



2017 ESG-GREEN REPORT

CAISSE CENTRALE DE RÉASSURANCE GROUP

GROUPE
CAISSE CENTRALE DE RÉASSURANCE



2017 ESG-GREEN REPORT

CAISSE CENTRALE DE RÉASSURANCE GROUP

This report has been drafted in accordance with article 173 VI of the French law of August 17, 2015 relating to energy transition towards green growth (article L 533-22-1 of the French Monetary and Financial Code) and the decree of December 29, 2015 that stipulates the conditions for the application of the aforesaid article.

Reinsurance companies are obligated to provide a report indicating the procedures they apply to take into account the criteria for compliance with environmental, social and governance objectives in their investment policy, and the means employed to contribute to the energy and ecological transition.

CCR consolidates its financial statements with those of its subsidiary CCR Re. It presents within this report the information required of CCR and CCR Re (hereinafter the CCR Group) in aggregate form pursuant to Section IV.4° Article D. 533-16-1 of the French Monetary and Financial Code.

ABOUT THE CCR GROUP

The CCR Group is a reinsurance group wholly-owned by the State of France and ranks among the top 25 players in international reinsurance. Through the Natural Disaster compensation scheme backed by the State's guarantee and working in the general interest, the *Caisse Centrale de Réassurance* provides the French market with coverage against natural disasters and other exceptional risks. Its subsidiary, CCR Re, operates in the Life, Non-Life and Specialty Lines in France and in sixty countries worldwide.

A responsible and committed reinsurance group, CCR places social, societal and environmental challenges at the core of its activities and considerations.

CCR, A MAJOR ACTOR IN THE PREVENTION OF NATURAL DISASTERS

The expertise developed by CCR through its research and development efforts enables the Group to contribute to the furthering of the knowledge of natural disasters in France and to the betterment of their prevention. CCR therefore provides assistance to the State in identifying areas highly exposed to such risks and in deciding which preventive measures should be taken as a priority. It also actively participates in the Preliminary Flood Risk Assessment (PFRA) of the EU Floods Directive as well as in the monitoring of the National Strategy of Ecological Transition towards Sustainable Development (*SNTEDD*). Furthermore, by providing access to digital services via its website (E-risk, E-liste and *CERES*), CCR shares all its research results with the general public, municipalities and insurers in the aim of enabling them to enhance their knowledge of these events.

ENVIRONMENTAL SPONSORSHIP

In November 2017, the CCR Group undertook a three-year environmental initiative sponsoring Energy Observer, the first self-sufficient sea-going vessel with zero greenhouse gas and fine particle emissions thanks to a unique combination of renewable energies (sun and wind power) and hydrogen.

The crew of Energy Observer has taken on a dual challenge

- A human challenge of sailing around the world to display its innovative solutions to climate change and to prove that a low-carbon world is possible, in line with the ambition of reducing global warming.
- A technological and scientific challenge aimed at testing cutting-edge technologies under extreme conditions that may serve as precursors to tomorrow's ocean-based and land-based energy networks.



Energy Observer

HUMANITARIAN SPONSORSHIP

Since 1996, CCR has been committed to sponsoring humanitarian actions. Each year, the CCR Group provides its financial support to associations operating in the field, backed by the support of its employees. Thusly, CCR and its employees have delivered their support to almost forty associations for the past twenty years.



AHVEC – Students at the library

CULTURAL SPONSORSHIP

As part of its Corporate Social Responsibility plan, the CCR Group has been committed to sponsoring museums that, thanks to its action program, can now offer access to culture for the disadvantaged.

In keeping with this commitment, the CCR Group sponsored the Rodin Museum's 2018 season. The support provided by the CCR Group will contribute to the acquisition and restoration of major art works and also to the development of exhibits and cultural programs.



Rodin Museum

PARTNERSHIP ON THE REDUCTION OF CLIMATE CHANGE RISK

CCR entered into a partnership with *Carbone4*, the leading consulting firm specialized in energy transition and climate change adaptation. The aim of the partnership was to co-finance, over the year 2017, the development of the Climate Risk & Impact Screening (CRIS) project, an innovative method and management tool for assessing the level of exposure of financial investment portfolios to the physical risks of climate change. Today, the solution is fully operational.

