2018
Green Bond Report
REPSOL Group

Contents

1. Introduction

Repsol works to provide accessible, efficient and safe energy to meet growing energy demand without compromising future generations. In Repsol's strategy there are clear energy efficiency and climate change objectives that supports the global goals that have to be pursued; the mitigation of climate change and the access to affordable energy in order to support economic growth and development.

Moreover, Repsol supports the 2030 Agenda for Sustainable Development of the United Nations and uses the 17 Sustainable Development Goals (SDGs) as a reference when defining its Sustainability priorities. The Company has prioritized seven SDGs to which Repsol can contribute most, highlighting in this document the actions related to two of them that are key for an energy company: SDG 7, Affordable and clean energy and SDG 13, Climate action.

Society increasingly requires more energy as the population grows and economies develop. This energy must be supplied in a safe, efficient and sustainable manner, along with a reduction in Greenhouse Gas (GHG) emissions. At Repsol, we share society's concerns over the effects that human activity is having on climate. We recognize that the current trend of GHG emissions is greater than the required to limit the increase of the average global temperature to no more than 2°C above preindustrial levels.

Repsol, as signatory of the Paris Pledge for Action, supports the Paris Agreement and is working to ensure that is an active part of the solution to climate change.

With the issuance of this Green Bond in May 2017, Repsol reinforces its commitment with Sustainability demonstrating its investment in sustainable purposes. On May 9th, Repsol announced its inaugural Green Bond offering having previously made available to the investors a NetRoadshow presentation and links to the Company's Green Bond Framework and Second Party Opinion, provided by Vigeo[1]. In addition, during the day one-on-ones and group calls were held with investors. The deal was announced to the market with Initial Price Talks of MS+55bp area. At the time of Guidance announcement, the spread was revised to MS+40bp as the orderbook reached €2.7 billion, which represents an oversubscription of five times the amount offered. Given the strong demand and continued growth of the orderbook, the deal was revised further to MS+35bp. Repsol finally issued €500 million in a 5-year deal and the coupon was set at 0.500%. Circa 45% of the bonds were allocated to investors with Environmental, Social and Governance (ESG) mandates.

1. ESG Analyst

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

2. Repsol Green Bond Framework Sumary

1. Use of proceeds

- The Green Bond will allocate **€ 500 million** to investment projects aimed **to avoid GHG emissions by around 1.2 millions of tons of CO_2eq**. This includes the refinancing of implemented projects since 2014, and financing of two Eligible Projects categories solely in our production facilities: (i) **Energy efficiency projects** and (ii) **Low emissions technologies**.

2. Project evaluation and selection

- Integration of ESG criteria, at project level, applying to the whole business divisions of the group, according to its Sustainability Model*.
- Proposal of the potentially eligible projects by the Technical Management according to profitability and the avoidance of GHG emissions.
- Monitoring at Corporate level by the Sustainability Division and the Green Bond Committee. More restrictive criterion on the eligibility of the projects so as to only include those projects for which CO_2eq emissions avoided have been verified with ISO 14064-1 standard.
- Excluded Projects are those in connection with the exploration of new oil and gas resources or reserves.

3. Management of proceeds

- The use of proceeds will be allocated to the eligible projects selected.
- In case of divestment or cancellation of a project, Repsol will use the net proceeds to finance other eligible projects which are compliant with the Green Bond framework.
- An independent Third Party verifies annually the reporting metrics and the compliance with the Green Bond Principles until the full allocation of the net proceeds.

4. Reporting

- Repsol is committed to disclose a report on an annual basis verified by an external auditor, providing: i) the proceeds allocation in respect of the Eligible Projects ii) GHG emissions avoided arising from these Eligible Projects for each category on an aggregate basis by technical typologies, and activity.

"Vigeo Eiris confirms that the Bond intended by Repsol is a "Green Bond" with positive contribution to sustainable development, aligned with the Green Bond Principles"

vigeo eiris Enterprise

* Repsol adopted a sustainability model in 2010, which consists of integrating Environmental, Social and Governance (ESG) requirements in the decision-making processes of the Company to prevent negative impacts and contribute to sustainable development when operating. The Repsol Sustainability Model Framework is divided into 6 main areas of work, where the Company sets long term goals and carries on annual action plans to ensure progress, which are assessed by Sustainability Division, with the participation of the Senior Management.
Additional information regarding Repsol's Sustainability Model is available on the website and sustainability plans.

