CCR, PUBLIC GROUP AND INTERNATIONAL REINSURER

ESG CLIMATE REPORT 2020

GROUPE
CAISSE CENTRALE DE RÉASSURANCE

CCR | CCR RE

Bertrand Labilloy
Chief Executive Officer

Laurent Montador
Deputy Chief Executice Officer

2020 was shaped by numerous health, economic, social and environmental risks that the CCR Group addressed in accordance with its general interest missions and the development of its competitive activities.

As a public reinsurer of natural disasters, CCR pursues its mission to provide expertise on climate issues to the French public authorities.

After modelling the impact of climate change according to IPCC scenarios on insured claims in mainland France in 2018, and then in the French overseas departments in 2019, our teams advised the French Prudential Supervisory and Resolution Authority in 2020 on the calibration of the market's climate stress tests, which will bring together the meaning and value of economic activities.

In the economic field, CCR also assisted the French public authorities to implement a public reinsurance scheme, which made it possible to preserve outstanding inter-company loans and therefore business and employment within SMEs and ETIs.

This means that ESG issues reside at the heart of the group's missions and can be found on both the assets and liabilities sides of its balance sheet.

Its developments need to be assessed from a medium to long term perspective but we are already convinced that the group's ESG performance contributes to its financial performance.

This conviction also applies to our economic and social efforts. Together with ceding companies, we strive to provide affordable insurance cover against natural perils through effective risk management and prevention.

In this respect, CCR takes into account in the management and prevention of natural catastrophes, the evolution of their intensities, their frequency, but also their geographical areas of impact.

CCR is also considering, in consultation with the French public authorities, the coverage of emerging risks that may have a systemic dimension, such as health or cyber risks.

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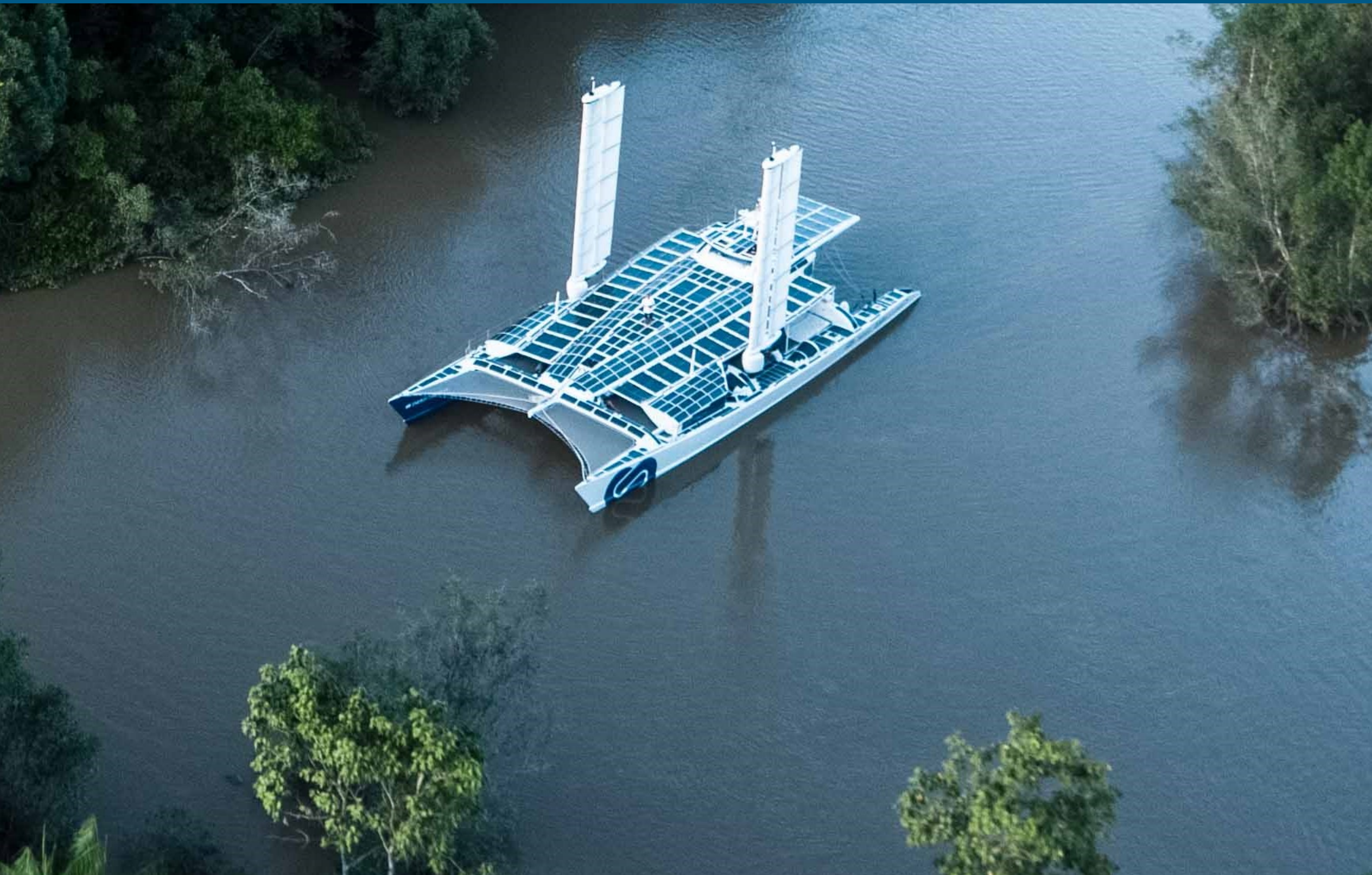
CCR, A RESPONSIBLE GROUP



1.1 Introduction

The Caisse Centrale de Réassurance (CCR) Group, owned by the French State, with more than 70 years' experience in public and open market reinsurance, ranks among the 30 leading international reinsurance players. In France, it is the public reinsurer of last resort, offering a State guarantee in the event of natural catastrophes or risks that insurance companies are unable to insure.

Drawing on its experience in risk management and its recognised scientific expertise in natural catastrophe forecasting, the CCR Group places the analysis of risks and opportunities related to climate change developments at the heart of its action and strategy.

Since the publication of its first ESG - Climate Report in 2016, in accordance with Article 173(VI) of the French Act of 17 August 2015 on energy transition for green growth, the group has been committed to continuous improvement in integrating environmental, social and governance (ESG) criteria into its activities and decisions.

This approach is applied in each of the group's two entities:

- the Caisse Centrale de Réassurance (CCR), which provides the French market, as part of the "Nat Cat" scheme and in the general interest, with State-guaranteed coverage against natural disasters and other exceptional risks;
- its subsidiary, CCR Re, which reinsures Life, Non-Life and Specialty lines in France and in 80 countries worldwide.

After taking part in the survey conducted by the French Prudential Supervisory and Resolution Authority (ACPR) in 2019 on the consideration of climate change risk in the insurance sector[1], the CCR Group pursued its efforts in 2020 to achieve compliance in terms of extra-financial reporting.

Beyond the regulatory framework, in 2020 the CCR Group voluntarily strengthened the integration of climate-related risks into its practices, by following the recommendations of the task force on Climate-Related Financial Disclosures (TCFD).

A cross-reference table in the appendix shows which parts of the report relate to the main TCFD recommendations.

Figure 1: TCFD's Core elements of recommended climate-related financial disclosures

Governance:
The organisation's governance around climate-related risks and opportunities.

Strategy:
The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.

Risk Management:
The processes used by the organisation to identify, assess and manage climate-related risks.

Metrics and Targets:
The metrics and targets used to assess and manage relevant climate-related risks and opportunities.

Source: https://www.unpri.org/news-and-press/tcfd-based-reporting-to-become-mandatory-for-pri-signatories-in-2020/4116.article

To help it prepare for these regulatory changes and to integrate best practices in climate reporting, the CCR Group mandated EcoAct to participate in the drafting of this report.

1 / https://acpr.banque-france.fr/les-assureurs-francais-face-au-risque-de-changement-climatique

CCR'S RAISON D'ÊTRE

Some of the missions entrusted to CCR are long-standing, in particular the reinsurance of exceptional transport risks in times of war or unrest, which dates back to the 1681 Great Ordinance of Marine and the French Commercial Code. These missions, defined by law[2], were extended to nuclear risks, risks of attacks and acts of terrorism and, above all, risks of natural catastrophes.

In the case of this compensation scheme, the principles of national solidarity and equality are affirmed by the 12th paragraph of the preamble to the French Constitution of 27 October 1946:

"... The Nation proclaims the solidarity and equality of all French people in bearing the burden resulting from national calamities."

CCR thus differs from competitive companies in that it is established by law to carry out tasks entrusted to it by the State in the public interest.

While the achievement of performance objectives expressed in financial and prudential terms constitutes a permanent incentive to manage its operations wisely, the quest for profit maximisation, within the regulatory and prudential framework applicable to reinsurance companies, remains subordinate to the pursuit of the general interest.

It is by virtue of the principle of national solidarity in the face of certain events:

- of an exceptional or catastrophic nature, of an unusual intensity or type, whether natural or man-made,
- which cannot be covered by market solutions under the conditions sought by the government,
- which require specific research, management and risk coverage measures...that the State entrusted CCR with specific missions and granted it with a guarantee which is itself exceptional in nature due to its unlimited nature, its specific terms and conditions and a scheme that deviates from European law.

In the field of the environment, CCR informs and alerts stakeholders on the foreseeable financial impacts of natural risks linked to global warming and, as a result, promotes the most appropriate prevention actions and positions itself as a reference expert.

It is therefore through the very exercise of its missions that CCR has been implementing public policies favourable to social and environmental issues for many years at the service of the national community.

For this reason, CCR adopted the following wording in 2019 as its *raison d'être*:

"In the general interest, to reinsure, with State-guaranteed coverage, risks resulting from exceptional events on French territory, such as natural disasters, attacks and acts of terrorism or other uninsurable risks, and to contribute through its research and advisory activities to the study of risks of all kinds, their prevention, management and coverage."

2 / See French Insurance Code, Art. L431-4, Art. L431-5, Art. L431-9 et L431-10.

1.2 CCR Group's Responsible Strategy

In a context marked by the health crisis, a general slowdown in the global economy and major natural disasters, such as the fires that hit Australia in January and the West Coast of the United States in the summer, but also the floods in China and the growing number of storms in the Atlantic, the CCR Group reaffirmed its responsible investor strategy in 2020.

Global warming and the increase in natural catastrophes make the Group's expertise and its mission of general interest to serve policyholders and its partners all the more relevant, both in terms of its public reinsurance mission and in terms of its support for change and enhanced risk prevention, particularly for local authorities.

