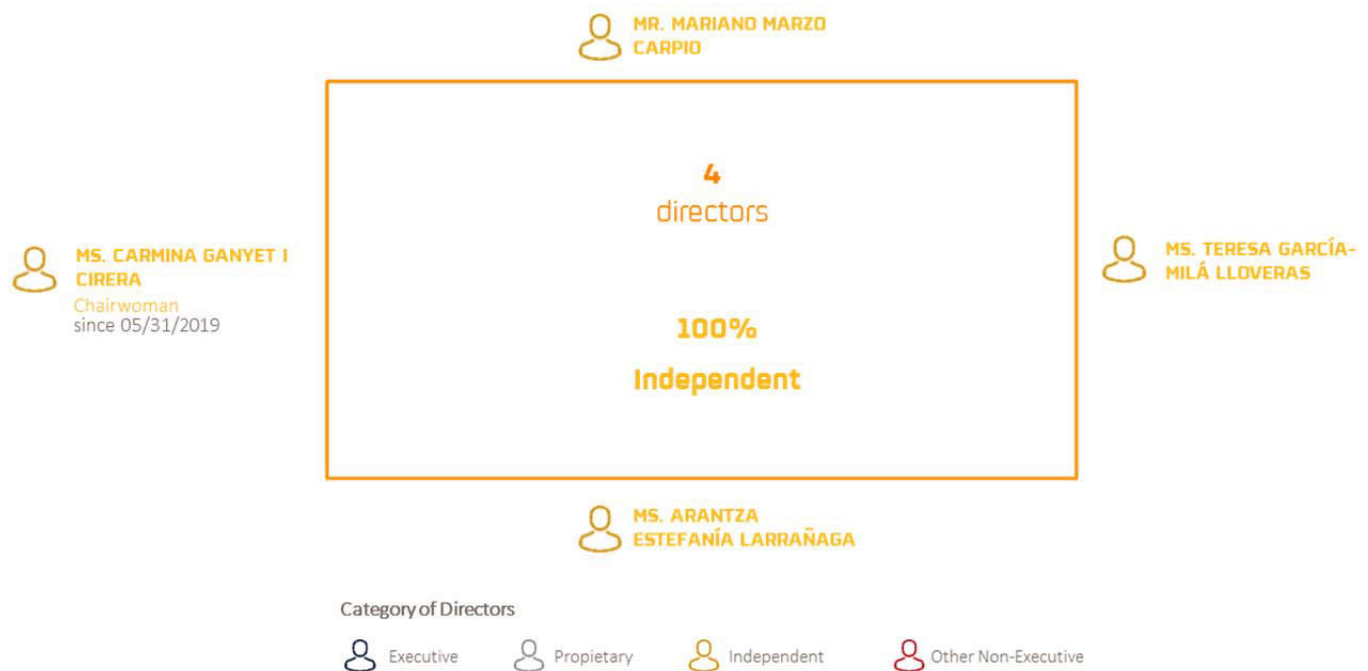
4.3. NOMINATION COMMITTEE

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 2019

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.

Number of meetings in 2019: **7**

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 Compensation Committees.
- Review of the Management Talent Map

Attendance at Nomination Committee meetings

Director	In person	By proxy	% of attendance in person in 2019
Mr. Ángel Duráñez Adeva ⁽¹⁾	3	--	100%
Ms. Carmina Ganyet i Cirera ⁽²⁾	7	--	100%
Mr. José Manuel Loureda Mantiñán ⁽³⁾	3	--	100%
Mr. Mariano Marzo Carpio	7	--	100%
Ms. Arantza Estefanía Larrañaga ⁽⁴⁾	4	--	100%
Ms. Teresa García-Milá Lloveras ⁽⁵⁾	4	--	100%

(1) Mr. Ángel Duráñez Adeva ended his term as Director and member of the Nomination Committee on May 31, 2019.

(2) Ms. Carmina Ganyet i Cirera was appointed President of the Nomination Committee on May 31, 2019.

(3) Mr. José Manuel Loureda Mantiñán ended his term as member of the Nomination Committee on May 31, 2019.

(4) Ms. Arantza Estefanía Larrañaga was appointed member of the Nomination Committee on May 31, 2019.

(5) Ms. Teresa García-Milá Lloveras was appointed member of the Nomination Committee on May 31, 2019.