INVESTMENT POLICY AND ESG CRITERIA

CCR Group is continuing to progressively integrate the ESG dimension in its investment policy.

Key objectives in terms of the integration of extra-financial criteria into the investment policy were met in the period July 2017 to June 2018, and adjustments to the selected approach were established in respect of:

- Consideration of the ESG dimension by the investment team that continues to develop its skills and expertise in this area.
- Systematic dialog with management companies and other financial partners whose role is to gather in-depth ESG information on investments in our portfolio, to provide the on-going surveillance of best practices and to give impetus in a pragmatic manner to the application of extra-financial criteria whenever possible.
- Targeted investments relating to specific global ESG-green issues that may be assessed in a qualitative and quantitative manner.
- The development of indicators that enable the establishment of an ESG-green dashboard for investments in the portfolio, so as to ensure the Group's commitment to ESG policy.

REAL ESTATE

The CCR Group's real estate portfolio is comprised of office buildings, stores and shops, residential buildings and shares in real estate mutual funds.

The CCR Group places particular importance on ESG fundamentals in the assessment of its directly held real estate investments and in selecting its real estate funds, demonstrating its commitment to enhancing the long-term value of its portfolio.

The Group strives to obtain energy performance certification of the buildings it has recently acquired or restructured to ensure the lowest possible levels of energy consumption.

The Group initiated the establishment of energy consumption indicators in partnership with the innovative start-up Deepki to be used to conduct energy audits on all its buildings. The project will enable the Group to develop a software map that may be used to identify, building by building, areas of energy savings on the basis of an itemized breakdown of consumption areas. In this manner, it will provide a detailed analysis of what opportunities are available to enhance to the value of buildings and develop the corresponding action plans.

For office buildings, CCR is pursuing the systematic introduction of an environmental performance agreement appended to the lease, in the aim of determining what action can be taken to reduce energy consumption and waste and to promote water conservation.

Consideration of environmental and social criteria is critical when selecting delegated real estate funds. Particular attention is paid to assets held by the fund as well as the level of compliance by asset managers with environmental and social criteria. Each managing company presents an ESG report.

The ESG approach being based on progress made in an on-going manner, the Group extends this approach to residential buildings while favoring the technical measures and investments aimed at reducing energy consumption. This is demonstrated by the strict use of thermal and acoustic insulation (renovation of windows), systematic installation of a room for bicycles, the use of LED lighting systems and of presence sensors in halls and staircases and improved accessibility to the premises.

A commitment towards efficient energy performance, the well-being of users, the technical rationalization of the premises and the presence of energy-related certifications comprise the core of the actions undertaken by the Group.

The rehabilitation of brownfield sites in urban areas continues to be an important objective for the Group since its first investment initiated in 2012 and its participation in a second fund in 2017 in this area.



CCR Paris headquarters, 157 Boulevard Haussmann, 75008 Paris

BOND INVESTMENTS

Green bonds remain a key area of concern for the CCR Group

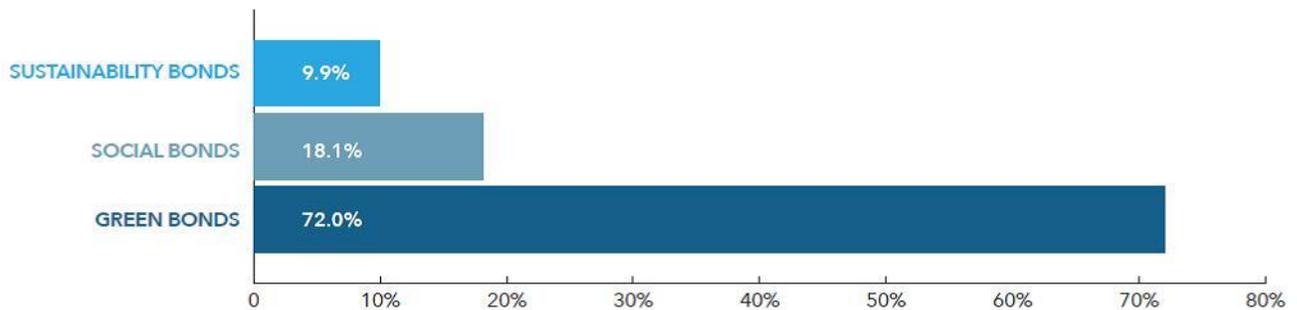
The Green Bond segment is comprised of three different types of bonds: Green Bonds strictly speaking (financing of the energy and ecological transition), Social Bonds (financing of projects that provide the disadvantaged with access to basic needs and the financing of efforts to counter poverty) and Sustainability Bonds (financing of a combination of environmental and social objectives). The CCR Group invests in all three types of bonds.