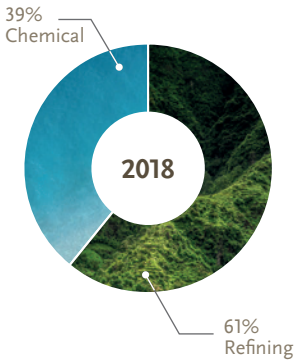
3. Allocation of the proceeds

The funds raised have been incorporated into Repsol Group's cash-pooling system, and later distributed to the Group's subsidiaries that have already implemented or will implement projects aimed to reduce CO_2 emissions (new investment as well as refinancing projects).
The Group's internal control system ensures that the funds managed under the cash-pooling system are allocated to projects included in the framework.

Energy Efficiency Projects *(Thousands of euros)*	**Financing Projects 2018** [1]	**Financing Projects 2017** [2]	**Refinancing Projects 2016-2014**
Technical typologies			
Refining	**7,307**	**40,444**	**119,432**
Upgrade of equipment: Heat	2,245	9,256	25,496
Upgrade of equipment: Dynamic equipment	-	25,964	9,531
Improvements of operating criteria	908	783	4,582
Energy Integration	1,314	3,640	39,336
New units / Process scheme modification	2,522	249	25,520
Network optimization	318	554	14,967
Chemical	**15,405**	**632**	**92,720**
Upgrade of equipment: Heat	245	423	8,890
Upgrade of equipment: Dynamic equipment	15,160	-	230
Improvements of operating criteria	-	-	35,956 [3]
Energy Integration	-	-	1,781
New units / Process scheme modification	-	209	45,763
Network optimization	-	-	100
Total amount invested	**22,712**	**41,076**	**212,152**

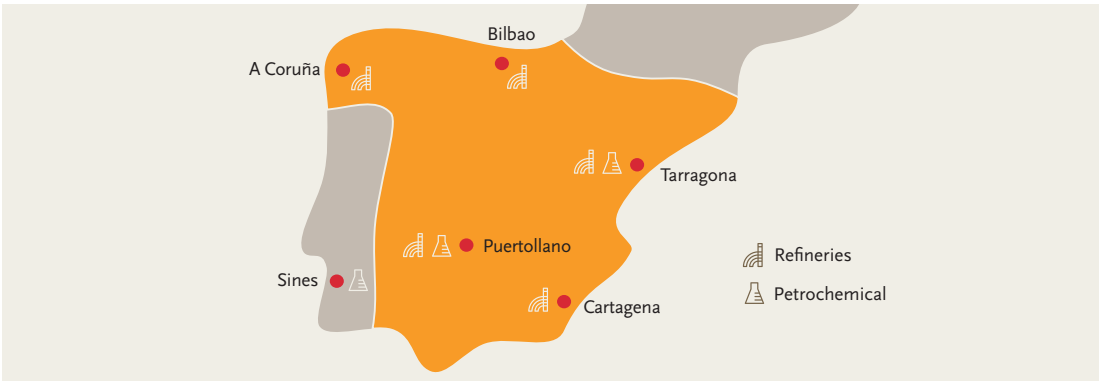
(1) 2018 financing project data may change in Green Bond Report to be published 1H2020. Despite the projects are technically completed, they may be pending disbursements.
(2) 2017 total amount invested has increased in 936 k€ with respect to the figure published in 2017 Green Bond Report, due to the accounting of pending disbursements.
(3) Refinancing projects investment has increased in 39 k€ due to the consideration of a new project.

Allocated proceeds distribution (%)



In 2019, maintenance shutdowns are scheduled for all refineries in Spain. Consequently, a lower number of initiatives have been implemented in 2018 and are expected to be implemented in 2019. This will result in an increase of proceeds allocated to energy efficiency projects.