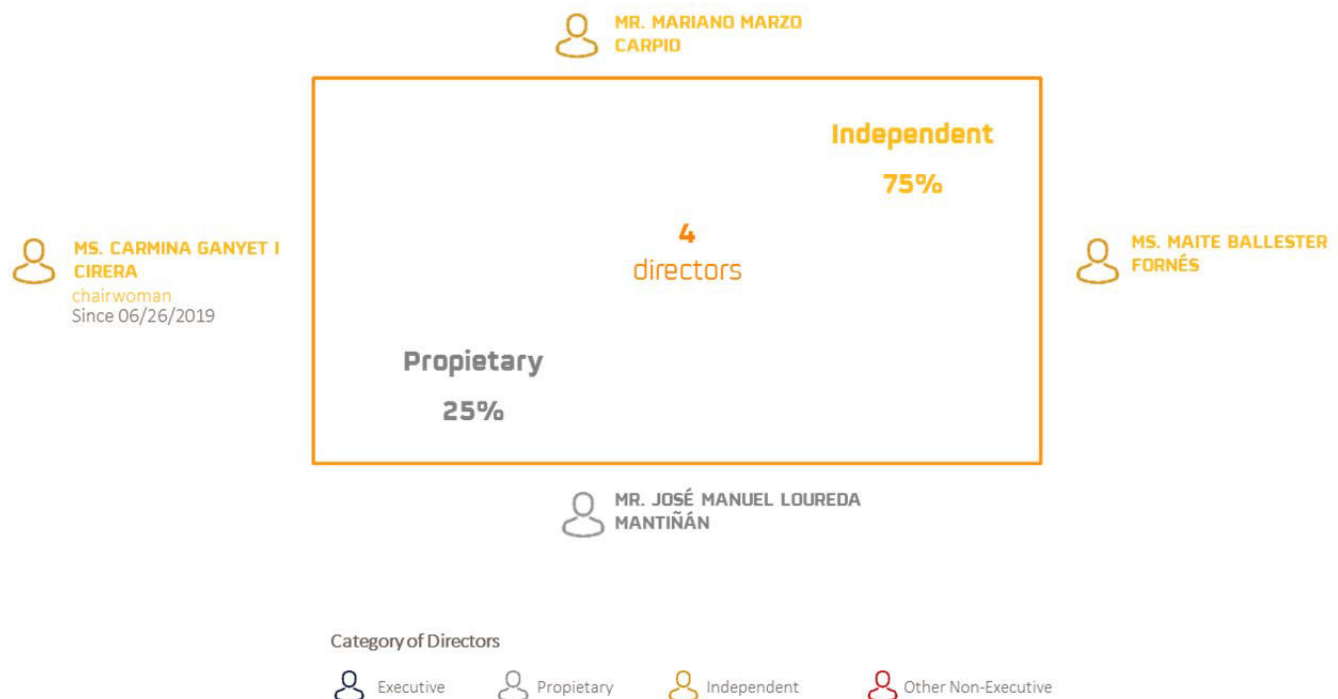
4.3. COMPENSATION COMMITTEE

This Committee was created by the Board of Directors, with information, advisory and proposal powers within its area of activity.

Composition

The Compensation 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 Compensation Committee is as follows:



Competences and activities in 2019

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.

Number of meetings in 2019: **5**

Main activities

- Report on the settlement of the Long-term Employee Incentive Programme 2015-2018 and proposed settlement of the Long-term Employee Remuneration Programme) 2019-2022.
- Remuneration proposal for membership of the Board of Directors and its Committees for the year 2019,
- Proposal for additional remuneration for Directors for the performance of executive duties
- Verification of the information of compensations of the Board of Directors and Senior Management included in the Financial Statements for year 2018.
- Proposals and reports for the Annual General Meeting related to:
 - Inclusion of the TSR (Total Shareholder Return) objective in the long-term variable remuneration of the Executive Directors.
 - Annual Report for remunerations of the Board of Directors pursuant to exercise 2018.
 - Repsol S.A. Directors Remuneration Policy 2019-2021.
- Definition of the objectives for the Long-Term Incentive (2019-2022).
- Self-evaluation of the functioning of the Committee
- Proposal for the new Global Stock Purchase Plan by all employees.
- Proposal of the new Long-Term Incentive Plan with partial concession in shares
- Report on the remuneration structure of the Directors
- Analysis of the Technical Guide of the CNMV about the Nomination and Compensation Committees.

Attendance at Compensation Committee meetings

Director	In person	By proxy	% of attendance in person in 2019
Ms. Maite Ballester Fornés	5	--	100%
Mr. Ángel Durández Adeva ⁽¹⁾	2	--	100%
Ms. Carmina Ganyet i Cirera ⁽²⁾	3	--	100%
Mr. José Manuel Loureda Mantiñán	5	--	100%
Mr. Ignacio Martín San Vicente ⁽³⁾	2	--	100%
Mr. Mariano Marzo Carpio ⁽⁴⁾	3	--	100%

(1) Mr. Ángel Durández Adeva ended his term as Director and member of the Compensation Committee on May 31, 2019.

(2) Ms. Carmina Ganyet i Cirera was appointed member of the Nomination Committee on May 31, 2019 and Chair of the same on June 26, 2019.

(3) Mr. Ignacio Martín San Vicente ended his term member of the Compensation Committee on May 31, 2019.

(4) Mr. Mariano Marzo Carpio was appointed member of the Nomination Committee on May 31, 2019.

