

2016 ESG-GREEN REPORT

Caisse Centrale de Réassurance Group



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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 article 1 - IV, paragraph 4 of the French decree of December 29, 2015.



GROUP PROFILE & MISSIONS

A reinsurance group wholly-owned by the State of France, the CCR Group stands among the top 25 players in international reinsurance. Backed by the State's guarantee and working in the general interest, it provides the French market with coverage against natural disasters and other exceptional risks.

Since January 1, 2017, its subsidiary, CCR Re, operates in the life, non-life and specialty lines in France as well as in sixty countries worldwide.

The CCR Group is backed by proven expertise in risk modeling and forecasting and employs 271 professionals motivated by the satisfaction of their clients who deploy their talents with the highest degree of professionalism. Thanks to recognized skills and expertise that ensure profitability and sustainability, the CCR Group consistently meets the demands of its mission and the expectations of its shareholder.

A CORPORATE CITIZEN

A risk management expert, specializing in particular in natural disaster coverage, the CCR Group has consistently taken into account the social, societal and environmental impacts of its activity for several years. By supporting and furthering concrete actions useful to civil society, the Group works to fulfill its social commitment alongside its clients and employees as well as within its ecosystem.

As an employer, the CCR Group considers that its primary responsibility is to foster the professional growth of its employees and to facilitate the professionalization of young talent. In this manner, particular attention is paid to ensure proper integration, training, professional development and mobility for all personnel.

Since 1996, the CCR Group has been committed to sponsoring humanitarian actions, bringing annual financial support to a range of associations in which its personnel have invested significant time and effort. To date, 36 associations on the ground have received support for their activities in France or internationally. Moreover, a cultural sponsorship program, initiated two years ago, works to facilitate public access to cultural heritage for the largest audience possible.

The work of the R&D and modeling teams is conducted on the basis of the scientific knowledge of risks in the aim of preventing their occurrence and reducing their impact. In this framework, CCR is participating with the NAIAD European project which aims to identify risk prevention measures inspired by nature in order to reduce the consequences of natural risks associated with water.

Lastly, the CCR Group is progressively integrating the ESG dimension into its investment policy.

Over the course of 2017, CCR entered into a partnership with Carbone 4, a company specialized in low carbon transition and climate change adaptation. The aim of the partnership is to co-finance the development of an innovative method and of a management tool used to assess the exposure of financial asset portfolios to physical risks and climate change. The Climate Risk & Impact Screening method will enable Carbone 4 to provide a unique solution in this area by the end of 2017.



1 Control the impact of our activity

- Transportation
- Waste sorting
- Water consumption
- Energy consumption

2 Optimize social policy

- Code of ethics
- Apprenticeships, learning
- Sports
- Employees elected to the Board of Directors

3 Interact with society

- Party to the FFA Sustainable Development charter
- Humanitarian sponsorship
- Cultural sponsorship
- Partnerships with scientific organizations

4 Act on product design

- Finance policy
- Real estate policy
- Reinsurance of extreme risks

5 Act on purchasing

- Selection of suppliers
- Traceability of reused materials



In 2016

40 Tons of recycled paper and cardboard

100 Kilograms of recycled bottles, batteries, ink cartridges and bottle caps

200,000 200,000 Unprinted documents

INVESTMENT POLICY AND ESG CRITERIA

The CCR Group draws up its investment policy in a **long-term perspective** and therefore places particular importance on the comprehension of fundamental developments relating to global economic, financial and societal issues. The CCR Group applies a **conviction style of management** that integrates the ESG dimension, based on the overall objective of **creating added value** associated with **effective risk management**.

As such, our efforts have progressively focused on gaining an in-depth understanding of environmental, social and governance criteria for the past several years and constitute a topic of **major interest** in terms of research and development into new forms of investment, asset portfolio review and the future organization of our investment approach.