Investments in Green Bonds increased by 42% between December 2016 and December 2017 and now represent 2.9% of all bond investments. This is the result of a combination of several factors:

- A primary Green Bond market that has expanded over the past year thereby facilitating access to this market.
- A willingness to strengthen the CCR Group's presence in this segment of the market in the framework of target ESG investment policy.

In 2017, CCR broadened the scope of its involvement in this area by participating in the first issuances of Social Bonds. The projects financed by these bonds include the creation of low-income housing in the Netherlands and various projects in Africa in the context of the activities of the African Development Bank (access to water supply, education and professional training, acquisition of agricultural and rural irrigation equipment, extension of telecommunication systems to rural areas).

Green Bond selection is based on several criteria:



- A selection filter based on Green Bond Principles (GBP)
- Regular exchanges with specialized analysts.
- An appreciation for the interest of the projects.
- The track records of the issuers: acquired reputation, analysis of previous achievements, the quality of reporting practices (frequency, pertinence, exhaustiveness of key data).

The CCR Group pursued and reinforced its investments in the Cat Bond segment

Investments are made through specialized fund brokers.

The year 2017 clearly demonstrated the usefulness of this market in terms of social welfare, following an impressive series of high severity hurricanes that struck the Caribbean and southern portions of the United States in the fall of 2017. The heavy losses absorbed by Cat Bonds helped to protect insurers and contributed to economic recovery in the wake of events of highly destructive force.

ESG & GREEN INDICATORS

Efforts were made over the course of the previous year to try and improve the information system used for extra-financial investments.

The first objective was to standardize the data that was gathered so as to ensure the coherency of the full array of indicators. To achieve this, the CCR Group selected the Morningstar/ Sustainalytics solution that enables the application of a single methodology for all funds within the portfolio. The selected tool provides ESG ratings and carbon footprints.

The task of obtaining data is still incomplete, to the extent that the following requirements must be met in respect of 2017:

- The scope of the ratings conducted on fund investments includes a significantly higher proportion of ESG ratings than carbon footprint ratings.
- Data on bond or credit funds, diversified funds and alternative funds are often partially or totally unavailable. A certain number of funds could not be rated due to the insignificant number of rated investments they contained. The weight of sovereign bonds and similar types of bonds is the primary reason for this shortfall.
- A large majority of private equity funds and convertible bond funds are almost fully covered in terms of ESG ratings. The group of investments that carries the lowest number of ratings is small-cap equity funds.

All these data are subject to fluctuations over time and difficult to interpret (combination of absolute value and relative value approaches depending on the investment). The analysis tool is therefore essentially used to predict fund portfolio tendencies in terms of ESG compliance, so as to identify the situations that should be questioned in terms of the pertinence of certain choices or the possible existence of extremes in the fund profile. A warning system detects significant deterioration in the profile and proposes changes in the values for which exclusion is a logical option.

Calculation of the carbon footprint of the bond portfolio managed by CCR is based on the tool provided by the firm Bloomberg. The coexistence of the two approaches (Morningstar for indirect management and Bloomberg for direct management) does not pose any major difficulties at this stage, to the extent that each form of management pilots the ESG dimension for investments in an autonomous manner before reconciliation of the two approaches. Despite this, work towards the overall standardization of the indicators for all financial assets is still an on-going effort.