Repsol refineries and petrochemical facilities

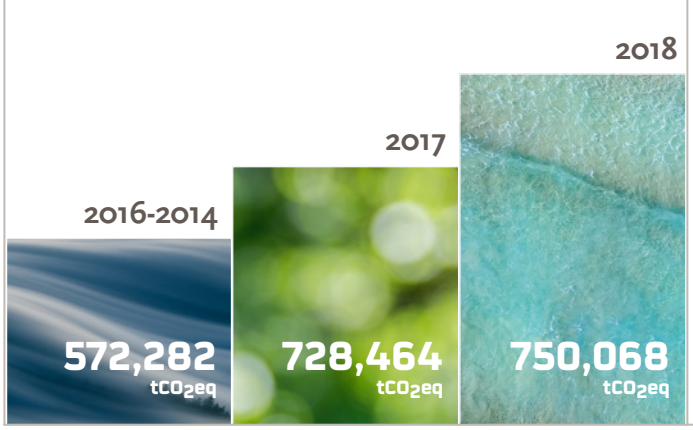


4. Avoided GHG emissions

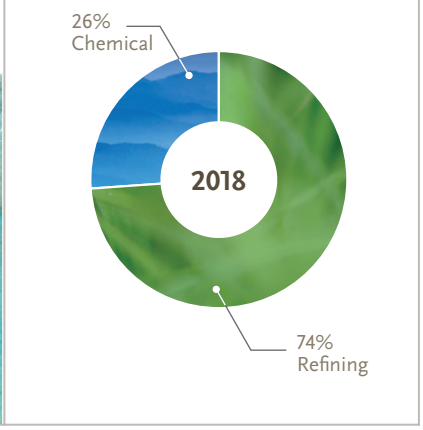
Energy Efficiency Projects [3] ***Verified Avoided GHG Emissions*** *(tons of CO_2eq)*	**Financing Projects 2018** [2]	**Financing Projects 2017** [1, 2]	**Refinancing Projects 2016-2014** [1]
Technical typologies			
Refining	19,968	153,631	378,866
Upgrade of equipment: Heat	5,770	36,069	99,261
Upgrade of equipment: Dynamic equipment	-	81,467	13,298
Improvements of operating criteria	3,443	20,285	33,049
Energy Integration	5,297	12,388	74,161
New units / Process scheme modification	3,089	456	69,455
Network optimization	2,369	2,966	89,642
Chemical	1,636	2,551	193,416
Upgrade of equipment: Heat	896	1,972	8,726
Upgrade of equipment: Dynamic equipment	740	-	203
Improvements of operating criteria	-	-	105,142 [4]
Energy Integration	-	-	7,755
New units / Process scheme modification	-	579	70,805
Network optimization	-	-	785
Total amount invested	**21,604**	**156,182**	**572,282**

(1) Annual avoided GHG emissions correspond to a 12-month period.
(2) Even though the ISO 14064-1 verification methodology aims at verifying a 12-month period, this may not coincide with a calendar year period. Hence, the verification process may encompass 12 months over two different years. Consequently, 2017 total amount avoided GHG emissions figure has increased in 55,922 tons CO2eq with respect to the figure published in 2017 Green Bond Report, and 2018 annual data may be subject to modification since projects that started in 2018 may be verified in two different periods, 2019 and 2020.
(3) The avoided GHG emissions associated with the projects financed this year by the Green Bond funds have been calculated under the requirements established by the international standard ISO 14604-1, comparing the emissions once the improvement project has been implemented with respect to the established baseline (existing situation before implementing the project). The emissions avoided are calculated from the energy not consumed or exploited by its emission factor. This emission factor will be determined by the composition, if it is a fuel, or by the generation mix if it is electricity. See 8. Methodology notes
(4) Verified avoided GHG emissions have increased in 9,254 tons of CO_2eq due to the consideration of a new project.

Verified avoided GHG emissions (tons of CO_2eq)



Distribution of avoided GHG emissions (%)



5. Case studies

17,200 ↓ tCO_2 per year

Case study: De-aerator substitution at Bilbao Refinery.