Today, the integration of ESG criteria is conducted for **real estate** and **equity** investments. It is slowly being applied to other asset classes and in particular to bond investments. The integration of ESG criteria requires that the necessary means be deployed gradually in consideration of the availability of resources and expected demands. The development of an extra-financial approach is accompanied by training initiatives aimed at deepening the knowledge of the Investment team in terms of ESG analysis.

Several **underlying directives** were identified in order to integrate **extra-financial criteria** into the investment policy:

- ESG issues are directly taken into account by the Investment team which has developed its expertise in this area.
- A dialog is systematically established with the investment management companies to ensure application of ESG criteria across the Group's portfolios and to verify that ESG practices are complied with.
- Investments targeting specific global ESG-Green-related issues as well as an impact analysis are made based on identifiable effects and for which a qualitative and quantitative assessment may be conducted.
- The development of key indicators, beyond the current scope of coverage, is pursued in an effort to obtain an enhanced global assessment of the asset portfolios and achieve a dynamic view of ESG-Green issues.

REAL ESTATE

The CCR Group initiated an ESG approach for the selection of real estate assets and the management of its real estate portfolio.

The real estate portfolio is comprised of 24 residential and office buildings for a total of approximately 100,000 m² and of shares in real estate mutual funds.

The objective is to create added-value while paying particular attention to the environmental performance of the property portfolio.

To achieve this, the CCR Group works to ensure that building certifications are obtained whenever conducting renovations. It was in this manner that the Group's headquarters received the French low consumption building (*BBC*) label. The CCR Group undertook a project for the restructuring of an office building with 4,200 m² of space located in Paris which received the Breeam Very Good label.

CCR Group headquarters

The renovation of the building, completed in 2014, significantly upgraded its environmental quality as well as the quality of the work areas. The building obtained the low consumption building label. Its distinguishing features include:



- The use of recycled building materials, for example over 5,000 m² of carpeting made from recycled fishing nets,
- The creation of green areas with a green wall of over 150 m² composed of locally-grown non-allergenic plants,
- The installation of heating and cooling systems piloted by a building management system,
- The use of soundproofing materials,
- The use of large thermally insulated windows to increase the amount of natural light,
- The installation of presence sensors that reduce the consumption of electricity.



CCR signed a **charter agreement for the energy efficiency of public and private commercially-owned buildings** launched by France's Sustainable Building Plan (*Plan Bâtiment Durable*) in October 2013.

Directives to help improve environmental performance were included in the appendices of commercial leases. These leases represent 50% of all rented office space.

Office building located in Paris 8th district

Renovated in 2016, the building obtained the Breeam Very Good label.

- Restructuring of floor space to ensure accessibility for persons with reduced mobility,
- Installation of meters at all office levels to facilitate efficient energy management,
- Creation of additional windows to increase the amount of natural light,
- Conformity with French standard NF 12464 for indoor lighting,
- Rational water use (water-efficient sanitary facilities, automatic watering system equipped with a hydrometric detector),
- Installation of bicycle racks, locker rooms with showers and charging stations for electric vehicles,
- Use of highly efficient acoustic insulation.



For its residential buildings, the CCR Group ensures that its tenants make rational use of energy and monitors the consumption of energy in shared areas. For all work

performed to its buildings, the Group strives to select only those contractors who comply with ESG best practices.

The principal specific measures that have been taken include the selection of responsible and environment-minded contractors for renovation and maintenance work, the replacement of the windows in one building at the time of its renovation [new windows that comply with RT 2005 and 2012 standards ($U_w < 2Wm^2$)], the use of LED lighting in all buildings, the development of green areas, the installation in one building of a room for bicycles accessible to all tenants, and the assurance of strict compliance with waste sorting guidelines.

In the framework of the diversification of its portfolio, the CCR Group holds assets through indirect investments in real estate mutual funds. Selection of mutual funds is performed on the basis of compliance with ESG practices. Close attention is paid to the types of assets included in the funds, as well as to the societal and environmental policies of the management companies.

Investments in funds for the rehabilitation of brownfield sites in urban areas

These investments initiated in 2012 contribute to the management of large sanitary and environmental risks.

