



# GREEN BOND FRAMEWORK



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# REPSOL

## Green Bond Framework

### Introduction and Objectives of the Green Bond Framework

#### Introduction

Repsol<sup>1</sup> is committed to sustainability and is convinced that innovation and technological development are keys for ensuring reliable and sustainable energy supply in the long run. 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. For this purpose, Repsol sets up and deploys an ambitious program to reduce its greenhouse gas (GHG) emissions and is continuously searching for solutions to contribute to a low emissions future. Repsol commits to achieve the objective to avoid 1.9 million of tons of GHG emissions annual run rate by 2020 starting in 2014<sup>2</sup>.

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 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 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.

It is worth mentioning that Repsol adopted a sustainability model in 2010, which consists of integrating Environmental, Social and Governance (ESG) requirements in the decision-making

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<sup>1</sup> "In this document, references to "Repsol" "Repsol Group," "Group," "the Company," "we," "us" and "our" refer to Repsol, S.A. and its consolidated subsidiaries, unless otherwise specified.

<sup>2</sup> GHG emissions avoided assuming the same production activity level of our industrial facilities than 2010 one.

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 that reports directly to the CEO, with the participation of the Senior Management:

1. Ethics and Transparency
2. People (Employees, Human rights and Community relations)
3. Safe operations
4. Resources and impacts management (circular economy, water, waste and biodiversity, among others)
5. Climate Change
6. Innovation and technology

Moreover, Repsol, as an active and committed UN Global Compact member since 2003, supports and contributes to achieve the UN Sustainable Development Goals (SDG) by 2030.

Specifically, Repsol can prove a long and sustained commitment to the climate change issue and provide an affordable and clean energy (SDGs 7 and 13) since 2002 when the Company made a public statement regarding its climate change position and developed an Energy Efficiency policy. In 2015, Repsol joined to the Oil and Gas Climate Initiative (OGCI) along with other nine O&G leading sector companies to collaborate on climate action, sharing best practices and technological solutions. On June 2016, Repsol signed an accession agreement to support two key international initiatives related to climate change action: Climate and Clean Air Coalition - Oil & Gas Methane Partnership of United Nations Environment Program and the World Bank's Zero Routing Flaring by 2030. Additionally, Repsol is firmly committed to respecting human rights and adopted a Policy on this matter which follows the specific recommendations set out in the United Nations "Protect, Respect and Remedy" framework and its Guiding Principles on Business and Human Rights in 2012.

Repsol believes that the oil and gas sector contributes to development by securing the energy supply that is essential for the realization of the fundamental rights of people to reducing poverty and inequality and driving economic growth.

The Company is also focusing its contribution to implementing safe operations measures to minimize the impacts on air, water and soil pollution (SDG 3); promoting inclusive and sustainable economic growth, employment and decent work for all (SDG8); managing and protecting the marine ecosystems (SDG 14) and preserving the land ecosystems (SDG15).

## Objective

Starting our GHG emissions reduction plan in 2014, the objective of the Repsol's Green Bond is to avoid 1.9 million of tons of GHG emissions annual run rate by 2020, through the implementation of energy efficiency and low emissions technology investment projects. According to International Energy Agency (IEA), energy efficiency will be a key driver to mitigate GHG emissions and to perform the transition from current policies to the future 2 Degrees Scenario (2DS).

There is no single pathway to a low emission future. Finding these pathways is a task for many actors from all sectors of society over the short, medium and long term. Nevertheless, three elements are common to most of the projected pathways:

- Improving efficiency and saving energy: The most cost effective method of reducing GHG emissions is to save energy.
- Reducing emissions from power generation: In the near term, one of the most cost-effective and impactful steps that society can take is to switch from coal to gas. In this sense, at Repsol we are well positioned with respect to our competitors. Our Upstream portfolio is evolving towards a higher percentage of gas compared to oil: around 65% of our production and 75% of our reserves are gas.
- Reducing emissions from remaining end-use sectors. Alternatives to electrification include hydrogen, biofuels, industrial Carbon Capture, Use and Storage (CCUS) and bioenergy with CCUS.

The Oil and Gas industry provides more than half of the world's energy and is an essential partner in sustainable development. It is using its skills, capabilities and resources to play a key role in helping to transform energy systems.

Repsol Green Bond Framework has been developed with the aim of providing transparency, disclosure, integrity and clarity to investors, and follows the ICMA's Green Bond Principles. These principles specify four pillars that are further detailed in this document:

- Use of Proceeds
- Process for Project Evaluation and Selection
- Management of Proceeds
- Reporting

## 1. Use of Proceeds

The proceeds of the Green Bond will be allocated to projects aimed to avoid GHG emissions by 1.2 millions of tons of CO<sub>2</sub>eq related to investment projects. The GHG emissions reduction plan includes operating improvement actions with no associated investments. Both contribute to meet the avoidance of 1.9 millions of tons of GHG emissions annual run rate by 2020. This includes the refinancing of implemented projects since 2014 and financing of, or investments in, two Eligible Projects categories<sup>3</sup> solely in our production facilities:

- i. energy efficiency projects
- ii. low emissions technologies

Energy efficiency projects will be the main category where the Green Bond proceeds will be allocated. Currently, the Green Bond scope is 100% focus on the downstream activities, refineries and chemical facilities, in Spain and Portugal to operation improvement. In the coming years and during the duration of the Green Bond, we are seeking additional projects to include in the Green Bond portfolio corresponding to the second category “low emission technologies” (see categories and technical typologies in appendix i).