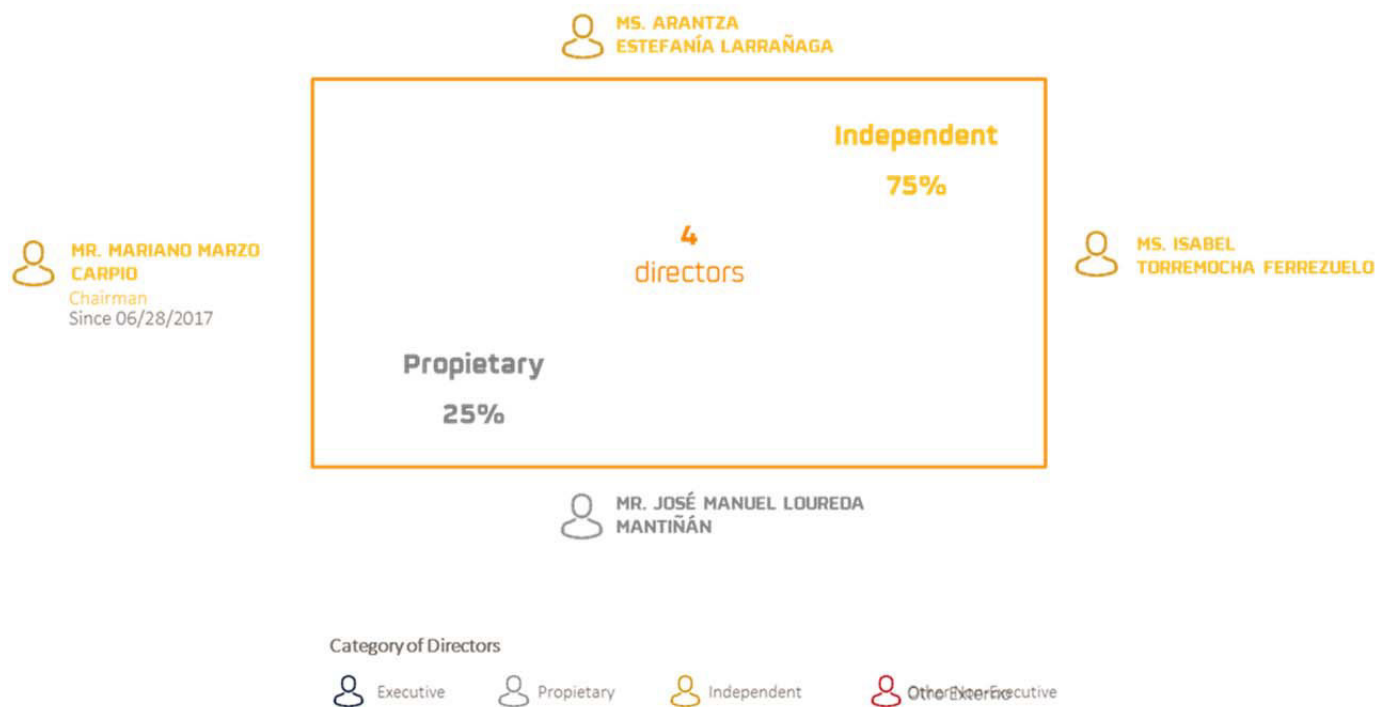
4.3. SUSTAINABILITY COMMITTEE

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, 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 2019

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.

Number of meetings in 2019: **4**

Main activities

- Monitoring of the non-financial information. Integrated Management Report 2018.
- Monitoring of the sustainability strategy of the Company: proposal and follow-up of the 2019 objectives; 2018 evaluation and closing of the objectives 2018.
- Development of the map of Emerging Risks and Climate Change.
- Analysis and follow up of the performance on:
 - Safety and Environment: S&E Scorecard, dashboard of indicators and safety and environmental strategy.
 - Community Relations and Human Rights advances
 - Circular Economy Advances. Informes sobre analistas e inversores ESG (Environmental, Social and Governance).
- Report on ESG analysts (Environmental, Social and Governance).
- Climate Disclosure Project Results and advance in the Task Force on Climate-related Financial Disclosures (TCFD) and the report on Carbon Disclosure Project (CDP)
- Activities related with Energy Transition and Climate Change
- Repsol Safety Culture.
- Materiality Analysis 2019.
- Emergencies and crisis management procedure.
- Plan to boost Sustainable Development Goals
- Self-Assessment of the Committee

In addition, all matters related to climate change were reviewed at all Committee meetings held in 2019.

Attendance at Sustainability Committee meetings

Director	In person	By proxy	% of attendance in person in 2019
Mr. Mariano Marzo Carpio	4	--	100%
Mr. Luis Carlos Croissier Batista ⁽¹⁾	1	--	100%
Mr. José Manuel Loureda Mantiñán ⁽²⁾	3	--	75%
Ms. Arantza Estefanía Larrañaga ⁽³⁾	3	--	100%
Ms. Isabel Torremocha Ferrezuelo ⁽⁴⁾	3	--	100%

(1) Mr. Croissier ended his term as member of the Board of Directors on May 31, 2019.

(2) For health reasons, Mr. Loureda was unable to attend personally to the September 25, 2019 meeting of the Sustainability Committee, although he delegated his representation to Mr. Marzo. The documentation of the meeting was sent to it prior to its celebration, so it conveyed its considerations and precise voting instructions prior to the meeting.

(3) Ms. Estefanía was appointed Director of Repsol, S.A. and member of the Sustainability Committee dated May 31, 2019.

(4) Ms. Torremocha Ferrezuelo was appointed member of the Sustainability Committee dated May 31, 2019.