- Decontamination operations aimed at eliminating sanitary and environmental risks.
- Redevelopment of urban areas in close collaboration with local authorities.
- Approach based on sustainable rehabilitation and respect for the environment with particular attention paid to the energy performance of new buildings.



A commitment towards efficient energy performance, the well-being of users, the technical rationalization of the premises and the presence of energy-related certifications are the principal criteria sought by several funds within the portfolio. All aspects of the process shall be continued in the goal of improving the energy footprint rating of all real estate investments.

DELEGATION OF ASSET MANAGEMENT

The majority of the management companies selected by the CCR Group have signed the United Nations Principles for Responsible Investment.

- 94% of all investment assets under management are delegated to signatory companies.
- 33 of the 40 companies that manage funds are signatory companies: they manage the most important investments across the asset management partnerships as a whole.

A direct and constructive dialog has already been initiated to take into account ESG criteria in our investment policy and on the issue of **decarbonization**.

As compliance with ESG and green practices is already observed by the CCR Group's partner management companies we are confident that relatively significant progress shall be achieved in the coming years.

The panel of the CCR Group's partner management companies is highly diversified from a geographical perspective. A number of major ESG-Green characteristics have emerged at the global level.

The great majority of our partner management companies have a dedicated ESG team (78% for managed assets), comply with a formal ESG policy (93%), regularly publish an ESG report (89%) and observe an explicit voting policy (85% for equity funds).



An investment policy that makes considerations for ESG issues in the overall asset delegation process.

ESG Green issues are systematically addressed when selecting external funds: an analysis is made to determine how investment policy integrates these issues during operational implementation.

These issues are repetitively addressed in the course of our exchanges with the companies to whom we have delegated the management of the funds.

The collected information, concerning the ESG policy, reports on the exercising of voting rights, or decisions effecting the investment funds based on the selected ESG criteria (exclusions, etc.) enables us to assess an investment and call it into question at any time. An approach that is deemed inappropriate with respect to ESG practices may lead to the exclusion of an investment or put into question an investment already included in the portfolio if the desired improvements in this area are not up to par with expectations (operational management of ESG issues, quality of the reports presented).

Progressive reinforcement of the scope of investments that integrate the ESG dimension is pursued year after year.

The equity funds that comply with a genuine ESG policy represent approximately 40% of all equity holdings.

The private equity investment program has incorporated the ESG dimension since 2013. This aspect is analyzed by the management committee and is supported by an ESG report on the overall activity of the management company.

Investing in development: the Micro-financing option in operation since 2012

- Loan grants to micro-finance institutions in emerging countries.
- A willingness to support the emergence of the entrepreneurial spirit and the creation of micro-businesses.