Technical typology: improvement of operating criteria.

The objective of this project is to reduce the operating pressure of the de-aerator U3-D-6 maintaining the limits of O_2 in the output flow. A reduction of 17,200 tCO_2 per year is allowed.

77,000 ↓ tCO_2 per year

Case study: Energy eficiency at Bilbao Refinery.

Technical typology: Upgrade of dynamic equipment.

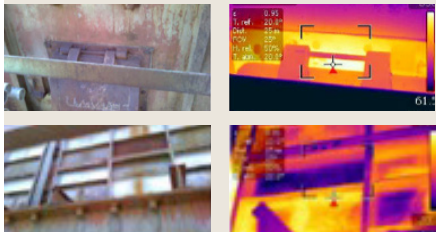
Substitution of two compressors for more efficient ones, with variable speed motor that optimizes the power consumed by adapting to the demand of the process, thus allowing the reduction of 77,000 tCO_2 per year.

4,100 ↓ tCO_2 per year

Case study: Improvements in crude oven no. 1 at Coruña Refinery.

Technical typology: upgrade of heat equipment.

Modifications in the furnace designed to fouling minimizing, efficiency and operation improvement, maintenance reduction, emissions reduction and efficiency Improvement by minimization of losses in radiant zone. It allows the reduction of 4,100 tCO_2 per year



5,200 ↓ tCO_2 per year

Case study: New heat exchanger in topping no. 4 unit at Cartagena Refinery.

Technical typology: energy integration.

Reduction of energy losses in the crude oil entering the furnace of the Topping No. 4 unit, by fouling of the existing exchangers. For this purpose, the replacement of the four tube-casing exchangers has been carried out, with a new exchanger type (Compabloc) that minimizes the fouling problems. It allows the reduction of 5,200 tCO_2 per year.

25,400 ↓ tCO_2 per year

Case study: Modifications in reformer furnace Hydrogen 2 Unit (Project C-40) at Cartagena Refiner.y

Technical typology: upgrade of heat equipment.

The objective of this project is to carry out modifications in the Hydrogen plant (U605) aimed at reducing the specific consumption of natural gas and fuel gas, reducing steam production and improving performance, thus allowing the reduction of 25,400 tCO_2 per year.

3,000 ↓ tCO_2 per year

Case Study: Thermal insulation in intermediate heated products tanks at Tarragona Chemical Plant.

Technical typology: energy integration.

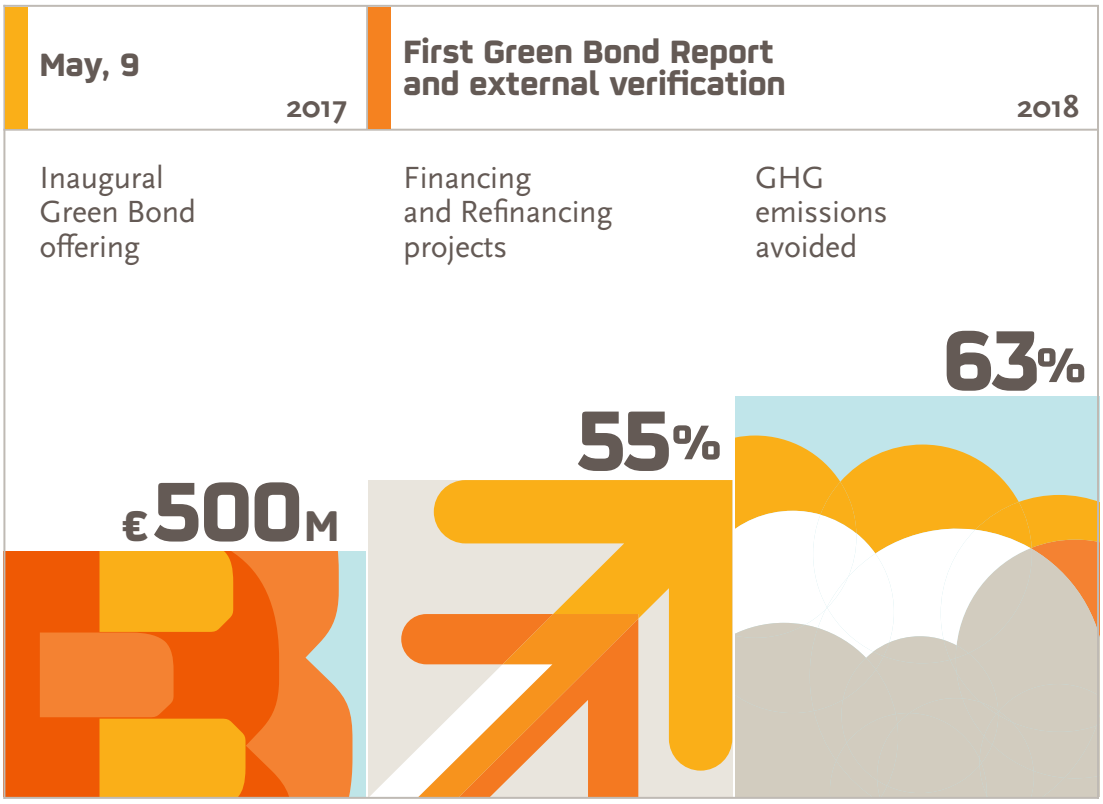
This project aims to reduce the consumption of low pressure steam, which results in a decrease of ultra-high pressure steam production in the olefins boiler. It avoids emissions of 3,000 tCO2 per year.