BENCHMARK FIGURES

Management company partners

96.6% of indirectly managed investments are delegated to companies who have signed the United Nations-supported Principles for Responsible Investment (94.0% at December 31, 2016). This commitment is considered above all as an indication of the willingness of management companies to comply with responsible investment principles thereby facilitating the extension of the ESG dimension to an increased number of investment funds. Establishment of an ESG policy tends to be a general rule: over 98% of indirectly managed investments are delegated to investment management companies with a clearly-defined ESG framework in place.

The following indicators shed additional light on the profile of our ESG investment management company partners, the majority of which present an annual ESG report (89.1% of investments). A large majority have an ESG team of professionals in place (77.0% of investments).

Private equity funds

For private equity funds, 87% of all investments were analyzed to determine compliance with RSG criteria and 78% with a carbon footprint.

For ESG compliance, 32% of the funds were rated “High” or “Above Average”, 49% of the funds obtained an average score, 18% were rated “Below Average” and 1% was qualified as “Low”

45% of all investments obtained a “Low Carbon” rating. All other funds were assigned to the “Medium Risk” category. To the extent that, in their brochures, these funds are not assigned a low carbon objective and that their status is the consequence of the composition of their portfolios measured at different intervals, we cannot exclude the possibility of a change in status due to the prospective development of their composition.

Other funds

The incompleteness of the analysis requires that assessment be based more on qualitative factors than quantitative factors at this stage.

Insofar as concerns the category of diversified investments, the rated funds that were given a carbon footprint rating were rated “Medium Risk”. For ESG scoring, one fund was rated “Below Average”.

Any controversial cases are closely monitored. Most funds in the portfolio are rated “Low” and “Moderate” while one fund is rated “Average”.

Beyond this analysis of insignificant interest, more attention is focused on the size of the controversial funds within the portfolio (number and weight in the portfolio), the tendencies over time, as well as identifying specific situations of high and severe impact, so as to discuss with the management company the most appropriate manner of dealing with these situations.