BOND INVESTMENT POLICY: INVESTMENTS IN GREEN BONDS

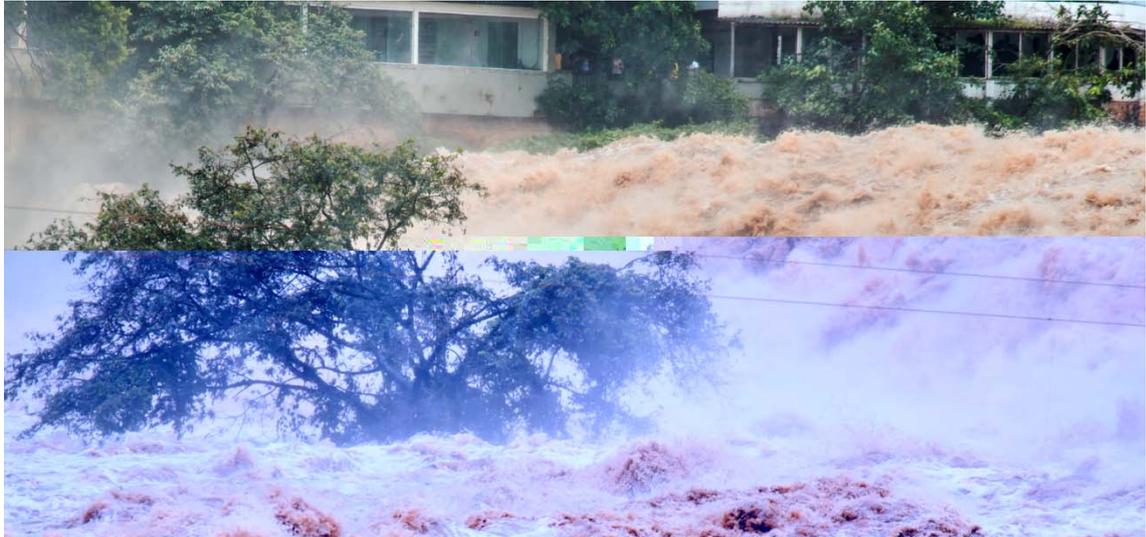
The CCR Group has invested in the Green Bond segment since 2014. The management team follows Green Bond Principles (GBPs) and consults with specialized analysts to validate its analysis to the extent that the GBPs fall short of ensuring the actual "Green" dimension of a bond issue. The process for selecting Green Bond issuers is based in particular on the acquired reputation of prior bond programs, the extent to which capital deployment objectives have been met (types of projects and timeliness) and the frequency of publication of sufficiently exhaustive reports.

No quantitative objectives have been established at this stage, whether these concern the number of or weight attributed to the Green Bonds in relation to the overall total of the bond portfolio. Mass consideration of Green Bonds is performed only for a small fraction of the world's bond stock. The piloting of the portfolio is directed essentially through rate risk management (target duration) and by using the credit limits attributed to each issuer. Green Bonds are issued whenever the characteristics of the issue comply with the duration and credit constraints outlined in the management rules.

The investment represents € 128 million for 15 issues. The majority of the bonds are used to finance projects relating to renewable energy sources. Some projects involve sustainable water management, waste processing or other ESG-related issues.

The analysis of the ESG dimension is pursued throughout the entire investment process for each Green Bond. Consultation of quarterly reports, exchanges with ESG analysts and debriefing meetings organized by the issuers enable the monitoring of ESG commitments for bond issues held in the portfolio.

Investments in Cat Bond funds



A financial solution enabling protection against major natural risks.

- Cat Bonds are being increasingly used to provide compensation for major natural disasters.
- To this extent, they help provide protection solutions to the populations directly affected by these events.
- The CCR Group has invested in Cat Bonds since 2000.

VOTING POLICY

Investment strategy favors a delegated management approach either through participation in multi-investor funds or through the creation of dedicated funds. Therefore, the Group directly retains only an extremely small number of equities.

General practices for the exercise of the voting rights of management companies are carefully scrutinized prior to investing in a fund and are then regularly reviewed in management meetings.

Monitoring of each management company's voting policy is therefore performed at least once a year in a management meeting. The voting policy maintained by the special investor funds is given even greater scrutiny as the CCR Group is the sole investor while it generally represents only a minor proportion of all shares issued by open multi-investor funds.

The main areas of scrutiny include the immediate or deferred conditions for the issue of new shares, regulatory agreements and compensation for company executives.