6. Total amount invested and GHG emissions avoided 2014-2017

Energy Efficiency Projects ***Refining and Chemical***	**Total amount invested** *(Thousands of euros)*	**Verified avoided GHG Emissions** *(tons of CO_2eq avoided)*
Financing and Refinancing projects 2014-2018	**275,940**	**750,068**

Repsol's commitment is to invest € 500 million in selected projects and avoid 1.2 millions of tons of CO_2eq. By the year 2018, 55% of the funds were allocated and 63% of the GHG emissions were avoided.

The 750,068 tons of CO2eq avoided by 2018, accounts for 65% of the total emissions in the Puertollano refinery.



7. ESG performance indicators

All ESG information is reported annually in the Management Report of Repsol, in accordance with the Global Reporting Initiative (GRI) Standard Guidelines, using the "comprehensive" option. This information is approved by the Board of Directors of Repsol and verified by an external auditor. The following table summarizes the key ESG Indicators for Refining and Chemical facilities in Spain and Portugal.

Energy Efficiency Projects *(Refining and Chemical segment-Spain and Portugal)*	**2018**	**2017**
Social Indicators		
Labor management		
Total employees (% women[1])	6,664 (19.9%)	6,751 (18.7%)
New employees (% women)	298 (29.5%)	250 (27.2%)
% women in leadership positions	24%	22%
Employee turnover rate (%)[2]	10%	3.1%
No. of employees with disabilities	124	136
Occupational health		
Occupational disease rate	0%	0%
Training and development		
Hours of training per employee[3]	81	51
% of employees receiving training[4]	75%	77%
Community dialogue and management		
Voluntary Social Investments (€ thousand)	2,021	2,133
Personal and process safety		
Lost Time Injury Frequency (LTIF)[5]	1.17	0.99
Total Recordable Incident Rate (TRIR)[6]	1.94	1.86
No. of Fatalities	2	0
PSIR (TIER1+TIER2)[7]	0.42	0.50
Environmental Indicators		
Spill prevention and management		
No. of spills (>1bbl) (t)	31.45	5.28
Energy and carbon management		
Energy intensity in Refining (GJ/t processed crude oil)	2.66	2.90
Intensity of GHG emissions in Refining (tCO_2e/t processed crude oil)	0.194	0.197
Direct emission of CO_2 (million tons)	11.80	11.47
Direct emission of CH_4 (million tons)	0.002	0.003
Direct emission of N_2O (thousand tons)	0.092	0.623
Direct emission of CO_2e (million tons)	11.87	11.73
Water management		
Fresh water withdrawn (kilotons)	45,215	46,933
Recycled water (kilotons)	16,649	14,445
Water discharged (kilotons)	25,946	24,047
Hydrocarbons discharged in water (tons)	49	60
Waste management		
Hazardous waste (metric tons)	26,807	19,843
Non-hazardous waste (metric tons)	66,643	56,239
Air quality – Pollution control		
Tons SO_2 / thousands of tons of oil processed tons (Refining)	0.547	0.499
NOX (tons)	9,512	14,151
COVNM (tons)	12,286	16,350

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

(2) Corresponds to the total turnover rate of permanent and temporary employees out of the total number of employees at year-end. Change over the criterion of year 2017, in which only permanent employees were considered.