In fact, the responsible investment policy defined last year, which stems from the various activities of the CCR Group, pursues the following three principles:

- **Principle of solidarity:** thanks to the public reinsurance scheme, the CCR Group gives companies and individuals access to affordable coverage for exceptional events and reimbursement in the event of claims;
- **Prevention and reinsurance of physical risk:** the CCR Group is a leading player in the scientific field of the study and management of physical risk linked to natural catastrophes and a multi-specialist player in other classes of insurance;
- **Societal support:** the CCR Group covers the risks of natural catastrophes to which populations are exposed and maintains an affordable insurance offer throughout France, including in the most vulnerable regions.

A Strategy for both Assets and Liabilities

CCR is a public group with a public-service mission to cover uninsurable risks, an international reinsurer and an investor.

This specificity makes it a unique player in the market which must systematically monitor the risks weighing on its financial balance sheet, through the amounts provisioned, in the event of natural catastrophes or extreme events. This namely led it, since its creation in 1946, to put in place a responsible strategy for the assessment of risks related to natural catastrophes, the nature and intensity of which have increased in recent years as global warming has taken hold.

The group would like to apply this risk integration strategy to both its reinsurance underwriting policy (liabilities) and its investment policy (assets), thus opening the door to new opportunities to support companies and financial players in the transition to a low-carbon society. This distinction, which is also supported by the ACPR's recommendations on climate change risk management[3], was therefore given particular attention in the drafting of the 2020 report.

3/ https://acpr.banque-france.fr/sites/default/files/medias/documents/bilan_gouvernement_application_decret_173-vi.pdf

Based on its responsible investment policy and charter, the CCR Group has strengthened its actions and made new commitments to implement its responsible investor strategy.

To contribute to the objective of carbon neutrality, the CCR Group carried out several large-scale projects in 2020 aimed at making its activities more compatible with a scenario limiting global warming to below 2°C.

The group has thus defined an ambitious carbon policy enabling it to envisage having carbon-neutral investments by 2030.

The group was able to contribute to the work of the French regulatory authorities on climate-stress tests and now applies them to part of its portfolio.

Figure 2: Breakdown of CCR's ESG-Climate strategy by pillar enriched in 2020

	PILLARS	INVESTMENT POLICY (ASSETS)	UNDERWRITING POLICY (LIABILITIES)	CSR POLICY
1	Transition risk prevention	• Analysis of the contribution of the portfolios to Paris Agreement targets with measures relating to: ➢ carbon footprint extended to Scope 3 ➢ temperatures • Implementation of a formal Coal Policy with a commitment to exit coal by 2030 • Green bonds	• Exclusion of specific contrats related to coal or lignite for CCR Re and communication with partners on exit trajectories • Participation of CCR to the climate pilot exercice led by the ACPR	• Partnership with Energy Observer • Participation to the ACPR Climate commission
2	Adaptation to physical risks	• Analysis of the exposure of the directly-owned real estate assets with a proprietary CCR tool • Methodology and modelling of the impacts of climate change for a wider application in 2021 and 2022[E] • Thematic funds (Cat bonds) • Contribution of CCR to the climate pilot exercise led by the ACPR	• Iclusion of climate change in ORSA reports since 2018 • Shareholders encourage to better take physical risks into account: work on prevention	• Publication of statistics and research on natural risk prevention • Research partnerships (Météo France, BRGM…)
3	Societal transition support	• ESG risk analysis on portfolios • Investment in social and sustainable bonds • Contribution to the questionnaire of the Observatoire de l'immobilier durable on directly-owned real estate assets • Creation of a questionnaire on voting policies within portfolio management companies (Proxinvest)	• Analysis of the exposure to ESG risks and the sustainability score in countries where CCR Re and CCR underwrite policies (RobecoSam CSR Index)	• Environmental and humanitarian Patronage • Inclusion, diversity policy and support for disabilities

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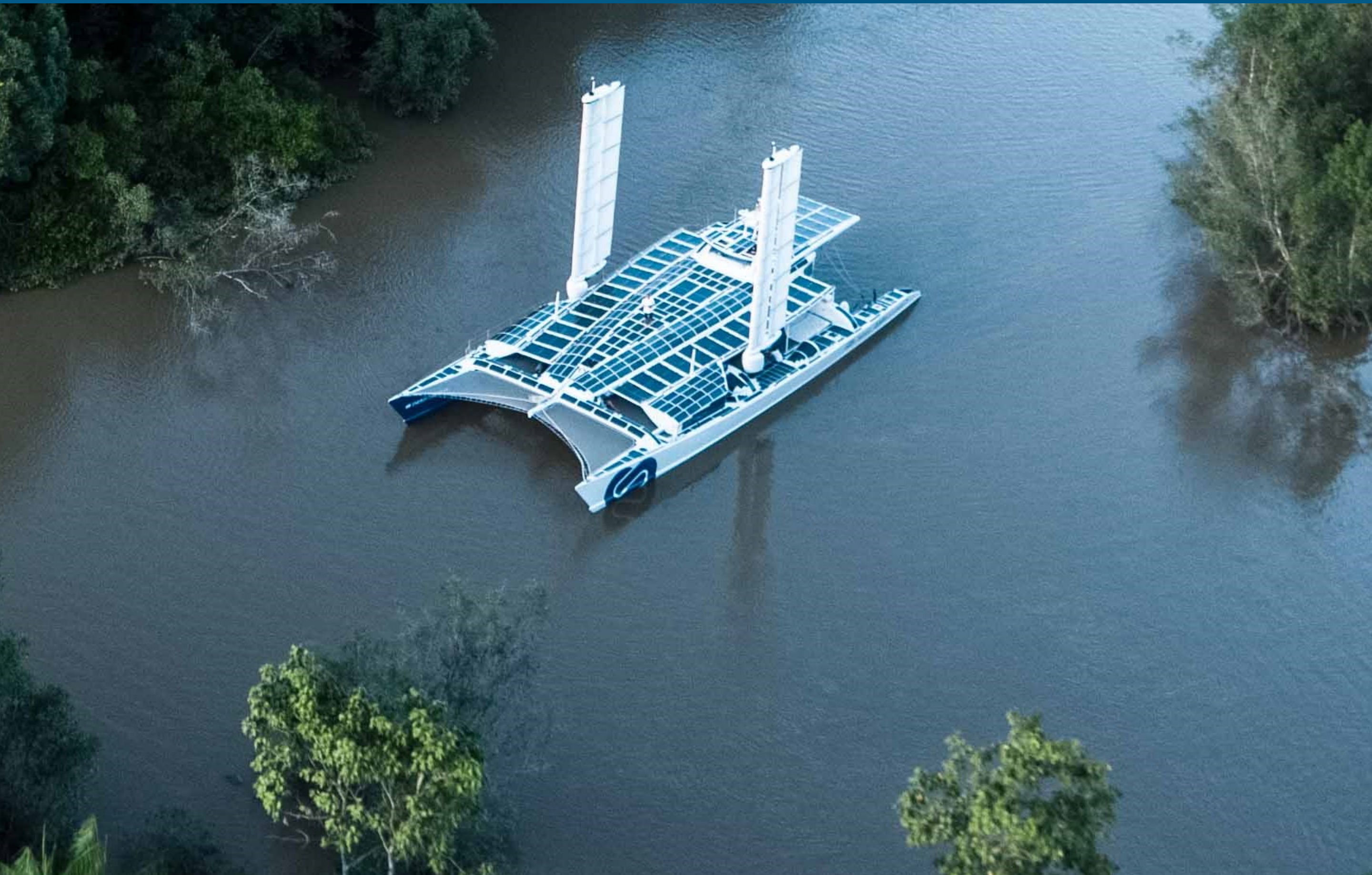
CCR GROUP'S RESPONSIBLE MANAGEMENT, FOR BOTH ASSETS AND LIABILITIES



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Following on from the work carried out in 2019 on its responsible investment policy, the CCR Group has undertaken major projects to better monitor and assess the impact of climate and ESG issues on its activities, and *vice versa*.

The group used the platform developed by Sequantis, a company which provides look-through transparency for part of its portfolios to assess the climate and ESG impact of its financial investments, their alignment with the objectives of the Paris Agreement (through a portfolio temperature measurement) and their exposure to transition risks.

Carbon footprint for financial assets was extended to Scope 3 emissions[4] in 2020, in anticipation of the SFDR provisions for 2023 [5].

The real estate assets were subject to a physical risk analysis using an internal tool.

Finally, CCR wanted to reaffirm this year how climate risk was taken into consideration in its activities within CCR and CCR Re.

2.1 Governance

Climate risk is studied and addressed at all levels of the group. The responsible investment policy is validated at the highest level of management through a governance model implemented in 2019.

The Boards of Directors of CCR and CCR Re are responsible for defining the strategic priorities of the group and overseeing their implementation. They are consulted at least twice a year on ESG - Climate issues:

- In December for the *ex-ante* review and validation of the investment policy upon proposal of the Audit, Risk and Accounts Committees of both entities;
- In June for the *ex-post* review of the previous year's ESG-Climate report in view of its publication, to reiterate all the issues related to the content of the regulatory report and to exchange on the implementation and the extensions of the mentioned measures.

Several members of the CCR and CCR Re Boards of Directors are renowned for their expertise in climate and environmental-related issues.

Due to CCR's public-service mission and its reinsurance activities, the members of the Boards of Directors are often faced with the consideration of climate issues.

In 2019 an ESG committee was set up, the majority of which is composed of members of the Executive Committee of CCR and CCR Re.

It reports to the Investment Committee, chaired by the Chief Executive Officer. It is responsible for validating the selection of assets in line with financial performance objectives. An update on ESG monitoring and extra-financial performance of the portfolios is carried out regularly.

Several members of the ESG Committee have participated in forums and conferences on the theme of responsible investment or climate change and have benefited from training on sustainable finance provided by Novethic, among others.

Some of its members participate in the Climate and Sustainable Finance Commission of the French Prudential Supervisory and Resolution Authority (ACPR) and benefit from monitoring and exchange services on cutting-edge ESG and climate issues, such as biodiversity.

The CCR Group has decided to hire a dedicated ESG analyst to further develop its internal expertise.