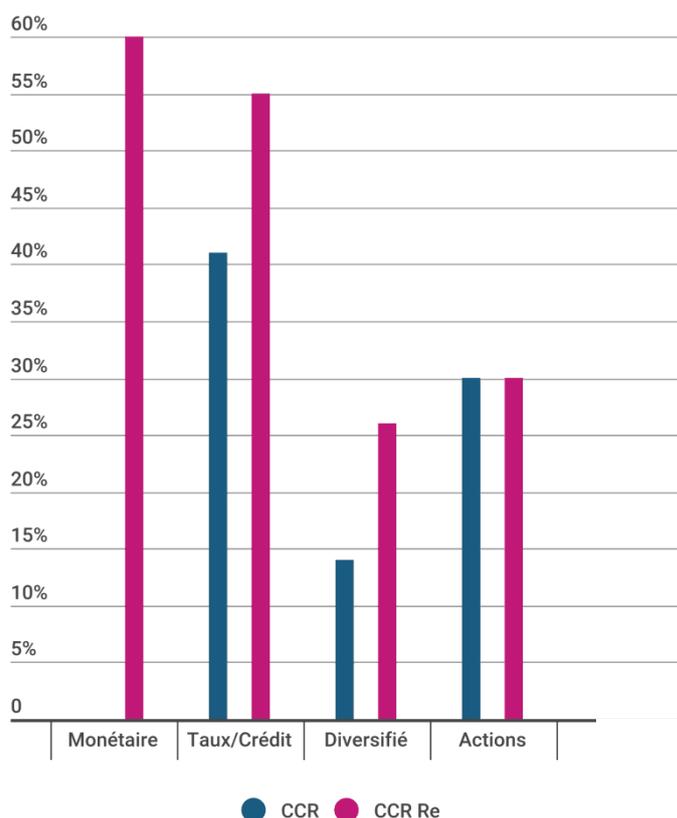
Water: the planet's most precious resource

- Investment in a Water Equity fund for more than 10 years.
- The principal areas of investment include the provisioning of water, water treatment services, water technology and environmental services.



ESG RATINGS

Issuers participating in the directly managed bond portfolio do not have ESG ratings at the present time.



For delegated management, the investment funds with ESG ratings are still limited in number.

Scoring grids are specific to each management company (proprietary methodology). An aggregate calculation is therefore not deemed practical at this stage. Nonetheless, these ratings provide an assessment of the average values of equities in the portfolio and enable the monitoring of their development conditioned on the ability to produce a reading at sufficient intervals.

**Delegated assets with ESG ratings
(% of asset class total return)**

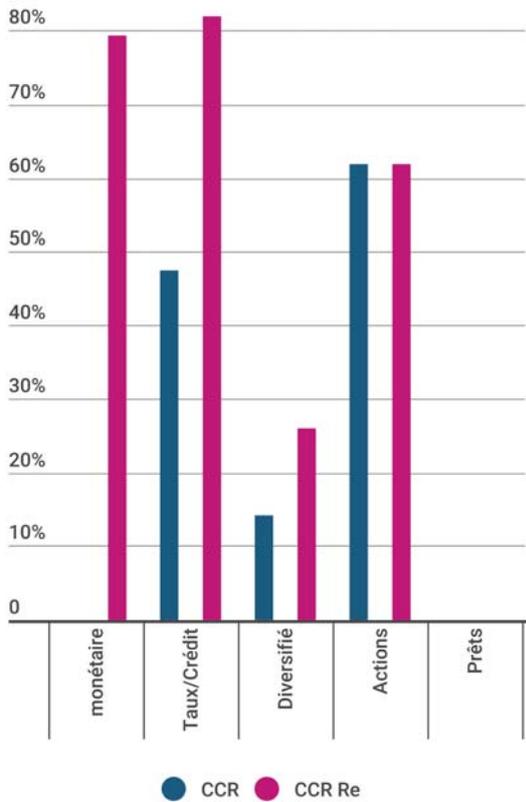
At an operational level, different approaches are combined depending on the partner management companies and on the basis of ESG criteria. Certain investment policies have adopted the principle of an exclusion for companies listed at the very bottom of the applied rating scale while other policies have opted in favor of a Best Efforts approach. The Best in Class approach is applied with restraint for the panel of partner management companies as regards the funds included in CCR Group portfolios.

The weight of funds with ESG ratings within each asset class varies as illustrated by the graph. There were no monetary funds in the CCR portfolio at December 31, 2016.

CARBON FOOTPRINT RATING

Measurement of a carbon footprint rating for delegated management is incomplete.

The CCR Group does not currently have access to a tool enabling it to centralize the calculation of a carbon footprint rating for all its assets under delegated management. The management companies have been requested to make the calculations. The data are therefore dependent on the choices of each company in respect of ESG Green reporting.