(3) Calculated as total number of hours of the year divided by total managed workforce.

(4) Extension rate calculated over the cumulative average of the managed workforce, taken to one.

(5) LTIF: Number of fatalities plus lost time injuries accumulated within the period for every 1,000,000 hours worked.

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

(7) PSIR (Process Safety Incident Rate): A process safety accident is one in which the first line of control has been breached, with the following happening simultaneously: i) A chemical product or process is involved ii) It occurs at a specific location: the incident takes place at a production, distribution, or storage facility, at an auxiliary services facility (utilities) or pilot plant related to the chemical process or product involved and iii) It gives rise to an unplanned or uncontrolled release of material, including non-toxic and non-flammable matter (e.g. vapor, hot water, nitrogen, compressed air or CO_2), with certain levels of consequence The process safety accident will be classified as Tier 1 or Tier 2 according to the defined thresholds.

No controversies arose 2018 in Spain and Portugal facilities

8. Methodology notes

Repsol publishes this report on an annual basis reporting on:

a) Total amount of Green Bond proceeds allocated to Eligible Projects

b) The proceeds allocation in respect of the Eligible Projects for each category on an aggregate basis by technical typologies, year of implementation; project stage; share of refinancing and financing proceeds

c) The ex-ante estimates / real of GHG emissions avoided arising from these Eligible Projects for each category on an aggregate basis by technical typologies, and activity (refining and chemicals facilities).

Both GHG inventories and targeted actions to reduce GHG emissions are verified by a third party according to ISO 14064-1 methodology. Accordingly, the avoided GHG emissions associated with the projects financed this year by the Green Bond funds, have been calculated under the requirements established by the above mentioned standard, thus following the same methodology which implies estimating energy consumption and associated emissions reduction using emission factors, heating values, etc., comparing the emissions once the improvement project has been implemented with respect to the established baseline (existing situation before implementing the project).

The whole organization finds reduction opportunities in order to reduce the energy consumption in the different industrial processes. For example, by reducing the fuel consumption in furnaces or boilers, by adjusting optimum O2 concentration in the combustion mix, by implementing high efficiency pumps, by replacing condensation steam turbines, by power motors, by reducing routine flaring by sending the fuel gases to a power generator, by reducing methane venting or leaks, etc. All of those opportunities are described in the framework as different categories.

When the organization finds out an opportunity, process engineers quantify the energy savings compared with the reference. For example, if it comes to a reduction opportunity in a furnace or a boiler fuel consumption reduction is quantified (t of fuel oil, Nm3 of Natural Gas, etc.). The energy from this volume or mass is calculated using its Low Calorific Value (GJ per t, GJ per Nm3, etc.) that is something well know if it is a commercial fuel or it is determined if it is not a commercial one (for example, a refinery fuel gas). When the amount of energy saved is quantified, the emissions avoided are calculated using its emission factor; this emission factor is determined by the composition if it is a fuel or by the generation mix if it is electricity. Once again, this emission factor is well known from commercial fuels or power mix or is determined if it is not a commercial one.

Calculations have been done for the time period of 1st January to 31st December 2018. To the extent available, the reporting is based on real data reported by the projects.