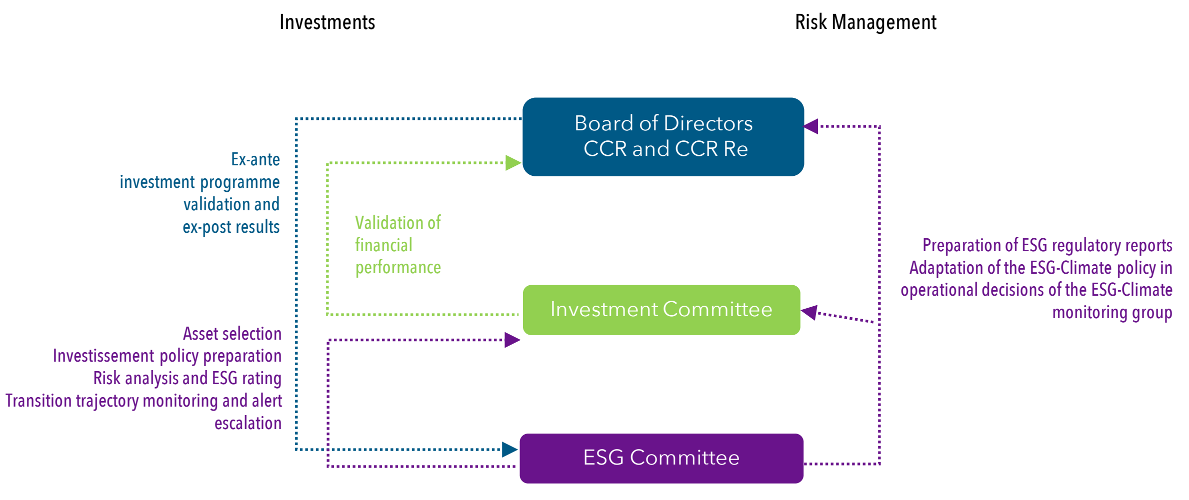
In addition, the Actuarial and Risk Management Department has added climate risk to the risk repository, which will be applied to all the mappings of the Group's operational entities in 2021.

This cross-functional initiative, in line with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) and the Network for Greening the Financial System (NGFS), aims to facilitate the integration of this risk into the day-to-day management decisions taken by all business lines. This structuring and holistic approach aims to engage all entities in the identification, definition and remediation of risks.

4/ Scope 3 is one of the three levels of gas emissions established in the Green House Gas Protocol. It relates to other indirect emissions, such as the extraction of materials purchased by the company to make the product or emissions related to the transport of employees and customers coming to buy the product.

5/ The inclusion of Scope 3 for investments in companies will be mandatory from January 2023, see Final Report on draft Regulatory Technical Standards, ESMA, EBA, EIOPA, February 2021

Figures 3: Governance: CCR ESG-Climate Policy



Operating Charter – ESG Committee

OBJECTIVES

The purpose of this committee is to build the responsible investment policy, draft ESG regulatory reports, define the ESG-investment budgets and engage with management companies…

COMMITTEE CHAIRMAN (DECISION-MAKER)

Chairman: Deputy CIO or CIO in her absence

MISSIONS

- Elaboration of the responsible investment policy
- Design and preparation of ESG regulatory reports
- Investment size proposals by strategy and asset class (Green bonds, climate funds, impact finds, virtuous infrastructure etc.)
- Review of risk analysis results and portfolio scores and ratings to steer the transition trajectory of the portfolios
- Analysis of results for ESG-Climate surveys filled out by management companies
- Engagement effort with management companies
- Feedback from market meetings and ESG forums
- ESG regulatory watch

COMMITTEE SECRETARY (COORDINATOR / FACILITATOR)

Deputy CIO
ESG Analyst

PERMANANENT MEMBERS

1 meeting / 6 months – Duration: 2 hours

MEETING RECIPIENTS

- Deputy CIO
- CIO
- Chief ALM and Risk Officer
- CFO
- CHRO
- Head of Delegated Management
- Head of Direct Management
- ESG Analyst
- General Secretary
- Head of NatCat
- CCR Re Head of Underwritting

PRODUCTION

- ESG and Climate reporting on inventories and flows
- Analyses of ESG and climate scores with past history
- Monitoring of compliance of ESG policy with public committements (ESG-investment allocations, exclusion policy, coal exit, threshold compliance, etc…)
- Analyses of results for surveys fillied out by management companies
- Monitoring of ESG regulatory requirements

DESTINATAIRES DU COMPTE RENDU

Permanent members and Investment Committee experts

2.2 The Responsible Investment Charter

In 2019, the CCR Group adopted a charter to structure its strategy and policy on responsible investment. This charter is based on three pillars, reflecting the group's commitment to the climate and the ESG challenges of the energy, ecological and societal transition:

- Pillar 1: Prevention of transition risk
- Pillar 2: Adaptation to physical climate risk
- Pillar 3: Supporting societal transition

For each of these pillars, the CCR Group has chosen to adopt a dual approach with different action levers:

- on the one hand, to strengthen risk management (physical climate, transition and ESG risks), the measurement of their financial impact on the portfolio and their integration into its investment policy and,
- on the other hand, to contribute to the financing of initiatives that are well positioned to respond to the identified issues.

The CCR Group has chosen a specific number of Sustainable Development Goals (SDGs) in relation to each of the three pillars to position its strategy on the energy, ecological and societal transition and to direct its investments towards the progressive achievement of these goals.

Figure 4: Ambitions and action levers associated with the three pillars

PILLARS	AMBITIONS	SDG
1 Transition risk prevention	• Include risk related to the energy and green transition in all investment-related practices • Contribute to the financing of the low-carbon transition by increasing thematic investments	7, 13
2 Adaptation to physical risks	• Improve the knowledge of the impact of physical risks on portfolios • Get involved with the financing of assets adapting to climate change	13, 11
3 Societal transition support	• Improve ESG impact of activities • Encourage stakeholders to follow the same path	8, 10, 17

Climate - pillar 1:
Prevention of transition risk: Mitigating climate change and supporting the low-carbon transition

The CCR Group integrates the assessment of risks related to the Energy and Ecological Transition in all its investment practices.

The group is making progress year after year in extending its ESG-climate analysis, with the objective of covering 80% of the assets in its portfolio by 2022.

Analysis metrics were developed, and the CCR Group sought to formalise a coal exclusion policy, that will become fully enforced by 2030.

With the aim of supporting long-term objectives, the group has continued its policy of responsible financing for activities that contribute directly to the transition to a low-carbon economy, through green bonds.

These investments contribute to the achievement of Sustainable Development Goal 13 on the fight against climate change and its impacts and Goal 7 on ensuring access to reliable, sustainable and modern energy services at an affordable cost for all.

Climate - pillar 2:
Adaptation to physical climate risk

The analysis and consideration of physical risks lies at the heart of CCR's mission as public reinsurer of natural catastrophes. As the manifestation of these risks is intrinsically linked to climate change, the group is applying its expertise to advance research on modelling the effects of global warming and to contribute to better measuring the exposure of financial and non-financial assets to climate change.

In 2020, the CCR Group also carried out a physical risk analysis of all its directly-owned real estate assets using analysis tools developed by CCR.

The CCR Group aims to extend the quantification of physical risk to its entire portfolio under direct management and then to assets under delegated management (excluding money market assets) from 2022, giving priority to internal modelling for assets located in France.

Finally, the CCR Group continues to participate in the financing of assets working to adapt to climate change, such as thematic funds related to water, pollution control or CatBonds, thus contributing to Sustainable Development Goals 6 on access to clean water and SDG 11 for building sustainable cities and resilient communities.

Climate - pillar 3: Supporting societal transition

Eager to integrate its climate strategy into a global ESG policy that reflects the group's values, the CCR Group continued to measure the exposure of its portfolio to ESG risks in 2020, enabling it to cover more than 60% of its financial assets. This coverage will improve every year to reach 80% by 2022.

To participate in a better consideration of these issues and to support the societal transition, the group continued to invest in thematic bonds (social and sustainability bonds). It is also committed to raising awareness among all its stakeholders, and in particular among management companies, so as to make a positive contribution to the achievement of the three sustainable development goals: 8[6], 10[7] and 17[8].

To strengthen and carry out its responsible strategy, the CCR Group called on the expertise of several service providers (research consultancy, consultancy firms, data providers) in 2020.

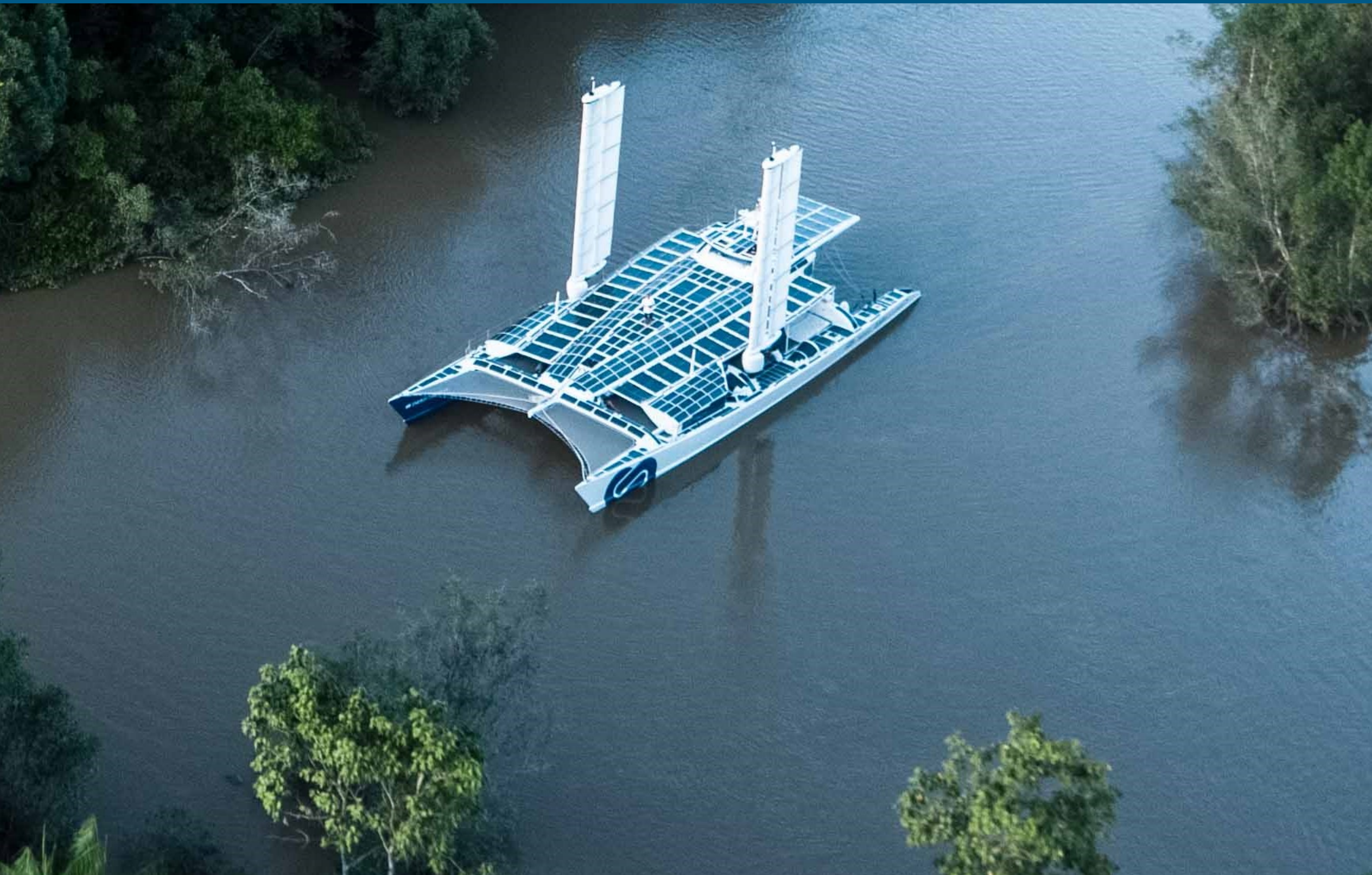
Figure 5: CCR providers for ESG – Climate issues