5. Remuneration of Directors and Senior Management

18,565¹⁹

Remuneration accrued in 2019
by the Board of Directors

2,310²⁰

Amount of accumulated pension
rights of current Directors

0

Amount of accumulated pension
rights of former Directors

10,195²¹

Total remuneration of Senior Management in 2019

(thousand of euros)

Breakdown of the members of Senior Management in 2019 that are not Executive Directors

Name	Category
Luis Cabra Dueñas	EMD of Technological Development, Resources and Sustainability
Begoña Elices García	EMD of External Relations
Arturo Gonzalo Aizpiri	EMD of People and Organization
Miguel Klingenberg Calvo	EMD of Legal Affairs
Antonio Lorenzo Sierra	EMD of CFO
Isabel Moreno Salas	MR. Audit, Control and Risks
María Victoria Zingoni	EMD of Commercial Businesses and Chemistry
Tomás García Blanco	EMD of Exploration and Production
Juan Antonio Carrillo de Albornoz Tejedor	ED of Industrial Businesses and Trading

¹⁹ The amount indicated under this heading does not include the amounts corresponding to the compensation received by the Director-Secretary-General due to the termination of his contract and of his executive functions and non-competition agreement, which amounted to 11.3 million.

²⁰ It does not include the amount of 2.9 million euros accumulated in the "Permanence Award" Investment Fund on behalf of the Director-Secretary General, as this was settled on 31 December 2019.

²¹ The amount indicated under this heading includes the remuneration of the Director of Audit, Control and Risk because, for the purposes of this report, "senior management" means those executives who report directly to the Board or the chief executive of the company and, in any case, the internal auditor.

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 seven Managing Directors (excluding Executive Directors) and another 244 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 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 24 months, or the amount stipulated by law if higher.

For Chief Executive Officers contracted after 2012, compensation of one year's total remuneration (six months in the case of one of them) included within the 24 monthly payments of their compensation is established for the post-contractual non-compete commitment. For the other executives, one year of remuneration, total or fixed, is established in accordance with the duration of the contract, in addition to their compensation. The contracts of executives of some countries do not envisage the post-contractual non-compete commitment or do not establish any compensation for it.

For the CEO, on the other hand, deferred financial compensation equivalent to two years' fixed and variable annual remuneration — including the non-compete remuneration — is established, which will apply in case of termination of the contract due to causes attributable to Repsol or by mutual agreement, if it takes place in the Company's interest.

With respect to Mr. Suárez de Lezo, on 18 December 2019, the Board of Directors resolved the termination, by mutual agreement and at the initiative and in the Company's interest, of his executive functions as General Secretary, effective from 31 December 2019, as well as the payment of his deferred financial compensation and of the financial compensation for the non-compete agreement as detailed in this section and in the Annual Directors' Remuneration Report.

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.

Lastly, 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.

Furthermore, the Internal Conduct Regulations of the Repsol Group on the Securities Market, with the same scope of application, contain the conflicts of interest prevention and resolution mechanisms.

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

Repsol related party transactions are assessed 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) Persons, Companies and Group entities (if there are transactions which are not eliminated during the consolidation process) and iii) Directors and Senior Management.

Note 28 to the Consolidated Group Financial Statements provides information on the incomes, expenses and other transactions recognized in the financial year and the debit and credit balances recorded at December 31st for transactions with related parties, including significant shareholders.

B. The Repsol Corporate Governance System

6. Related party and intra-group transactions

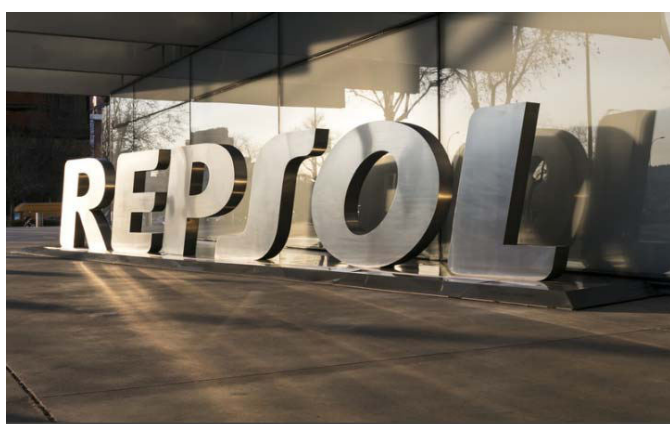


List of any transactions between the Company or entities of its group and significant shareholders of the Company:

Name of controlling shareholder	Name of company or group Company	Relationship	Type of transaction	Amount (thousand euros)
SACYR, S.A.	REPSOL GROUP	Commercial	Receipt of services	29,133
SACYR, S.A.	REPSOL GROUP	Commercial	Purchase of property and equipment	35,285
SACYR, S.A.	REPSOL GROUP	Corporate	Dividends and other distributed profits	109,462
TEMASEK HOLDINGS (PRIVATE) LIMITED	REPSOL GROUP	Commercial	Purchase of goods finished or not	170,569

Transactions with other entities in its group that are not eliminated from the process of preparing the consolidated financial statements and do not form part of the company's normal business

The transactions performed by Repsol, S.A. with the companies in its Group, and between them, form part of the company's normal business operations in terms of their purpose and under market conditions.



Between the Company or Group entities with the Company's directors are executives.