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REPSOL

Independent Assurance
Report on the
"Green Bond Report 2018"

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INDEPENDENT LIMITED ASSURANCE REPORT

To the Management of Repsol S.A.:

We have carried out our work to provide a limited assurance on the information related to financed projects of the Green Bond of 2017 (ISIN XS1613140489) issued by Repsol International Finance B.V, contained in the "Green Bond Report 2018" of Repsol, S.A. and its subsidiaries (hereinafter, "Repsol") for the year ended 31 December 2018, and prepared in accordance with the document "Repsol's Green Bond Framework" dated on 2017 (hereinafter, "the Framework"), available in the web page https://www.repsol.com/es/accionistas-inversores/renta-fija-y-rating/renta-fija/index.cshtml.

The aspects of the information subject of our review are the following:

- The allocation of the monetary amounts of investments from the Bond to the projects financed by it and the capital invested in the financed projects is attributable to the Bond.

- The application of the categories of eligible projects to the selected projects defined in the mentioned Framework.

- The verification that the estimated Co2 emissions avoided per year are calculated in accordance with their calculation methodology, defined in the mentioned "Green Bond Report 2018".

Responsibility of Management

Management of Repsol is responsible for the preparation, content and presentation of the "Green Bond Report 2018", in accordance with the requirements included in the Framework in which the allocation of funds, the categories of eligible projects and the estimated CO2 emissions avoided are described.

Management's responsibility includes establishing, implementing and maintaining the internal control required to ensure that the information included in the "Green Bond Report 2018" is free from any material misstatement due to fraud or error.

Management of Repsol is also responsible for defining, implementing, adapting and maintaining the management systems from which the information required to prepare the mentioned "Green Bond Report 2018", is obtained.

Our responsibility

Our responsibility is to issue a limited assurance report based on the procedures that we have carried out and the evidence obtained. Our limited assurance engagement was done in accordance with the International Standard on Assurance Engagements 3000 (Reviewed) "Assurance Engagements other than Audits or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC).

The scope of a limited assurance engagement is substantially less extensive than the scope of a reasonable assurance engagement and thus, less security is provided.

The procedures that we have carried out are based on our professional judgment and have included consultations, observation of processes, document inspection, analytical procedures and random sampling test. The general procedures employed are described below:

- Meetings with Repsol's personnel from various departments who have been involved in the preparation of the "Green Bond Report 2018" in order to know the characteristics of the projects financed by the Bond, the internal management procedures and systems in place, the data collection process and the environment control.

- Analysis of the procedures used for gathering and validating the information and data presented on the estimated CO_2 emissions avoided included in the "Green Bond Report 2018".

- Verification of the traceability of the funds obtained through the Bond to finance projects and verification that the investments undertaken by Repsol in the projects financed have been made in accordance with the Framework criteria.

- Verification through random sampling tests revisions and substantive tests of the information related to the estimated CO_2 emissions avoided. We have also verified whether they have been appropriately compiled from the data provided by Repsol's sources of information.

- Obtainment of a management representation letter from the Company.

Our Independence and Quality Control

We have fulfilled our work in accordance with the independence requirements and other ethical requirements of the Code of Ethics for Professional Accountants of the International Ethics Standard Board for Accountants (IESBA), which are based on basic principles of integrity, objectivity, professional competence and diligence, confidentiality and professional conduct.

Our firm applies the International Standard on Quality Control 1 (ISQC 1) and thus employs an exhaustive quality control system which includes documented policies and procedures on the compliance of ethical requirements, professional standards, statutory laws and applicable regulations

Limited and moderate assurance conclusion

As a result of the procedures carried out and the evidence obtained, no matters have come to our attention which may lead us to believe that:

- The funds obtained through the Bond have not been assigned to the projects financed by them and that the capital invested in the financed projects is not attributable to the Bond.

- The selected projects disclosed in the "Green Bond Report 2018" have not been selected in accordance with what is indicated in the Framework.

- The estimated Co2 emissions avoided per year, as disclosed in the "Green Bond Report 2018", contain significant errors or have not been prepared, in all their significant aspects, in accordance with what is indicated in the Framework and as indicated in the "Green Bond Report 2018" in relation to its calculation.

Use and distribution

Our report is only issued to the Management of Repsol, in accordance with the terms and conditions of our engagement letter. We do not assume any liability to third parties other than Repsol's Management.

PricewaterhouseCoopers Auditores, S.L.

Pablo Bascones

26 June 2019