SUPPLIERS	ACTIONS FOR THE CCR GROUP	PILLAR 1	PILLAR 2	PILLAR 3
Sequantis	Set up of an ESG-Climate platform with look-through analysis of the investment portfolios	✓	✓	✓
Sustainalytics	ESG risk and impact assessement of the porfolio			✓
Carbon 4	Supply of data on carbon footprint and measurement of temperature of the investment portfolio	✓		
Urgewald	Use of GCEI to measure carbon exposure	✓		
EcoAct	Contribution to the drafting of the regulatory report of Art. 173 (VI)	✓	✓	✓
Proxinvest	Survey of the voting policy among portfolio management companies			✓
Ekodev	GHG assessment on real estate assets	✓		
Citron	Platform for the monitoring of enery condumption of the directly-held property assets	✓		

6/ SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
7/ SDG 10: Reduce inequality within and among countries.
8/ SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

3

CCR GROUP'S INVESTMENT POLICY



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Building on the work undertaken in 2019, the CCR Group is continuing to implement its investment policy, in line with the investment charter presented above (2.2).

The CCR Group has enhanced its action plan by formalising objectives that are both ambitious and realistic.

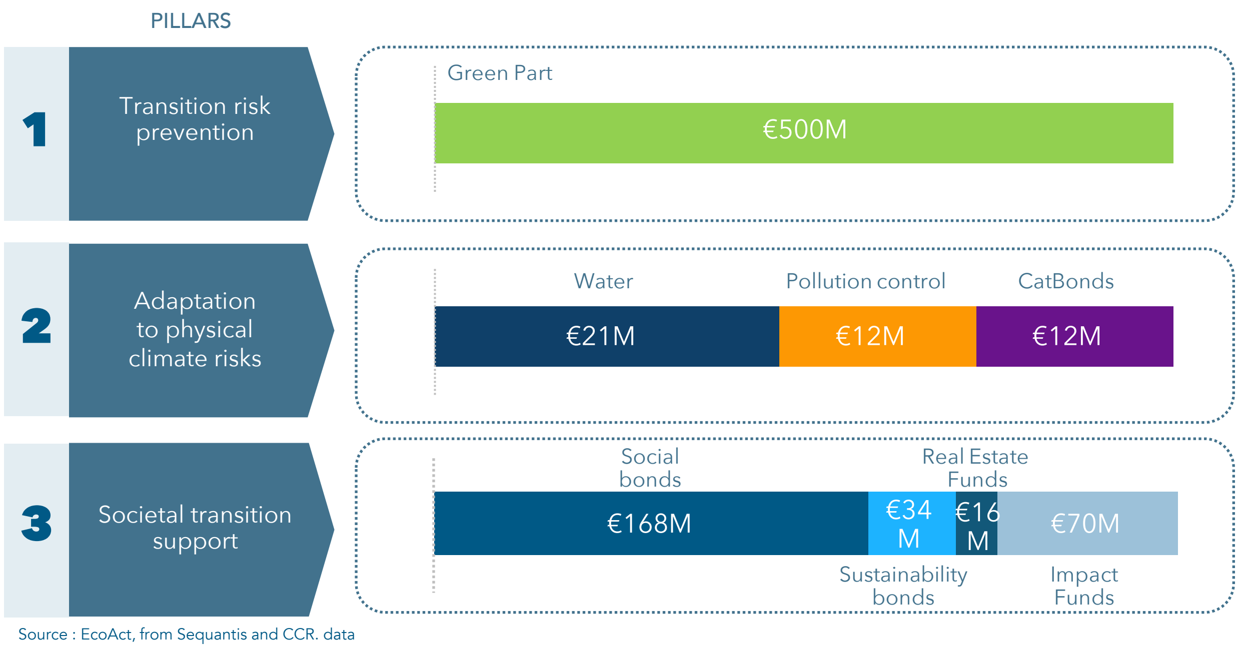
This policy is based on an ESG risk management framework for each of the three pillars and a targeted responsible investment programme, with the objective of generating a strong financial return.

In 2020, the CCR Group almost doubled its contribution to environmental and social transitions from €439m in 2019 to €833m (+89%) in favour of initiatives that directly contribute to the three pillars of its responsible investment policy.

The group reaffirms its commitment to increase this support by at least 20% of its investment flows each year, i.e. around €100m per annum.

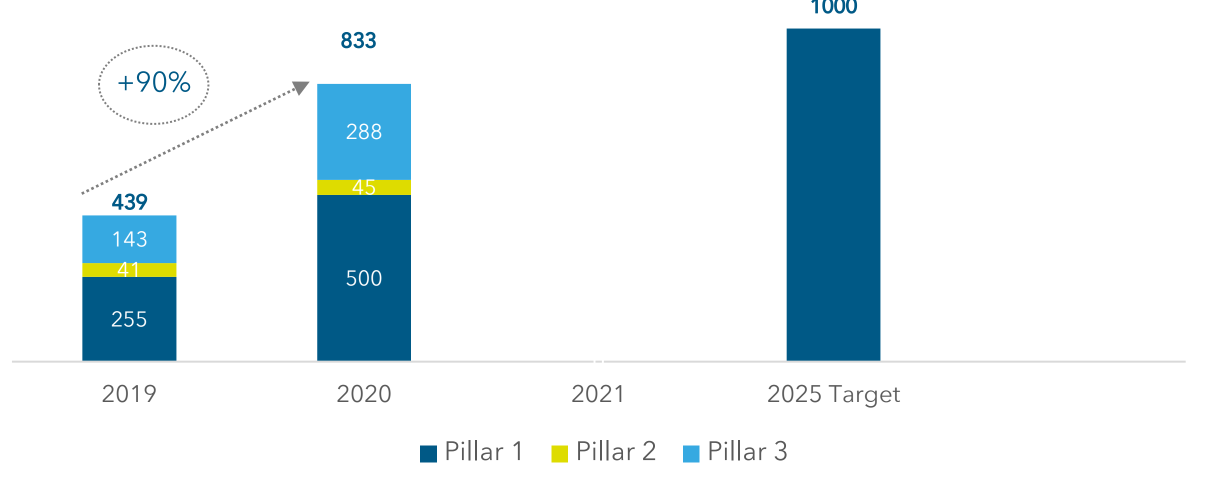
This effort should eventually lead to more than doubling the size of the portfolio of thematic investments associated with each of the three pillars of the Charter.

Figures 6: Overall target to contribute to the long-term financial performance of the CCR Group



Source : EcoAct, from Sequantis and CCR. data

Figure 7: Target and progress of annual investment flows



3.1 Portfolio Structure and Scope of Analysis

As of 31 December 2020, CCR was managing a portfolio of €10.8bn consisting of direct investments in corporate bonds (28.38%), sovereign bonds (16.11%) and direct real estate (7.59%), as well as investments under delegated management through dedicated (6.6%) and collective (27.63%) vehicles, that were listed and unlisted (34.23%). The portfolio also includes money-market investments (13.67%).

The CCR Group's management of assets is primarily driven by liability constraints within the framework of prudent management.

The CCR Group thus aims to apply its policy mainly to the three pillars of its charter and plans to adapt its practices to each asset class and management method with a focus on climate risk analysis (pillars 1 and 2) and ESG risks (pillar 3).

CCR Group's climate and ESG risk analysis is intended to be pragmatic and scalable.

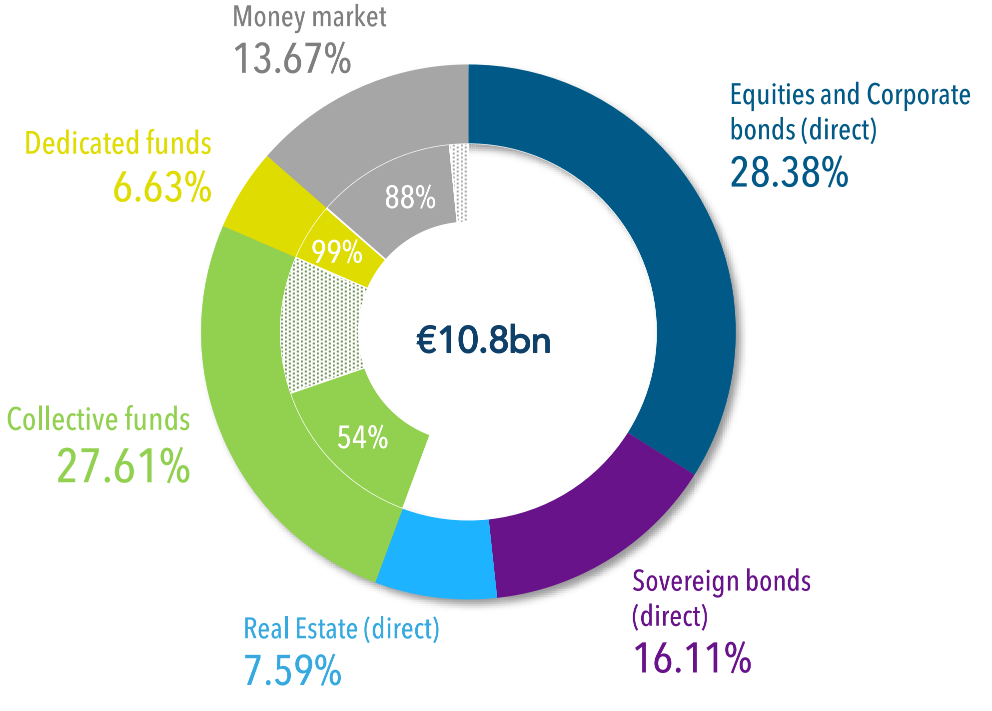
In 2020, all the asset classes of the CCR Group were analysed, 86% of the portfolios were covered.

Overall, almost two-thirds of the value of the Group's portfolio of financial assets was analysed.

The CCR Group aims to extend the scope of these analyses over the next few years by including all delegated management and by adjusting the methodologies to include the most recent developments and thus refine the accuracy and relevance of the results. This development is strongly linked to the emphasis placed on the transparency of assets under delegated management (see figure 8).