Name of directors or executives	Company executives
Name of related party	Repsol Group
Relationship	Contractual
Nature of the transaction	Financing agreements: loans
Amount (thousand euros)	331

In The Note 29 and 30 of the 2019 Consolidated Annual Accounts and in the Remunerations Reports is informed the remunerations with Directors and Senior Management.

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.

To that effect and as mentioned in section B.4.2. the Audit and Control Committee regularly review the 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 appointed PricewaterhouseCoopers, S.L. as its external auditor for 2018, 2019 and 2020, being year 2019 the second year that this firm audits the Company.

Mechanisms to preserve independence of the External 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 fees²² for this work and the percentage they represent of the approved fees to the Company and/or its Group, for the year 2019:

	Company	Group companies	Total
Amount of non-audit work (thousands of euros) ⁽¹⁾	288	449	737
Amount of non-audit work / Amount of audit work (%)	9%	10%	9%

(1) Includes, mainly, 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 letter), as well as verification of the non-financial information in the management report consolidated).

²² Amounts approved by the Audit and Control Committee for the year 2019.

Reservations or qualifications in the auditor's report

The auditor's report on the financial statements for 2019 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	2	2
No. of years audited by current audit firm / No. of years that the Company or its Group has been audited (%)	6.06%	6.89%

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 Integrated Report 2019 of Repsol Group, of which this Annual Corporate Governance Report forms part as Annex VII.

8.1. 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's define. 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

B. The Repsol Corporate Governance System

8. Risk control and management



direct channel for employee consultations. The framework of this regulation is the Ethics and Conduct Code.

Additionally, communication actions and training courses on the "Code of Ethics and Conduct" are performed to strengthen their knowledge and for their adequate fulfilment. This year, Repsol wanted to go a step further and it has developed a new training action in relation to the Code of Ethics and Conduct for its employees in an innovative and dynamic "web series" format, placing special emphasis on anti-corruption matters and issues related to personal data protection. It should also be highlighted that Repsol has approved new basic regulations developing the content of the Code in relevant aspects this year, such as the management of gifts and entertainment, conflicts of interest and due diligence with third parties.

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. In 2019, Repsol has taken a further step forward and developed a new training programme for all employees on the Code of Ethics and Conduct, in an innovative and dynamic web site format, with special emphasis on anti-corruption and personal data protection issues. It should also be noted that this year Repsol has approved new basic regulations that develop the content of the Code in relevant aspects, such as the management of gifts and hospitality, conflicts of interest and due diligence with third parties. 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.

In accordance with the Regulations of the Ethics and Compliance Committee, the Committee is composed of a multidisciplinary group, including the General Director of Legal Affairs, the General Director of People and Organization, the Corporate Director of Legal Services and Chief Compliance Officer, the Director of Audit, Control and Risks and the Director of Labor Relations, Legal Labor Management and Safety at Work. 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, which has been updated this year in line with the recent Crime reform, and with a recurrent dissemination plan. This plan included carrying out new classroom-based training sessions in 2019 for Repsol's new Industrial Complex managers and directors, as well as an online course for those responsible for managing the controls of the Model. Moreover, Repsol has a Criminal Prevention Manual designed to improve the understanding of the criminal risks and the actions and conduct expected of the employees, which has been updated this year in accordance with the recent criminal reform, and with a recurrent disclosure plan. This plan included the holding of new in-person training sessions for new executives and managers of Repsol's Industrial Complexes in 2019, as well as the completion of an online course for the Model controls managers.

- **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 issue related to compliance with the Code of Ethics and Conduct as well as 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 Group 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
- Valuations subject to analysis and complex estimates
- Capture, analysis, evaluation and recording of business transactions
- Preparation of consolidated financial statements
- Economic and financial information requirements

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). As a result of this analysis, the following categories of causal factors for financial reporting fraud risk have been defined:

- Inadequate control environment.
- Intentional error on the financial statements
- Asset misappropriation.

- **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 2019 Consolidated Integrated 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.

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, without prejudice to those that may be added or rectified by 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.

B. The Repsol Corporate Governance System

8. Risk control and management



- The Unit that monitors, analyzes, reviews and interprets the accounting standards contained in the regulatory framework 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
- 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. 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 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, 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 identifies responsible areas and establishes uniform criteria for judgments, estimates and valuations in the processes considered relevant for the preparation of financial information. Specifically, and in accordance with that set forth in Note 3 "Estimates and judgements" of the Repsol Group's Consolidated Financial Statements for 2019, 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, regulations 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. Once the conflicts have been identified, remediation plans are defined for them, aimed in some cases at adapting the security profiles and roles that cause these conflicts and in other cases at identifying and implementing mitigating controls that guarantee adequate coverage of the risks associated with these conflicts. Once the conflicts have been identified, remediation plans are defined, aiming, in some cases, to align the security profiles and roles that cause these conflicts and, in others, to identify and implement mitigating controls guaranteeing the adequate coverage of the risks associated with those conflicts.

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, which 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:

- Request 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.
- Conduct 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 2019, 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 2019.

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 2019, 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.