Delegated assets with carbon footprint ratings

result in a decentralized calculation at the management company level (Trucost, MSCI and Bloomberg are the three primary data contributors), and also because of the existence of different methodologies, the size of the scope of the rating (73% to 100% for equity funds) and the selection of a different scope (Scope 1-2 or Scope 1-2-3 depending on the funds).

Generally, we observe that small funds (less than € 500 million) have been excluded from the scope of the analyses of several management companies. The proportion of those funds included in the analyses is relatively significant. However, it remains somewhat low for the bond and credit category (in particular for sovereign issuers) as well as for diversified funds. A certain number of companies opt to exclude the calculation whenever the scope is significant yet only a minor proportion of a portfolio is represented.

The graph shows the proportion of amounts under delegated management for which a carbon footprint rating has been calculated (the marked differences between CCR and CCR Re is due to the presence of CCR Re dedicated funds which have a greater weighting than those of CCR and for which a carbon footprint rating is available).

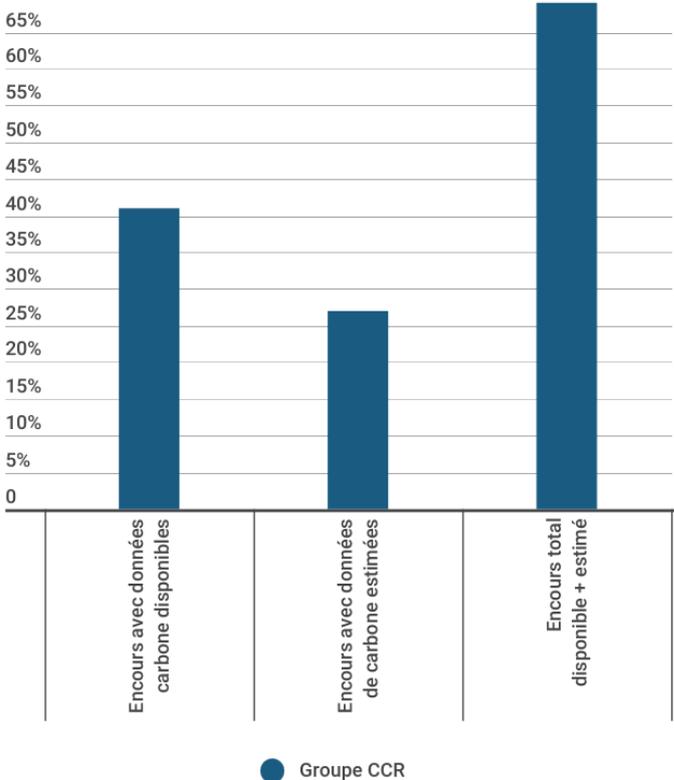
An aggregate calculation of the data has therefore not been performed at this stage as the diversity of the contributors would

Although not exhaustive, available data provide a preliminary estimation of the positions of the rated funds.

- 64% of equity funds have a footprint rating of less than that of their benchmark index.
- The lessons that may be drawn from calculations in other asset classes are of limited interest in the absence of any increase in the rated funds.

The directly managed bond portfolio is composed of Investment Grade issues

The carbon footprint rating for this portfolio was calculated using methodology developed by the firm of Bloomberg.