In 2020, the ESG-climate risk analysis was carried out on all direct and delegated asset classes and covered 86% of the assets as of 31 December 2020.

Figure 8: Portfolio structure of the CCR Group as of 31/12/2020 by market value, breakdown of funds and money market investments (in % per investment category)



Source: EcoAct, based on CCR Group portfolio data

3.2 Climate Analysis of Financial Assets

3.2.1 Pillar 1: Mitigating climate change and supporting the low-carbon transition

The gradual implementation of a low-carbon business model to limit global warming to below 2°C raises a transition risk for all agents, and more particularly for the financial system, which is at the heart of capital allocation. According to TCFD segmentation, this risk is mainly defined by:

- Legal and regulatory risk linked to the evolution of laws and standards aimed at guiding agents towards a low-carbon economy,
- Technological risk arising from research and technological innovations to improve the energy efficiency of production processes and equipment,
- Market risk resulting from the impact of climate change on supply (scarcity of certain resources) and demand (changes in consumption behaviour),
- Reputation risk linked to changes in the perceptions of all stakeholders, in particular customers and consumers, about the challenges of climate change and the positioning of agents in relation to these challenges.

The CCR Group is gradually integrating these risks into its asset management.

Several methodologies were implemented in 2020 to assess:

- Investment-induced greenhouse gas emissions,
- the alignment of investments with the objectives of the Paris Agreement.

1 / Investment-Induced Greenhouse Gas Emissions

Scope of Analysis

At the end of 2020, CCR Group's total financial assets (excluding direct real estate) totalled EUR 9.985 billion in market value. The climate analysis carried out this year was extended to all types of financial investments, including money-market assets, although coverage rates varied depending on the asset classes.

Overall, about 60% of the financial investments were covered by the study, i.e. nearly EUR 6 billion. The coverage rate depends first of all on the availability of financial data at the level of each company.

For funds, the coverage rate is the result of look-through transparency, i.e. the ability to trace back to the detailed positions of the ultimate issuers.

Secondly, measuring climate indicators involves obtaining climate reporting data from issuers, which is generally more challenging for non-listed companies. This last point explains in particular the 72% coverage rate of directly-held shares and corporate bonds.

Methodology

To measure the portfolio's carbon footprint, the CCR Group chose to rely on Sequantis, which uses the methodology and indicators calculated by the firm Carbon4 Finance.

By integrating Scope 3 emissions[9] for the first time, which are prevalent for most business sectors, the CCR Group now has a comprehensive picture of the carbon performance of its portfolio. This study, carried out on the three categories of emissions defined by the GHG Protocol, comes in preparation for the regulatory changes planned by SFDR for 2023.

The three categories of emissions in carbon accounting

The main international standards and methodologies to account for greenhouse gas emissions define three categories known as 'scopes':

- Scope 1 refers to the direct emissions from permanent or temporary facilities from organisation-owned or controlled sources, such as emissions from gas and fuel consumption in buildings.
- Scope 2 refers to indirect emissions associated with the production of electricity, heat or steam imported for the organisation's activities.
- Scope 3 refers to other emissions indirectly induced by activities throughout the organisation's (upstream and downstream) value chain, such as the purchase of raw materials, services or other products, employee travel, and the upstream and downstream transport of goods.

9/ Carbon4 Finance's methodology takes into account Scope 3 upstream and downstream emissions where they are of high relevance.

The analysis of the portfolio's carbon performance was performed through a bottom-up approach, with each asset being analysed individually before the results were consolidated. This method makes it possible to monitor results at the level of the portfolio and of each asset class, and to analyse in detail the contribution of a particular issuer or a given sector.

The impact of investments on climate change is assessed through two indicators: i) induced emissions (Scopes 1, 2, 3), and ii) saved emissions.

The induced emissions, expressed in tonnes of CO_2e (tCO_2e), are calculated from the greenhouse gas emissions of the issuers in the portfolio - be they companies, states, regions, public or supranational entities - multiplied by an allocation factor. For listed companies, this factor[10] is the amount of the investment divided by the value of the company[11]. For unlisted companies, public entities or states, the factor used is the amount of the investment divided by the debt of the entity[12]. The carbon efficiency of the investment is then calculated, expressed in tCO_2e/M€ invested, by dividing the emissions induced by the amount of the investment[13]. This approach is in line with the main standards, such as PCAF[14], and the European regulation on sustainable finance (SFDR). It should be noted that a restatement is made during consolidation at portfolio-level to limit double counting as much as possible.

The saved emissions are calculated[15] by adding the avoided emissions and the reduced emissions. Avoided emissions are the gain between the emitter's emissions and the emissions associated with a sector-based reference scenario. Reduced emissions refer to greenhouse gas emission gains resulting from improvements in the efficiency of a production process, leading to an actual decrease in the issuer's carbon intensity over the last five years. This indicator identifies those issuers that are greater contributors to the low-carbon transition.

This new approach used in 2020 differs significantly from the Sustainalytics methodology that was used for the carbon analysis carried out on investments in 2019. The method was based on a carbon intensity indicator for business operations on Scopes 1-2, expressed in tCO_2e/M€ of revenue. The results obtained with these two approaches cannot be directly compared due to their inherent differences.

Data Collection and Sources Used

Carbon4 Finance's analysis is based on various types of data:

- Year-end investissement data provided by the CCR Group,
- Financial data, from the data providers Refinitiv and Factset,
- Operational data specific to each issuer (such as climate, production and sales data), taken from public reports or from modelling carried out by Carbon4 Finance in the absence of available information,
- Physical emission factors from independent authorities: AIE, ADEME, FAOSTAT, CNUCED, FCBA.

10/ $Induced\ emissions_i = \frac{Market\ value\ investment_i}{Enterprise\ Value_i}\ x\ GHG\ emissions\ of\ company_i$

11/ The value of the company at the end of the year is defined here as the sum of its market capitalisation and its debt, without deducting any cash or cash equivalents

12/ $Induced\ emissions_i = \frac{Market\ value\ investment_i}{Debt\ of entity_i}\ x\ GHG\ emissions\ of entity_i$

13/ $Carbon\ efficiency_i = \frac{Induced\ emissions_i}{Value\ of\ investment_i}$

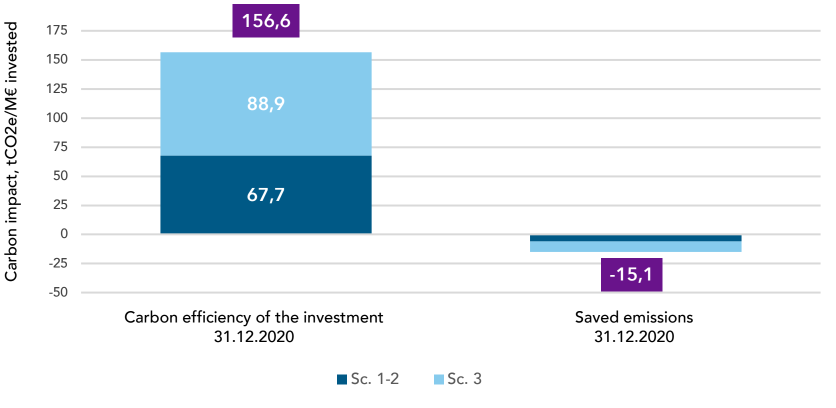
14/ PCAF (2020). "The Global GHG Accounting and Reporting Standard for the Financial Industry. First edition."

15/ Note that this indicator is not calculated for States.

Results

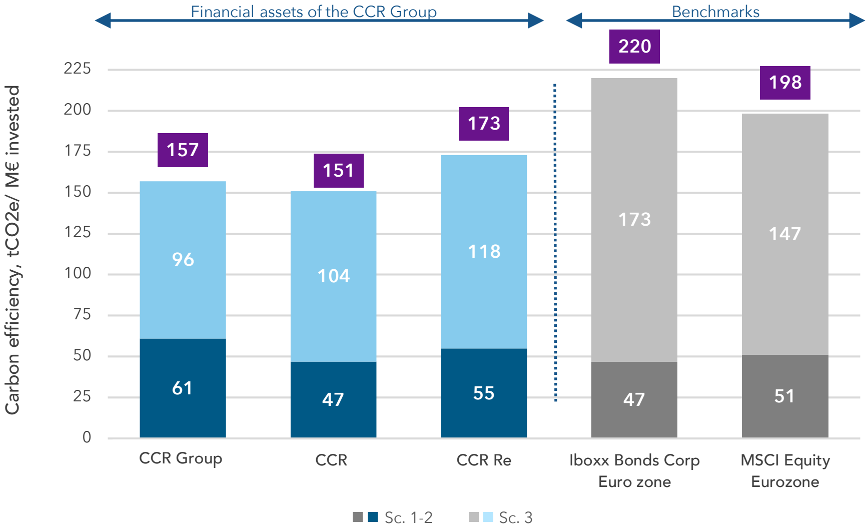
- In 2020, the carbon efficiency of the portfolio of financial assets was 156.6 tCO_2e/M€ invested, i.e. a total volume of induced emissions of around 1.074 Mt CO_2e, broken down into 0.4 Mt CO_2e for Scopes 1 and 2, and 0.65 Mt CO_2e for Scope 3.
- It should be noted that Scope 3 indirect emissions account for almost two-thirds of this impact, which demonstrates the relevance of including these emissions in the analysis.
- The analysis of the performance between the different asset classes shows many differences.
- First, we observe a lower impact for sovereign bonds (77 tCO_2e/M€) which are slightly higher than the benchmark (Index Gov Bonds Eurozone 01-03).
- The equity and corporate bond portfolio performs slightly better than the managed funds (180 tCO_2e/M€ vs.186 tCO_2e/M€). These portfolios outperform the Eurozone equity and bond benchmarks.