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, 2019, 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
<p>Recommendation 1</p> <p>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.</p>	X				
<p>Recommendation 2</p> <p>When the parent company and a subsidiary are listed, they should both provide detailed disclosure on:</p> <p>a) The type of activity they engage in and any business dealings between them, and between the listed subsidiary and other group companies.</p> <p>b) The mechanisms in place to resolve any conflicts of interest.</p>				X	
<p>Recommendation 3</p> <p>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:</p> <p>a) Changes taking place since the previous annual general meeting.</p> <p>b) The specific reasons for the company not following a given Good Governance Code recommendation, and any alternative procedures followed in its stead.</p>	X				
<p>Recommendation 4</p> <p>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.</p> <p>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.</p>	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 5</p> <p>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.</p> <p>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.</p>	X				
<p>Recommendation 6</p> <p>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:</p> <ul style="list-style-type: none"> 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				
<p>Recommendation 7</p> <p>The company should broadcast its general meetings live on the corporate website.</p>	X				
<p>Recommendation 8</p> <p>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.</p>	X				
<p>Recommendation 9</p> <p>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.</p> <p>Such conditions and procedures should encourage shareholders to attend and exercise their rights and be applied in a non-discriminatory manner.</p>	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 10</p> <p>When an accredited shareholder exercises the right to supplement the agenda or submit new proposals prior to the general meeting, the company should:</p> <ul style="list-style-type: none"> 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	
<p>Recommendation 11</p> <p>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.</p>				X	
<p>Recommendation 12</p> <p>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.</p> <p>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.</p>		X			
<p>Recommendation 13</p> <p>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.</p>				X	

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 14</p> <p>The board of directors should approve a director selection policy that:</p> <ul style="list-style-type: none"> 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. <p>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.</p> <p>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.</p> <p>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.</p>	X				
<p>Recommendation 15</p> <p>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.</p>	X				
<p>Recommendation 16</p> <p>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.</p> <p>This criterion can be relaxed:</p> <ul style="list-style-type: none"> 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				
<p>Recommendation 17</p> <p>The number of independent directors should be at least half of all board members.</p> <p>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.</p>	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 18</p> <p>Companies should disclose the following director particulars on their websites and keep them regularly updated:</p> <ul style="list-style-type: none"> 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				
<p>Recommendation 19</p> <p>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.</p>				X	
<p>Recommendation 20</p> <p>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.</p>				X	

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 21</p> <p>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.</p> <p>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.</p> <p>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.</p>	X				
<p>Recommendation 22</p> <p>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.</p> <p>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.</p>	X				
<p>Recommendation 23</p> <p>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.</p> <p>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.</p> <p>The terms of this recommendation also apply to the secretary of the board, even if he or she is not a director.</p>				X	

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
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 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	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 31</p> <p>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.</p> <p>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.</p>	X				
<p>Recommendation 32</p> <p>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.</p>	X				
<p>Recommendation 33</p> <p>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.</p>	X				
<p>Recommendation 34</p> <p>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.</p>	X				
<p>Recommendation 35</p> <p>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.</p>	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 36</p> <p>The board in plenary session should conduct an annual evaluation, adopting, where necessary, an action plan to correct weakness detected in:</p> <ul style="list-style-type: none"> 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. <p>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.</p> <p>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.</p> <p>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.</p> <p>The process followed and areas evaluated should be detailed in the annual corporate governance report.</p>	X				
<p>Recommendation 37</p> <p>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.</p>	X				
<p>Recommendation 38</p> <p>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.</p>	X				
<p>Recommendation 39</p> <p>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.</p>	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 40</p> <p>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.</p>	X				
<p>Recommendation 41</p> <p>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.</p>	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 42</p> <p>The audit committee should have the following functions over and above those legally assigned:</p> <p>1. With respect to internal control and reporting systems:</p> <ul style="list-style-type: none"> 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. <p>2. With regard to the external auditor:</p> <ul style="list-style-type: none"> 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				
<p>Recommendation 43</p> <p>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.</p>	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 44</p> <p>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.</p>	X				
<p>Recommendation 45</p> <p>Risk control and management policy should identify at least:</p> <ul style="list-style-type: none"> 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				
<p>Recommendation 46</p> <p>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:</p> <ul style="list-style-type: none"> 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				
<p>Recommendation 47</p> <p>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.</p>	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
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: <ul style="list-style-type: none"> 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
<p>Recommendation 52</p> <p>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:</p> <ul style="list-style-type: none"> 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
<p>Recommendation 53</p> <p>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:</p> <ul style="list-style-type: none"> 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
<p>Recommendation 54</p> <p>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:</p> <ul style="list-style-type: none"> 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				
<p>Recommendation 55</p> <p>The company should report on corporate social responsibility developments in its directors' report or in a separate document, using an internationally accepted methodology.</p>	X				
<p>Recommendation 56</p> <p>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.</p>	X				
<p>Recommendation 57</p> <p>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.</p> <p>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.</p>	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 58</p> <p>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.</p> <p>In particular, variable remuneration items should meet the following conditions:</p> <ul style="list-style-type: none"> 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				
<p>Recommendation 59</p> <p>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.</p>	X				
<p>Recommendation 60</p> <p>Remuneration linked to company earnings should bear in mind any qualifications stated in the external auditor's report that reduce their amount.</p>				X	
<p>Recommendation 61</p> <p>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.</p>	X				
<p>Recommendation 62</p> <p>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.</p> <p>The above condition will not apply to any shares that the director must dispose of to defray costs related to their acquisition.</p>	X				