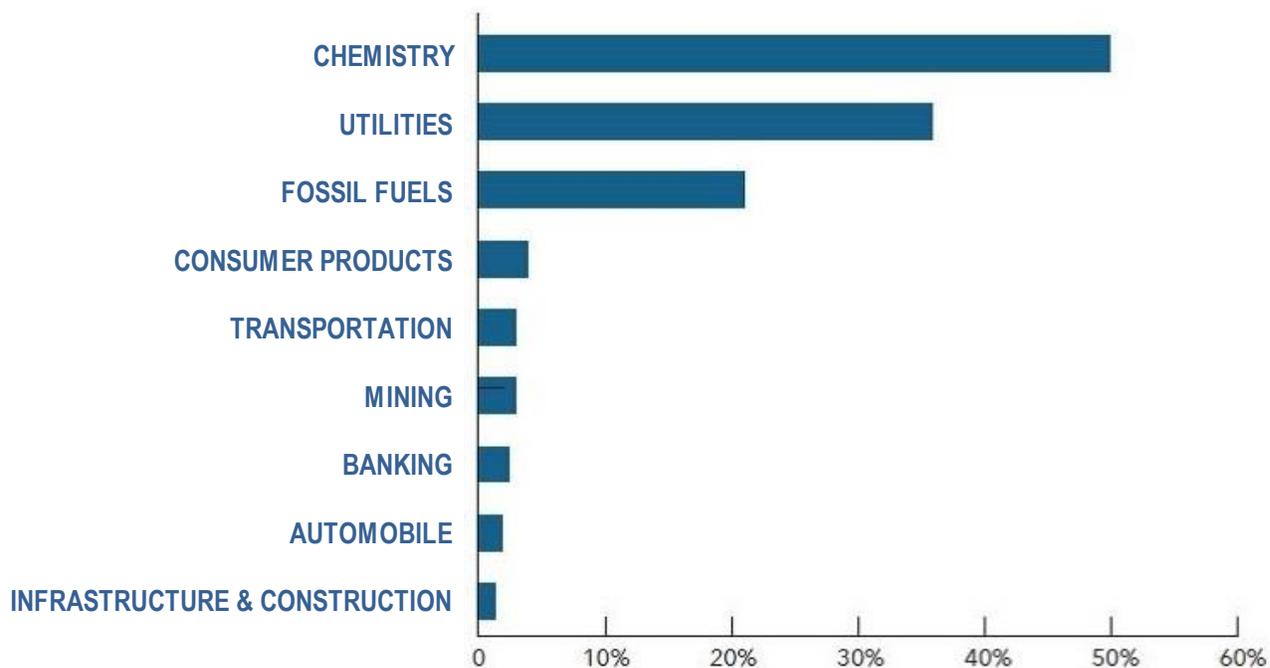
Directly-managed bond portfolio

Certain methodological principles must be taken into account before analyzing results. The Bloomberg tool provides a carbon footprint rating for the database published by the companies, whenever the necessary information is made available. In the absence of such information, it provides a carbon footprint estimate based on the median of a group of comparable companies. The bond issues taken into account correspond to “Scope 1 + Scope 2”. The absence of “Scope 3” reduces the significance of the carbon footprint rating for the economic stakeholders operating outside the sectors that consume high amounts of energy.

The structure of the portfolio has significant influence on the scope of the calculation, since multilateral development banks, sovereign issuers, municipalities and government agencies remain outside the field of analysis given the absence of relative data. 67% of all portfolio investments were analyzed compared to 70% in 2016. This variation is due primarily to the increased weight of the four unanalyzed sectors in the overall bond portfolio.

The carbon intensity level of the consolidated bond portfolio amounted to 129.46 tons of CO² per million euros of revenues compared to 107.48 in 2016. The principal sectors contributing to the carbon footprint are displayed in the table below based on the breakdown of the portfolio into thirty business sectors and four sectors not included in the above-mentioned analysis.

CARBON FOOTPRINT: CONTRIBUTION BY THE TEN LARGEST SECTORS



FINANCIAL INVESTMENT: ACTIONS ACHIEVED

The investment policy favors a medium- and long-term approach, a certain number of actions including the development of the ESG-Green dimension are therefore being pursued:

- Involvement in development: micro-finance investments (loans to micro-financing institutions). Additionally, the CCR Group conducts social sponsorship programs for populations residing in the countries with low per-capita incomes.
- Investments relating to water resource management (supply, treatment, technology and environmental services).

FINANCIAL INVESTMENT: AN ESG-GREEN COMMITMENT THAT IS BEING PROGRESSIVELY EXPANDED

The CCR Group initiated two new Private Equity programs in the fourth quarter of 2017 and first quarter of 2018 (Europe and FinTech/InsurTech in finance/insurance). The ESG dimension is integrated into the management process. Specifications are now systematically drafted for almost the entire Private Equity portfolio and include ESG requirements.

Investments made in 2017 in infrastructure (equity and debt) are also subject to ESG requirements. To the extent that the business activities involved are susceptible to high-impact environmental challenges, communication of the resulting effects and the sustainable actions undertaken to curtail them, enables careful scrutiny of these issues.

OUTLOOK FOR DEVELOPMENT

The development of quantitative indicators and qualitative analyses remains an important area of development, along with the ambition of obtaining more complete data on bond investments. More generally, implementation of an array of analysis filters will enable enhanced control of the alignment of investment portfolios with their objectives and identify areas of dispute whether they involve controversial issues or issues of another concern.

Training and awareness programs for investment teams in the ESG and environmental approach shall be pursued, combined with a willingness to instill ESG trends in the operational piloting of the portfolios to as full an extent possible.

The integration of ESG criteria in bond investments under delegated management is currently under review and will be accompanied by a definition of a balanced “risk/profitability/ESG profile” triptych that is still being developed.

The CCR Group will pursue its ESG approach with respect to real estate investments. Much emphasis will be placed on the consideration of ESG criteria when acquiring buildings as well as the selection of real estate funds under delegated management. The environmental performance of real estate assets will be reinforced in particular through the implementation of an action plan for reaching energy savings goals. The contribution of the ESG approach to the operational piloting of the real estate portfolio is therefore expected to undergo marked development.