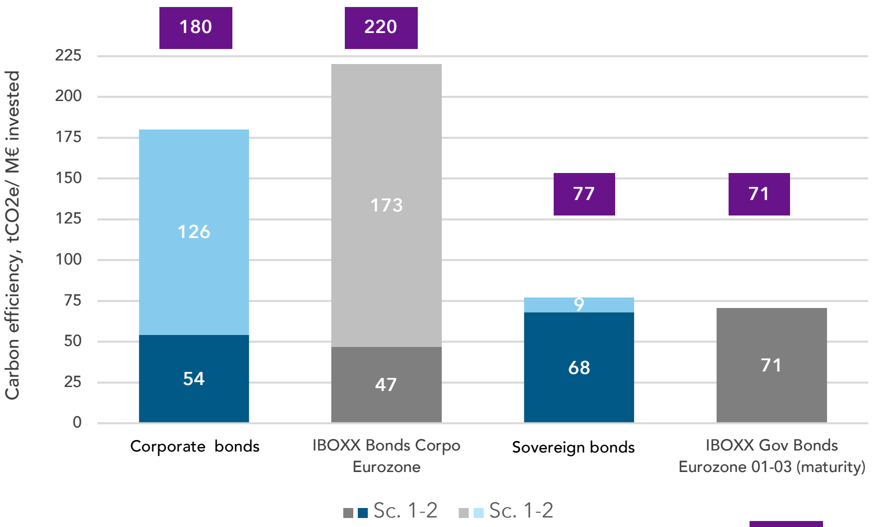
Figures 9: 2020 Carbon efficiency of CCR Group's financial assets in comparaison to the benchmarks, in tCO_2 e/ M€ invested (market value as of 31/12/2020)

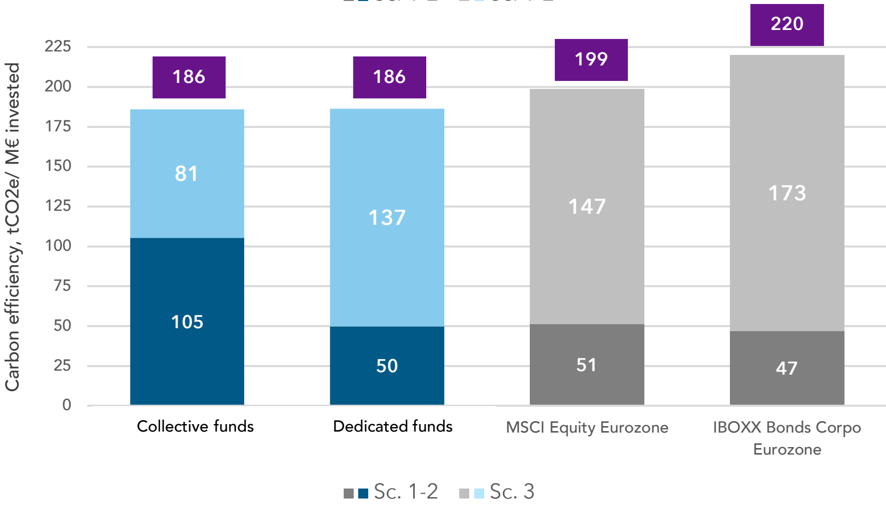


Source: EcoAct, based on Carbon4 Finance analysis

Figures 9: 2020 Carbon efficiency of CCR Group's financial assets in comparaison to the benchmarks, in tCO_2 e/ M€ invested (market value as of 31/12/2020)



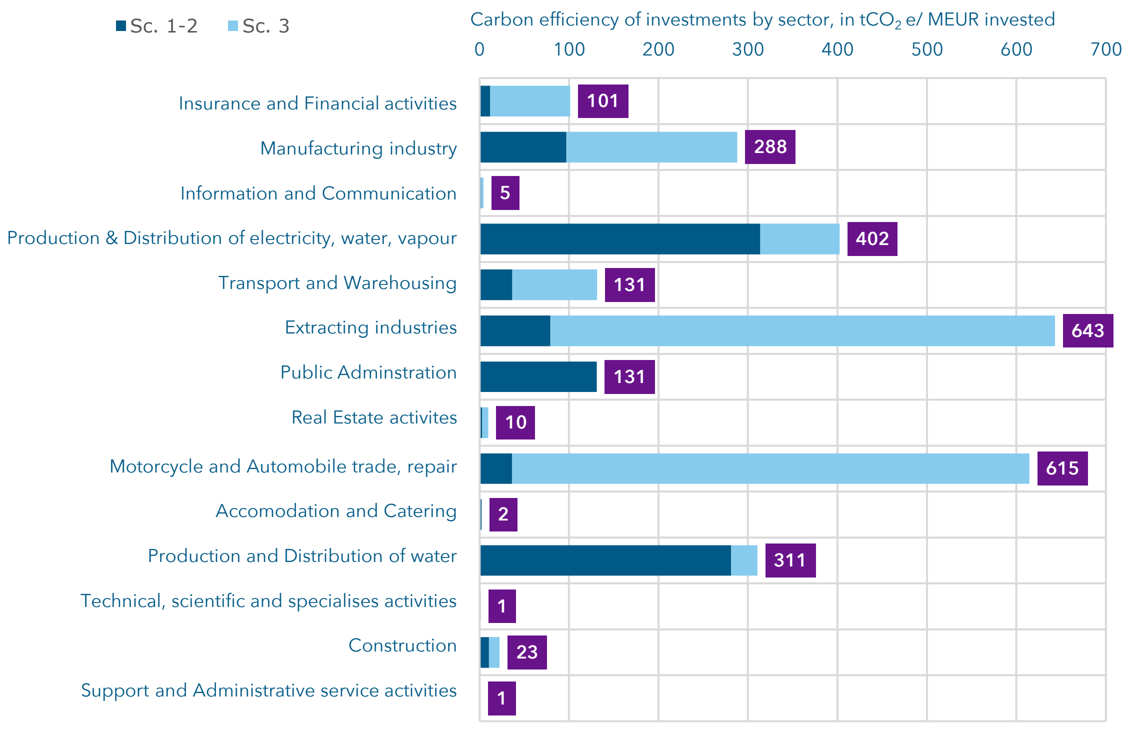




Source: EcoAct, based on Carbon4 Finance analysis

A sector-based analysis was carried out on the corporate bond portfolio managed directly by the CCR Group. Several lessons can be drawn from it. Firstly, there are significant differences in the carbon efficiency of the sectors in the portfolio, with several carbon-intensive sectors of concern, like mining, transport, water and electricity distribution, and the industrial sector. Secondly, the relevance of integrating Scope 3 (in green in the diagram below) can again be highlighted, in particular for the financial, transport and mining sectors.

Figure 10: Carbon efficiency of investments by sector, in tCO_2e/ MEUR



Source: EcoAct based on Carbon4 Finance analysis

Main findings

To manage and reduce this footprint, the CCR Group has developed tools and will rely on a more detailed analysis of the contribution of the various sectors and the issuers that make them up, in particular through the partnership established with Sequantis.

2 / The Alignment of Financial Assets with Long-Term Climate Targets

The concept of 'alignment' emerged in response to the targets of the 2015 Paris Agreement, which set a global warming target well below 2°C above pre-industrial levels. Although there is no formal definition, the literature tends to define "alignment" as a multidimensional process, aiming to assess the alignment of all activities of the financial institution[16].

In 2020, the CCR Group's climate analysis was enriched by the addition of a portfolio temperature indicator, which measures the gap between the carbon performance of its investments and the performance expected in a 2°C scenario. This indicator, which will enable the Group to monitor its decarbonisation trajectory, is an important step in the Group's alignment process.

Scope of Analysis

The analysis was carried out on all of the CCR Group's financial assets (excluding direct real estate), with the same coverage rates as those described in the section dedicated to emissions induced by investments, i.e. 60% of portfolios.

Methodology

This analysis is based on the Carbon Impact Analytics methodology developed by Carbon4 Finance. Investment alignment is determined here by positioning investments on an average global rating scale of the underlying constituents, calibrated with two benchmarks representing the 2°C[17.] and 3.5°C "Business as Usual"[18.] trajectories. A curve, using these two references, starting at +1.5°C and capped at +6°C allows us to assess the temperature rise of the investments through its overall average score.

Data Collection and Sources Used

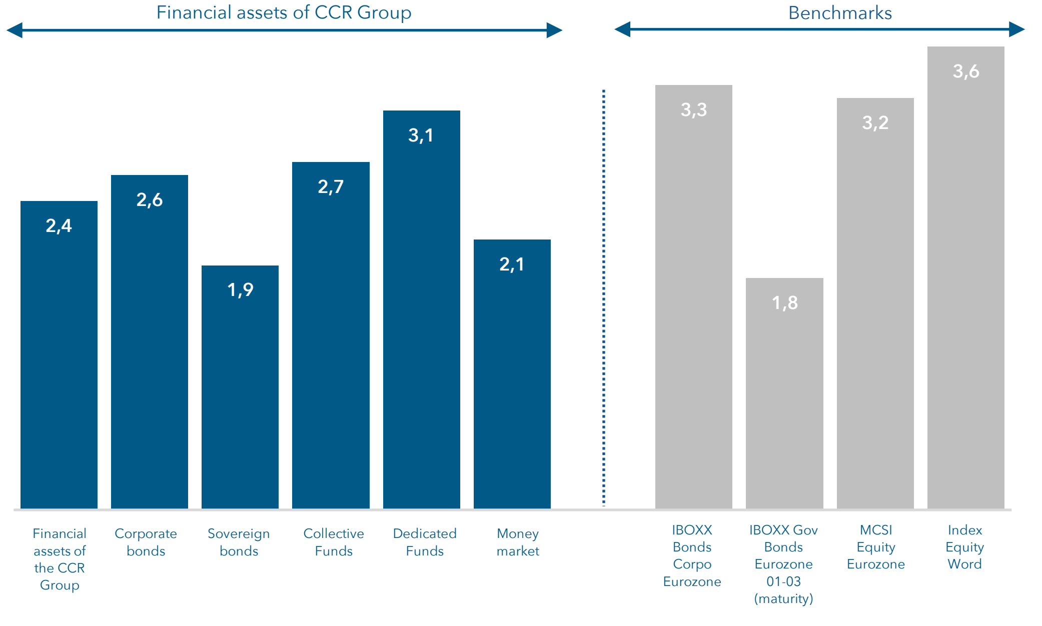
The approach is based on the same data sources as described in the section on investment-induced carbon emissions.

16/ See "A Framework for Alignment with the Paris Agreement: Why, What and How for Financial Institutions?", I4CE, Sept. 2019
17/ The Euronext Low Carbon 100 index represents the 2°C trajectory. It is specifically designed to reflect the investment needs to reach a 2°C world based on the IEA outlook.
18/ The 3,5°C benchmark is the entire Carbon Impact Analytics database, which is considered a proxy for the global economy, currently on a +3,5°C warming trajectory.

Results

In 2020, the portfolio of financial assets was in line with a 2.4°C warming trajectory, below the main Eurozone equity and bond benchmarks which are above 3°C.

Figure 11: Temperature of CCR Group's assets, and comparison with benchmarks as of 31/12/2020



Source : EcoAct based on Carbon4 data

The introduction of this new portfolio temperature indicator, in addition to induced and saved emissions, provides the CCR Group with a dynamic and comprehensive view of the carbon performance of its financial investments.

Although the results show a better carbon performance of the CCR Group's assets compared to the main European indices, they are still above the 2°C reference scenario. The Group intends to complete this study with a more detailed analysis, focusing on the main contributors, with a view to setting targets for the next few years to align portfolios with a trajectory under 2°C of warming.