Recommendation	Complies	Partially complies	Explanation	Not applicable	Explanation
<p>Recommendation 63</p> <p>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.</p>	X				
<p>Recommendation 64</p> <p>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.</p>		X			<p>This recommendation was added to the Code of Good Governance of Listed Companies by agreement of the CNMV Council of February 18, 2015. Since then Repsol has been considering that the Company complies with said recommendation, as it was also included annually in the following Directors' Remuneration Reports and have done everything in their hand in order to comply: (i) on February 25, 2014, the Board of Directors of Repsol, SA approved settlement of a limit of two years compensation for the severance payment of the new executive directors that could be appointed from then; and (ii) in compliance with said commitment, the contractual conditions agreed upon subsequently and, particularly, with the CEO of Repsol in April 2014, include the limit for severance payment of two years of the annual fixed and variable remuneration.</p> <p>The contract of the Director General Secretary was signed in 2005, and its conditions - which have been detailed in each Annual Report on Directors' Remuneration and that included a higher compensation than two years - therefore respond to the circumstances in force then. In relation to this Recommendation, the Company did not have any freedom of action regarding said contract, which is the very essence of any "recommendation" and of the "comply or explain" principle.</p> <p>Notwithstanding the above, after the conversations held with the CNMV about the degree of follow-up by Repsol of this recommendation and in accordance with its criteria, we proceed to indicate that its follow-up has been partial until the end of fiscal year 2019 (date on which produced the termination of the contract mentioned in the previous paragraph) and that in the same sense modifies the criteria set out in the Annual Corporate Governance Reports corresponding to the 2015 and following fiscal years.</p>





Repsol, S.A.

Independent reasonable assurance report
on the design and effectiveness of the
internal control over financial reporting (ICFR)
as at December 31, 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 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, 2019. 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" 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.

Our Responsibility

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, 2019, in all material respects, an effective Internal Control over Financial Reporting for the period ended at December 31, 2019, 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" report.

In addition, the attached description of the ICFR Report as at December 31, 2019 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 Gorriena Basualdu

February 20, 2020

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, 2019, as approved by its Board of Directors on February 19, 2020, 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, 2019, approved at its meeting held on February 19, 2020 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 <i>Chairman</i>	Mr. Manuel Manrique Cecilia <i>Vice Chariman</i>
Mr. Josu Jon Imaz San Miguel <i>CEO</i>	Ms. María Teresa Ballester Fornés <i>Director</i>
D. Rene Dahan <i>Director</i>	Dña. Aránzazu Estefanía Larrañaga <i>Director</i>
Dña. María del Carmen Ganyet i Cirera <i>Director</i>	Dña. María Teresa García-Milà Lloveras <i>Director</i>
Mr. José Manuel Loureda Mantiñán <i>Director</i>	Mr. Ignacio Martín San Vicente <i>Director</i>
Mr. Mariano Marzo Carpio <i>Director</i>	Mr. Henri Philippe Reichstul <i>Director</i>
Ms. Isabel Torremocha Ferrezuelo <i>Director</i>	Mr. J. Robinson West <i>Director</i>
Mr. Luis Suárez de Lezo Mantilla <i>Director and Secretary</i>	



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

Independent Verification Report
31 December 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 Repsol, S.A.:

Pursuant to Article 49 of the Code of Commerce, we have verified, under a limited assurance scope, the accompanying Statement of non-financial information (hereinafter "NFS") attached for the year ended 31 December 2019 of Repsol, S.A. (the Parent company) and investees comprising the Repsol Group ("Repsol" or "the Group") which forms part of Repsol's 2019 Consolidated Management's Report.

The content of the consolidated management report includes additional information to that required by current commercial legislation on non-financial reporting which has not been covered by our verification work. In this respect, our work has been restricted solely to verifying the information identified in Appendix V "Statement of non-financial information" and Appendix IV "GRI Index" in the accompanying consolidated management report attached.

Likewise, we have carried out a moderate assurance engagement of the application of the principles of inclusivity, materiality and responsiveness, related to the information included in the section "Materiality and Stakeholder Engagement" of Appendix III of the accompanying consolidated management report, in accordance with the provisions of the 2008 AccountAbility Principles Standard AA1000 (AA1000APS) issued by AccountAbility.

Responsibility of the directors of the parent company

The preparation of the NFS included in Repsol's consolidated management report, and the content thereof are responsibility of the board of 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 Comprehensive Option, and Oil and Gas Sector Disclosures of the GRI G4 Guidelines (Oil and Gas Sector Disclosures) in line with the details provided for each matter in the table included in Appendix V "Statement of non-financial information" and Appendix IV "GRI Index" of the consolidated management report.

This responsibility also includes the design, implementation and maintenance of the internal control that is 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, and for the application of AA1000AP principles (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 due care, confidentiality and professional behaviour.

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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 has been formed by 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 limited assurance verification report based on the work carried out. Our work has been aligned with the requirements set by 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”). We have also carried out our moderate 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 their nature and timing of execution and are more restricted than those carried out in a reasonable assurance engagement. Accordingly, the assurance obtained is substantially lower.