Excluded Projects are those in connection with the exploration of new oil and gas resources or reserves.

An amount equal to net proceeds will be allocated to investment projects defined as “Eligible Projects”.

Eligible Projects include new and on-going investment projects with disbursements since 2014 up to 3 years after to the Green Bond issuance.

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<sup>3</sup> Further details in the appendix

Furthermore, at the facilities where the investment projects are implemented, Repsol, according to its Sustainability Model –described above-, will monitor and ensure the performance according to its ESG standards on the following matters:

- Labor management
- Community dialogue and management
- Training and development
- Occupational health
- Personal and process safety
- Spill prevention and management
- Air quality –Pollution control
- Water management
- Waste management

Regarding these matters, Repsol discloses the Key Performance Indicators in the Sustainability report according to GRI-G4 In accordance –Comprehensive on an annual basis.

In addition, the facilities under the Green Bond Framework have energy management systems in accordance with the ISO50001 standard, which guarantees the optimal use and consumption of energy.

## **2. Process for Evaluation and Selection of projects**

The proposed investments projects must have a positive environmental impact (e.g. reduction and/or avoidance of GHG emissions) and shall be aligned with the sustainability policies defined by Repsol under the Sustainability Model, described above, in order to be selected as eligible.

In addition, Repsol has committed to ensure the responsible management and sustainable value of the financed projects through the integration of ESG criteria, above mentioned, at project level, applying to the whole business divisions of the group, according to its Sustainability Policy.

The investment projects covered by the Green Bond belong to the climate change work area, particularly our GHG emissions reduction plan as part of our Sustainability Model.

Particularly, the process of evaluation and selection of projects is as follows:

1. The potentially Eligible Projects are proposed by the Technical Management (Process and production engineer, Process and production Manager, Project Manager etc.) in the facility according to the profitability, the GHG emissions reductions targeted and/or achieved and the hereby defined eligibility criteria.
2. If the investment of the project is below 5 million €, the Country / Facility Manager directly approves the investment and the project is added to the GHG emissions reductions plan
3. If the investment of the project is below 15 million €, the Business Operations Committee directly approves the investment and the project is added to the GHG emissions reductions plan
4. If the investment of the project is above 15 million €, the Business Executive Committee directly approved the investment and the project will be added to the GHG emissions reductions plan

The Repsol Executive Steering Committee is responsible for the approval of the emissions reduction Company long-term goal and its annual monitoring.

The GHG emissions reduction plan is a “ongoing plan” based on profitability and sustainability criteria that is reviewed periodically.

The Sustainability Division is responsible for validating and monitoring the GHG emissions reduction plan.

Complying with this commitment, Repsol will constitute a specific committee to select, review and monitor the list of projects financed by the Green Bond proceeds to guarantee the suitable scope (avoiding potential controversies) and will deem to the compliance with the eligibility and ESG criteria and internal standards of the eligible projects. In addition, this committee will be empowered to reject from the scope of the Green Bond any project that does not fulfil their eligibility criteria. The committee will meet at least once per year and will be made up by the Head



of Energy and Climate Change; the Head of Strategy on Sustainability and the Head of Financing. This committee will be chaired by the Sustainability Director.

Projects which do not contribute to the GHG emissions reduction targets or pursue the exploration of new oil and gas resources or reserves or are involved in a ESG issue or controversy shall be excluded from the Company GHG emissions reduction plan, and so from the Green Bond eligibility framework.

### **3. Management of Proceeds**

Repsol International Finance B.V (“RIF”), the issuing entity, will grant an amount equal to the net proceeds to the subsidiaries in charge for the Eligible Projects via intercompany loans, with the purpose to finance the disbursements in connection with the Eligible Projects.

Pending the full allocation to eligible projects, Repsol commits to hold the balance of net proceeds not already allocated to Eligible Projects within the treasury of the Group, invested in cash, cash equivalent and/or bank accounts.

The above mentioned process will be monitored along the entire period in which the expected capex/opex will be incurred. The allocation to the projects will be reviewed at corporate level to ensure it meets the eligibility and ESG criteria set forth in the Green Bond Framework. Repsol will track investments of the proceeds allocated to eligible projects and this allocation process will be reviewed annually by external auditor.

Repsol commits to allocate the proceeds of a given Green Bond issuance within a three-year period from the issue date of the Green Bond issuance. The share of refinancing will not exceed a 55% of the proceeds.

In case of asset divestment or cancellation of a project, Repsol will use the net proceeds to finance other Eligible Projects which are compliant with the current Green framework.