3 / Exclusion Policy

The CCR Group makes several types of exclusions in its investment choices, in addition to the application of regulatory exclusions, the CCR Group decided to include the exclusion of certain activities:

Regulatory exclusions

The CCR Group does not invest in activities or companies and states that do not comply with certain international conventions, and namely companiesthat do not abide by the principles of the International Labour Organisation (ILO) or companies that are involved in controversial weapons, tobacco and states under embargo.

Sector-based exclusions

In addition to strengthening communication with its stakeholders, both on the assets and liabilities side, the CCR Group this year sought to reassert its decision to exit from coal by formalising a coal policy.

CCR's Coal Policy

To measure the exposure of its investments to coal-related activities, CCR Group used this year the GCEL - Global Coal Exit List - data as published by the NGO Urgewald, which is the most comprehensive database currently available on companies involved in the coal value chain (exploration, drilling, mining, transport and logistics, engineering, trading, construction, maintenance, infrastructure, power generation etc.), i.e. 935 groups and more than 1,800 subsidiaries and joint ventures.

However, CCR is aware that this data does not cover companies involved in the coking coal (or "metallurgical coal") value chain or the use of coal for other purposes such as the production of cement or steel. The group is nonetheless keen to improve the measurement of its exposure once sufficiently robust measurement methodologies will be in place.

According to the methodology developed by Urgewald, all companies on its GCEL list meet at least one of the following three criteria:

- The share of their revenue or power generation from coal is equal to or greater than 20% (relative criterion);
- They produce at least 10 million tonnes of coal per year or operate coal-fired power plants with a capacity of more than 5GW (absolute criterion); absolu) ;
- They are developing new mining, power generation or infrastructure projects related to the coal value chain (expansion criterion).

Thus, in 2020, according to this methodology, companies related to the coal sector (i.e. power generation, mining activities, services) represent just over 0.1% of the financial portfolio of CCR and CCR Re. If we only focus on the coal share in the revenues of these companies, i.e. only the share of business relating to the thermal coal value chain, coal only represents 0.03% of CCR's financial portfolios.

In 2019, the CCR Group decided to gradually withdraw from the most carbon-intensive sectors in its directly managed bond portfolio, in particular, from issuers for which their coal-related activity exceeds the threshold of 10% of their revenues.

This year, the CCR Group is strengthening this commitment with the objective of definitively exiting thermal coal by 2030 for its entire investment portfolio, regardless of the management method (direct or delegated management).

On the asset side, most of CCR's coal exposure comes from indirect investment, and the group will continue its policy of dialogue to encourage partner funds and issuers to progressively reduce their coal-related activities in accordance with the recommendations of NGOs identified by the French Insurance Federation (FFA) that are deemed relevant to the profession.

In addition to this 2030 target, the CCR Group will make the following commitments:

- As of this year, the CCR Group will no longer invest in companies developing projects to increase coal production capacity (mines, power plants and infrastructure) ;
- As of this year, the CCR Group will no longer invest in companies that are more than 10% coal-fired and are not committed to a greenhouse gas reduction trajectory that is consistent with the Paris Agreement's goal of limiting global warming to below 1.5°C;
- From this year until 2025, the group will no longer invest in companies with more than 10 GW of installed coal-fired power capacity. From 2026, this threshold will be lowered to 5 GW.

These thresholds are both ambitious and realistic as they take into account the commitments of energy companies to reduce their exposure to coal and align their activities with a GHG emission reduction trajectory compatible with the targets of the Paris Agreement.

On the liabilities side, while the CCR Group does not have equivalent methodologies for measuring coal exposure, it remains attentive to its exposure in the context of transition risk prevention.

As a public reinsurer, CCR has mining concessions and the four only coal-fired power plants still operating in France in its portfolio. Its timetable for a net exit from coal depends on public policy.

Regarding CCR Re's activities, the company aims to strengthen its tools regarding coal exposure measurement as part of its underwriting policy, and will therefore ask its partners to obtain more information on the coal exposure of contracts and the envisaged exit policy.

3.2.2 Pillar 2: Adapting to physical climate risks and supporting the transition to climate change resilience

The CCR Group's investment portfolio is exposed to physical climate risks through the assets held directly in the portfolio and through those financed indirectly via investments in companies. Exposure to physical risks means exposure to damage caused by more or less extreme weather and climate phenomena (heat waves, cyclones, floods, drought, etc.). The CCR Group may be indirectly exposed to these risks through the exposure of the companies financed by its investments. Depending on their geographical location, these companies may be subject to short-term extreme climate events (e.g. storms) or medium- to long-term chronic trends (e.g. sea level rise).

The CCR Group has recognised expertise in modelling natural catastrophe risks in mainland France and Overseas France for the management of insurance risks on the liabilities side, as highlighted in Part 4 of this report.

In particular, the CCR Group contributes to the advancement of research on climate risks, including physical risks, through research partnerships with financial market regulators, universities and research institutions, as well as through the regular publication of internal studies. This commitment to climate research is described in further detail in Part 5 of the report.

As announced in last year's report, in 2020, the CCR Group focused its work on the analysis of physical risks within its directly managed property investments. The results of this study are presented in Part 3.5 of this report (see ESG-climate Policy for Real Estate Assets).

The physical risks on the portfolio of financial assets will be the subject of specific analyses from FY2021 onwards, following on from last year's announcements.

3.3 Thematic Investments

Thematic investments play a major role in the CCR Group's responsible commitment and meet each of the three pillars of the Group's Responsible Charter. Overall, these investments have increased significantly in the CCR Group's assets and reflect the strong involvement of the fund management teams in targeting its investments. To address the theme of mitigating climate change and supporting the low-carbon transition, the group is putting an emphasis on its investments in green bonds.

To address the adaptation to physical climate risk, investments in certain "water" or "pollution control" impact funds are good drivers.

Finally, the 3rd pillar is fed by investments linked to societal transition: in this respect we will find investments in Social & Sustainability bonds or impact funds directly linked to this theme.

3.3.1 Pillar 1: Mitigating climate change and supporting the low-carbon transition

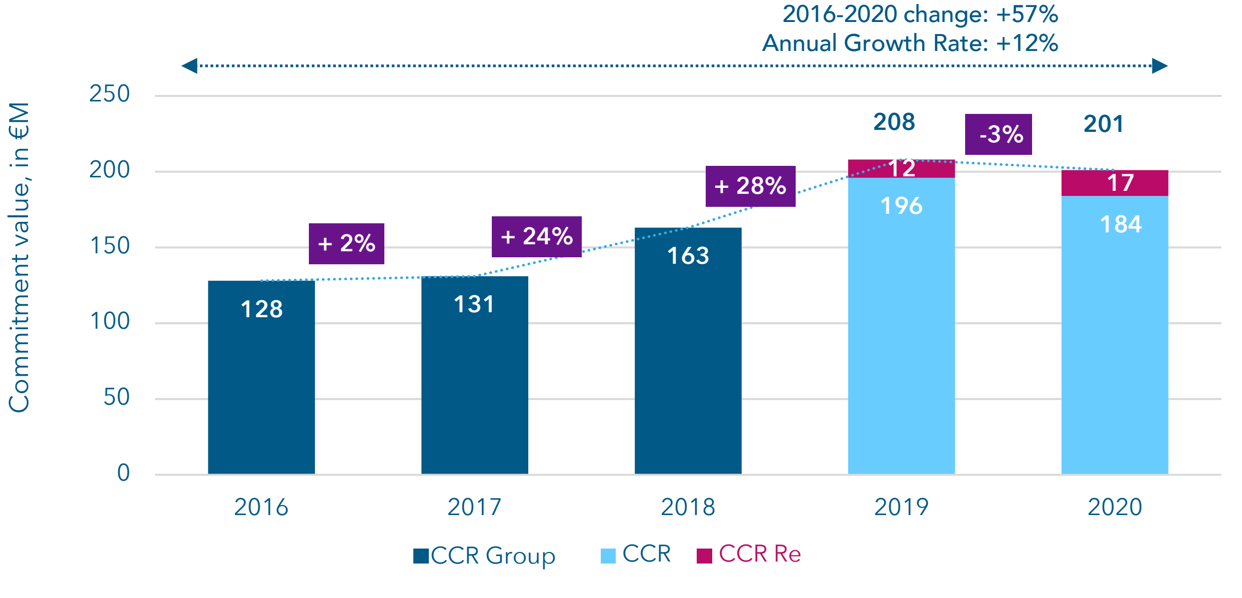
The CCR Group is participating in the market momentum with an outstanding amount in green bonds that has increased by 57% since 2016 (at end-2020, the outstanding amount in green bonds represented 6.7% of all directly-owned bonds). The selection of Green Bonds is based on several criteria:

- A filter based on Green Bond Principles (GBP),
- Regular communication with specialist analysts,
- Participation in as many roadshows as possible,
- Assessment of the relevance of projects and monitoring of the progress of their funding,
- Track record of issuers: acquired reputation, analysis of past achievements, quality of reporting (frequency, relevance, completeness of key data),
- Monitoring and analysis of all annual reports published by issuers in relation to their green bond issues.

In addition, the fund managers monitor green bond investments on a daily basis through a file that allows them to forecast maturing bonds, so that they can reinvest these maturities to maintain or increase the rate of investment in green bonds, social bonds and sustainable bonds.

Figure 12: CCR Group's investment in green bonds, in €M (commitment value)

The Group's overall green bond portfolio decreased slightly, while that of CCR Re increased.



Source: CCR Group -Addition in 2020 of Trust Fund (Green Bond from Canada).

Figure 13: Investments in Socially Responsible and Sustainable Bonds

CCR : SRI BONDS (million € in nominal)					
	2019		2020		Variation
	Amounts	% of assets (nominal / cost price)	Amounts	% of assets (nominal / cost price)	
ESG	81	1,1%	170	2,2%	**+109%**
Climat	196	2,7%	184	2,4%	**-6%**
Total	277	3,8%	354	4,7%	**+28%**

CCR Re : SRI BONDS (million € in nominal)					
	2019		2020		Variation
	Amounts	% of assets (nominal / cost price)	Amounts	% of assets (nominal / cost price)	
ESG	3	0,2%	33	1,3%	**+923%**
Climat	12	0,6%	17	0,7%	**+47%**
Total	15	0,7%	51	2,0%	**+237%**

3.3.2 Pillar 2: Adapting to physical climate risks and supporting the transition to climate change resilience

In 2020, the CCR Group had €45 million of its portfolio in collective funds linked to physical risk adaptation themes, up 10% in market value compared to 2019:

- €21M in water-related funds,
- €12M in pollution control funds,
- €12M in CatBond funds.

The theme of water has been present in the portfolio for over 10 years via a thematic equity fund. This fund, which incorporates an ESG approach in its investment process, invests in companies that market products or services in the field of water supply, water treatment, technology and environmental services related to water.