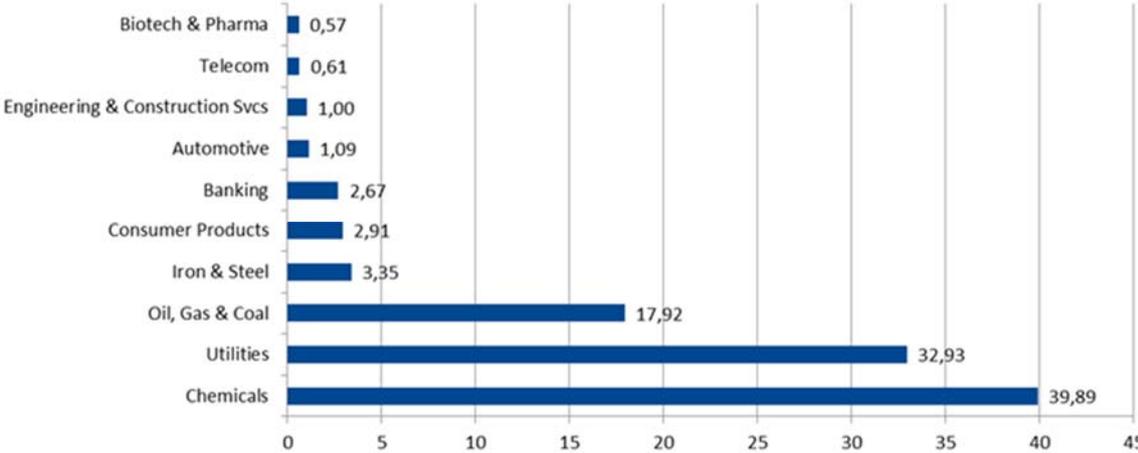


The tool provides a carbon footprint rating for the database published by the companies, whenever the necessary information is made available. In other cases, an estimate based on the median for a group of comparable companies is performed. The bond issues taken into account correspond to Scope 1 + Scope 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.

Weight of investments with carbon footprint ratings (% of the bond portfolio)

The structure of the bond portfolio has a strong influence on the scope of calculation as carbon footprint information is not presently available for sovereign issuers, the local municipalities and government agencies in particular.

Taking into account the above-mentioned limitations, **the carbon intensity of the consolidated bond portfolio is 107.48** (expressed in tons of CO² per million euros of revenue). This calculation was performed on 69.96% of the total amount of the portfolio.



Analysis of carbon intensity by sector: the ten largest contributors

FUTURE ESG ACTIONS

More extensive integration of extra-financial criteria into the investment process shall be pursued beyond the integration of traditional criteria such as expected profitability, risk, liquidity and regulatory impact, all of which are considered when selecting investments. To this extent, the ESG contribution to the operational management of financial risks should be furthered significantly and developed above and beyond the actions already performed.

In the area of real estate investment, the CCR Group voluntarily seeks to step up its use of ESG criteria in the coming years. Extra-financial factors will resultantly play a crucial role in the selection of assets within the framework of our building acquisition policy. Likewise, obtaining environmental certifications will comprise a key goal when conducting real estate restructuring operations. Lastly, the development of a credible and comprehensive ESG policy will continue to be a major concern in the selection of real estate funds under delegated management. Our willingness also implies that we make all CCR Group partners aware of ESG requirements by establishing a dialog with tenants and contractors, so as to structure the exchange of information and pursue shared actions enabling improved energy efficiency and enhanced environmental quality.

The involvement of the CCR Group in the development of Green Bonds and Social Bonds shall be pursued over the coming years. Changes in the principles that provide the basis for the operation of these instruments shall be taken into account in the investment methodology so as to favor investments that finance pertinent and identifiable projects for which sufficient information is provided in a transparent manner.

In the area of delegated financial assets, the aim of the dialog established with the management companies will be to reinforce the ESG analysis of assets in the portfolio and to identify concrete actions that may be taken to limit adverse impact. The funds that currently fall outside the limits of this approach will be considered at length so as to validate the conditions by which the integration of ESG criteria is possible in view of their specific constraints.

The development of quantitative indicators and qualitative analyses is a key issue in addition to the developments that have already been realized. This is indeed the only means of developing an objective assessment of the actions achieved. As such, the operational implementation of more effective tools for the assessment of the asset portfolio's exposure to climate change risk is already being actively pursued. The timely short-term development of such tools would require access to innovative instruments that could provide the concise measurement of portfolio exposure. A wider application of carbon footprint measures by the companies and institutions participating in the portfolio and more significant standardization of analysis methodology are indispensable in order to further the advancement of the energy transition.



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