Our work has consisted of posing questions to management and various Group units that were involved in the preparation of the NFS, in the review of the processes for compiling and validating the information presented in the NFS and in the application of certain analytical procedures and review sampling tests, as described below:

- Meetings with Repsol personnel to ascertain the business model, policies and management approaches applied and the main risks related to these matters, and to obtain the information required for the external review.
- Analysis of the scope, relevance and integrity of the content included in the NFS for 2019 based on the materiality analysis performed by Repsol and described in section “Materiality and Stakeholder Engagement” of Appendix III of the consolidated management report and considering the content required under current commercial legislation.
- Analysis of the procedures used to compile and validate the information presented in NFS for 2019.
- Review of information concerning risks, policies and management approaches applied in relation to material issues presented in the NFS for 2019.
- Analysis of the documentation and actions related to the application of the inclusivity, materiality and responsiveness principles of the AA1000APS (2008).
- Verification, through sample testing, of the information relating to the content of the NFS for 2019 and its adequate compilation using data supplied by Repsol’s information sources.
- Obtainment of a management representation letter from the directors and the management of the Parent company.



Conclusions

Based on the procedures performed and the evidence we have obtained, no matters have come to our attention which may lead us to believe that:

- NFS for 2019 of Repsol, S.A. and investees comprising the Repsol Group for the year ended 31 December 2019 has not been prepared, in all of their significant matters, pursuant to prevailing mercantile regulations and GRI Standards, in conformity with the Comprehensive Option and the Oil and Gas Sector Disclosures, in accordance with each topic discussed in the tables included in Appendix V “Statement of non-financial information” and Appendix IV “GRI Index” of the consolidated management report.
- The information included in the section “Materiality and Stakeholder Engagement” of Appendix III of the consolidated management report, regarding the application of the principles of inclusivity, materiality and responsiveness, has not been prepared, in all of their significant matters, in accordance with the provisions of the AA1000APS (2008).

Recommendations

Regarding the observations and recommendations for improvement which have arisen during the assurance engagement, a summary is set out below of the main recommendations suggested for improving and empowering the application of principles of inclusivity, materiality and responsiveness under the AA1000APS (2008), which do not modify the assurance conclusion expressed in this report.

Inclusivity and materiality:

The Group, committed to its stakeholders’ relationships, has updated during 2019 its materiality analysis in order to reflect more precisely the current context in which it operates. As indicated in the section “Materiality and Stakeholder Engagement” of Appendix III, the main changes are briefly described. Indeed, the main changes executed during this year’s exercise are:

- Inclusion of new stakeholders in the analysis: the stakeholders involved have been those included in previous years’ analyses (employees, investors, financial entities, suppliers and subcontractor, and society and the media), and in 2019, clients, partners, competitors, business associations and public institutions have been additionally incorporated into the analysis. Overall, 8 big stakeholders have been considered. In addition, in order to improve stakeholders’ representation and inclusivity, a prioritization process of the different stakeholders has been carried out by the Group’s executive team in 2019 at a global scale.
- Development of a new methodology for the materiality analysis based on a benchmark and by defining a new list of matters, new prioritization criteria and materiality thresholds.

- From an external viewpoint, in addition to conducting enquiries and surveys to certain stakeholders, the management team has continued developing during 2019 specific ESG (Environmental, social and governance) Roadshows. In this way, it has enabled the team to learn about its stakeholders' opinion firsthand and its positioning in relation to these matters, some of which were led by the Chief Executive Officer.
- As a result of the 2019 analysis, three final materiality matrices have been established: one for the Group as a whole, one for Upstream and another for Downstream, with the objective of achieving results that are more adjusted to the intricacies of each type of activity. Furthermore, a materiality matrix has been developed for every stakeholder group (8 additional matrices), enabling the Group to gather a deeper insight of their respective expectations.
- The materiality process has been integrated in the Group, with the participation of the executive team, the business team and corporate areas, the team in charge of the relationship with the stakeholders and the countries where the Group carries out significant operations.

In regards to improving representation and inclusivity of the different stakeholders and for prioritizing the most relevant matters, it is recommended to increase direct consultations through surveys, at least to the most representative stakeholders from the main countries of activity, in order to include the consideration of their expectations directly in the analysis.

Responsiveness:

In 2019, Repsol has developed a new Global Sustainability Plan that incorporates, amongst other things, the most relevant objectives of the Strategic Plan for the Group in the field of sustainability, supply chain objectives and by establishing a longer time horizon, allowing the establishment of targets for 2025.

During 2019, the Group has progressed on the approval of new Local Sustainability Plans, incorporating Algeria, the UK and Canada. These Plans enable the company to expand at a local level the six strategic axes set by the Global Sustainability Plan (Climate Change, People, Safe Operation; Environment, Innovation and Technology, Ethics and transparency), currently including 22 Local Plans (published in the corporate website).

Future action should focus on the implementation of these Local Sustainability Plans in other countries, as well as on ensuring that public annual reporting includes the degree to which objectives have been achieved, considering the company's commitment with the new Global Sustainability Plan of 2019.

Use and distribution

This report has been drawn up in response to the requirement laid down in current Spanish commercial legislation and therefore might not be suitable for other purposes or jurisdictions.

PricewaterhouseCoopers Auditores, S.L.



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