## 4. Reporting

Transparency, reporting and verification are keys in order to enable investors to follow the implementation of Repsol's Green Bond Program. Therefore, Repsol will disclose a dedicated external public 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).

The key indicators linked to the sustainability objective of these projects will be the tones of CO<sub>2</sub>eq emissions avoidance according above mentioned breakdown.

Our GHG inventories are verified by a third party according to ISO 14064-1 methodology. The analysis of the contribution to the GHG emission reduction plan of each of project follows the same methodology which implies estimating energy consumption and associated emissions reduction using emission factors, heating values, etc.

The report will be published on Repsol's corporate Webpage within 6 months of each financial year-end after the completion of the external assurance and until the full allocation of the funds.

Moreover, monitoring is carried out every two months at Business Operations Committee level. Likewise, the GHG emissions avoidance indicator is quarterly disclosed in the interim financial information. The monitoring shall be carried out quarterly at corporate level and annually at the Executive Steering Committee and Sustainability Committee (Board of Directors' specialized committee).

## 5. External review

### Second Party opinion

Vigeo Eiris, as independent expert, has assessed the sustainability, transparency and governance of Repsol's Green Bond Framework and its alignment with the Green Bonds Principles. Vigeo Eiris applies its own methodology in line with international standards and Green Bond Principles guidelines to carry out this assessment. The results are documented in Vigeo Eiris' Second Party Opinion which is available on Repsol's website.

### Annual Assurance Report

Until the net proceeds are allocated in full to Eligible Projects and later in the case of any material change in the list of Eligible Projects, one of the external auditors is expected to verify annually the management of funds. In addition to this, the external auditors will verify the process used for the reporting metrics and the compliance with the Green Bond Principles until the allocation of the net proceeds.

## Appendix i: Categories and technical typologies

Downstream activities (refineries and chemical units) are a complex industry that generates a diverse slate of fuel products and petrochemicals, from gasoline to asphalt and also different polymer types. These facilities are typically large, sprawling industrial complexes with extensive piping running throughout, carrying streams of fluids between large processing units. In this sense, they require a range of processing steps, including distillation, cracking, reforming, and treating. Most of these processes are highly reliant on process heating and steam energy.

In general, the sector is a larger consumer of fuel. Close to 90% of onsite fuel use in refining is applied toward process heating, directly and for the generation of steam used in process heating. This large process heating energy demand entails the generation of onsite GHG combustion emissions.

“Combustion” in distillation and conversion units is identified as the main energy consumer in refineries and, therefore, minimizing the fuel usage in their furnaces is one of the key activities to be addressed in terms of improving the energy efficiency at refineries. As an example, minimizing the fuel consumption is not only a matter of maximizing the furnace efficiency itself but also optimizing the preheat exchanger networks.

All the technical typologies included in the energy efficiency projects category are devoted to reduce the energy consumption of our processes in the assets and therefore the associated GHG emissions.

### **Category: Energy efficiency**

Description of the technical typologies:

- Upgrade of equipment: Heat

- Our facilities consume large amount of energy and this energy is produced in heat equipment as boilers, furnaces, etc. Their operation and improvement is a key issue in order to improve our energy performance.  
Examples: Implementation of oxygen control systems or heat recovery from flue gases.
- Upgrade of equipment: Dynamic equipment
  - Fluids are moved using dynamic equipment as pumps, compressors, etc. They need a significant amount of energy to work.  
Examples: Implementation of variable speed motors or back pressure turbines instead of condensation turbines.
- improvements of operating criteria
  - The way facilities are operated is key in order to reduce energy consumption.  
Examples: Optimal operation is achieved through the implementation of control strategies (DMC, Dynamic Matrix Control), maintenance standards to improve equipment reliability, among others.
- Energy Integration
  - A cross linked grid with hot and cold streams are working on the facilities. Taking advantage of the opportunity to heat cold streams with hot streams is a key optimization vector in our industrial complexes.  
Examples: New schemes in heat exchanger trains, new technologies of heat exchangers as twisted tubes or Compabloc®, among others.
- New units / Process scheme modification
  - New process units or major modifications in our existing plants are exclusively aimed to reduce energy consumption and improve the efficiency of the facilities". In no case changes related to the creation of additional or new capacity are included in this technical typology.  
Examples: Cogenerations, hydrogen production, new process schemes devoted to energy efficiency improvements or high performance internals in fractionation columns.
- Network optimization
  - Networks have to be operated in optimal conditions avoiding leaks, unnecessary distances, improve equipment and pipes isolation, etc.  
Examples: Steam / H<sub>2</sub> networks, among others.

Generally speaking, technology and innovation are common elements in every technical typology.

**Category: Low emissions technologies**

This category includes other GHG emissions avoidance projects no related to energy efficiency one. Precisely, the eligible technologies included will be limited exclusively to the following topics:

- methane emissions mitigation (associated with our gas production plants and gas pipelines),
- reduction of flaring and venting and
- alternative power generation (include exclusively the use of renewables and the recovering of exhausted process heat using Organic Rankine Cycle, both to produce electricity).