CCR also invests in funds for the pollution control of industrial sites and the rehabilitation of urban wastelands in Europe. The aim is to limit the environmental and health risks that may emerge from these sites and to ensure the recycling of building land to fight against urban sprawl and to reallocate land in areas suffering from structural shortage of building land.

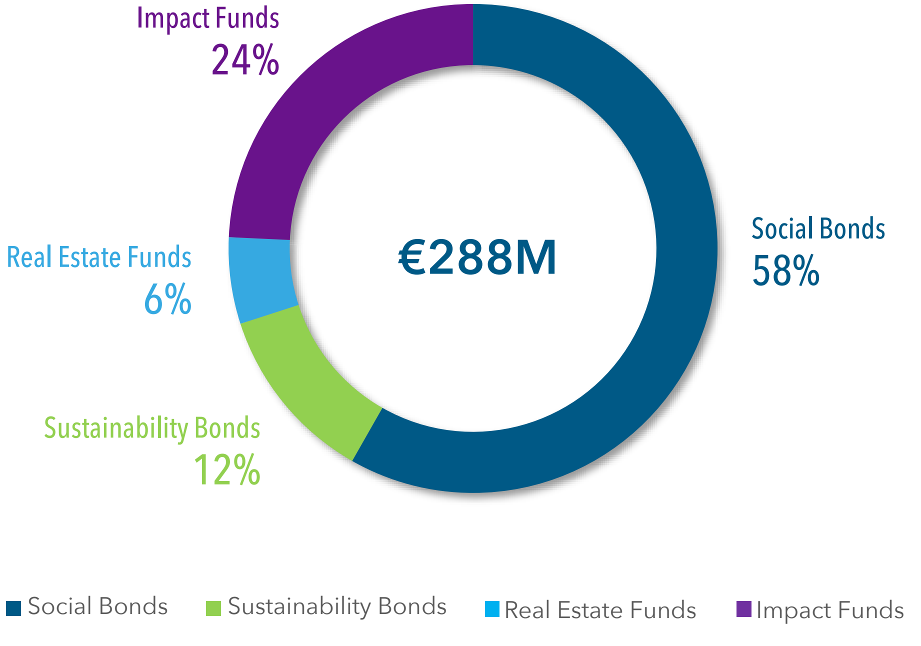
CCR Group also participates in climate change adaptation strategies by investing in financial products for natural catastrophe coverage (Insurance Linked Securities or ILS). By providing capacity to absorb the burden of natural catastrophes, these investments contribute to the protection of insurers and the recovery of the economy in the event of a major disaster.

3.3.3 Pillar 3: Supporting societal transition

Investments associated with the theme of supporting societal transition have doubled (€141M in 2019), amounting to €288M and break down over several asset classes:

- €202M in bonds, including :
  - €168M in Social Bonds (financing of projects promoting access to household essentials for disadvantaged populations and financing of actions to fight against poverty),
  - €34M in Sustainability Bonds (financing of projects contributing to the achievement of sustainable development objectives),
- €16,5M invested in real estate funds focused on social themes (senior residences),
- €70M invested in funds dedicated to themes such as microfinance, long-term corporate finance and economic development in developing countries.

Figure 14: Investment related to the theme of societal support in market value



3.4 ESG Policy

The management of climate risks, both physical and transitional, and the implementation of thematic investment programmes aimed at strengthening the resilience of assets and shifting the economy towards a lower carbon intensity will only be effective if populations and territories are involved and supported in this transition effort. For this reason, the CCR Group has made supporting societal transition the third pillar of its responsible investment policy.

The approach for this third pillar consists in monitoring the ESG scores of the issuers in the portfolio and an investment programme oriented towards bonds or funds focusing on societal themes, independently of the expertise and consultancy activities that the public reinsurer also provides to the Ministry of Ecology, the local authorities and specialised public institutions [in France].

1/ ESG Analysis

Scope of ESG Analysis for Financial Assets

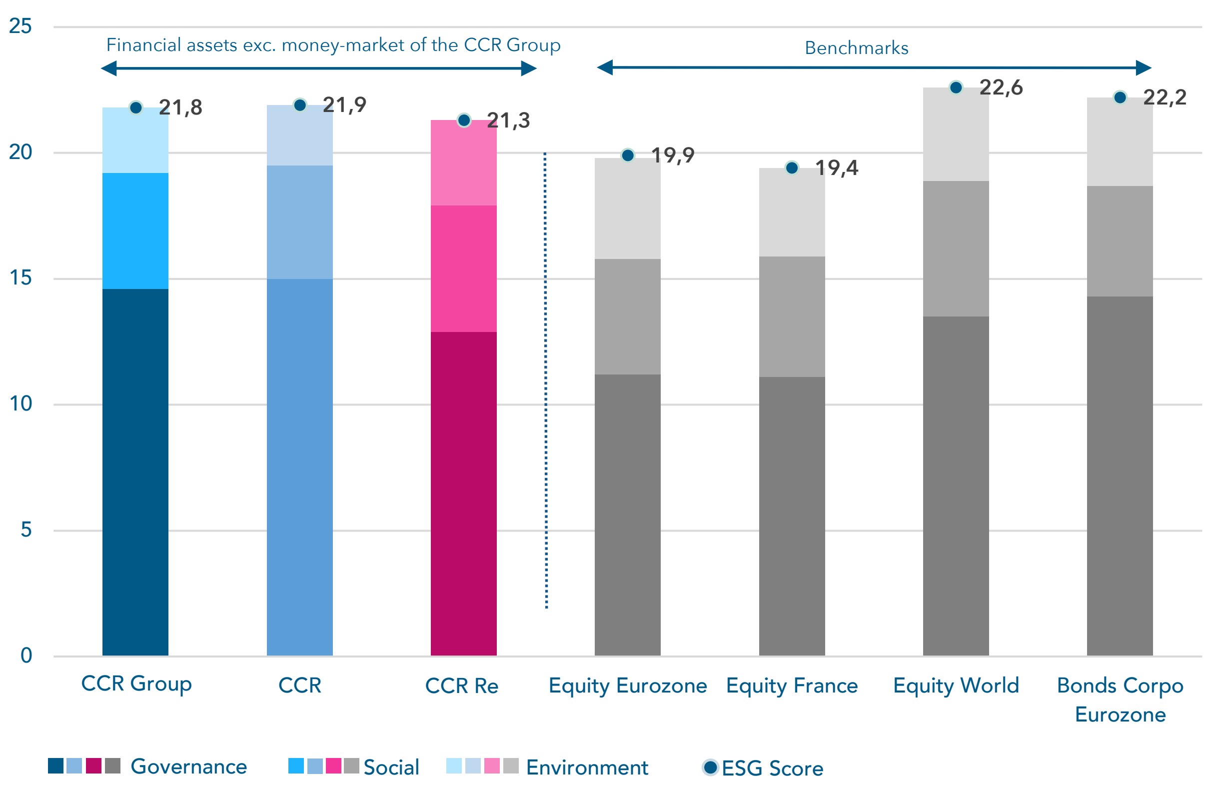
ESG analysis covers financial portfolios excluding directly-held real estate. In 2020, the overall coverage rate of ESG analysis reached 62% of financial assets.

Risk Analysis Methodology and Results

ESG risk analysis is based on Sustainalytics' ESG Risk Rating, which identifies material ESG issues that pose the greatest risk to asset value. Issuer ratings are based on two aspects:

- Issuers' exposure to ESG risks faced by a company;
- The risk management systems put in place by these issuers: we sometimes observe differences between issuers: for some there is a breakdown between the different ESG scores but for others, only the final score is available.

Figure 15: Comparison of the CCR Group's ESG score with benchmarks as of 31/12/2020, scope of financial assets



Source: EcoAct based on Sustainalytics data, Sequantis platform

The ESG risk of the non money-market portfolio is moderate with a score of 21.8/100 (a score closer to 100 indicates an increased risk), below the IBOXX EUR Corporate indices (22.2) and slightly above the Equity Eurozone index (19.9).

This score is mainly the result of governance risk, with environmental and social risks being low. Governance risk emerges mainly from the financial sector given its significant weight in the analysed portfolio (36.6%).

Nevertheless, it is important to note that despite an increase in investments in the financial sector, the ESG Governance Score has fallen significantly, which is an indication of the importance of considering scores during the stock-picking process.

Figure 16: ESG risk of the sectors presented in the portfolio of the CCR Group as of 31/12/2020, scope covered by ESG analysis

Scope	Weight of analysed portfolio	ESG Score
Financial Assets of the CCR Group		21,7
Finance	36,6%	23,9
Public Sector	19,8%	17,0
Industry	7,6%	22,3
Discretionary Consumer Goods	6,2%	19,6
Consumer Staples	5,9%	22,2
Utilities (water and electricity)	5,1%	24,0
Healthcare	4,9%	24,4
Energy	4,2%	32,6
Information Technology	4,0%	17,9
Materials	2,7%	20,9
Telecommunication	1,9%	19,2
Real Estate	1,2%	10,9

Source : EcoAct based on Sustainalytics data, Sequantis platform

Figure 17: Breakdown of exposure according to ESG scores of CCR Group's financial assets as of 31/12/2020, scope covered by ESG analysis

ESG Score	Weight of analysed portfolio
0-5	0,0%
5-10	3,0%
10-15	12,8%
15-20	31,2%
20-25	22,7%
25-30	22,0%
30-35	5,1%
35-40	1,9%
40-45	0,3%
45-50	0,0%
>50	0,8%

Source: EcoAct based on Sustainalytics data, Sequantis platform

The distribution of scores in the chart above shows that almost 92% of investments are made in the first three distribution deciles.

Special attention is given to investments in the "red zone" above '40'. These issuers are included in the list of highly controversial issuers (level 4-5 in the Sustainalytics methodology).

CCR Group will define a process for dealing with these issuers, and depending on the controversy may cease further investments in the issuer in question, or even sell its positions if market conditions allow it, or may continue to develop a constructive dialogue with the issuer and support it over time.

2/ CCR Group's Responsible Commitment Policy

Direct Management

The direct fund management teams regularly attend roadshows organised by issuers to foster communication with financial and institutional investors.

These events provide an opportunity to ask issuers about their strategies for future green bond issuances, key investment milestones, published reports and investment principles, and to determine their consistency with the Group's responsible investment principles.

Each year, the teams also analyse the ESG reports published by the issuers in the portfolio to monitor the progress of the projects implemented and to ensure that the internal assessment reports are properly updated.

ESG criteria are taken into account during the investment process for directly managed assets. The fund managers always consider ESG scores and qualitative analyses from Moody's, Standard & Poor's and Sequantis. They also check the issuer controversy risk by using the Dow Jones tool. Issuers are selected on the basis of the best scores in Sequantis' Best-in-Class methodology. This score will, at the very least, maintain the average ESG Score of the portfolio before investment.

The same applies to the consideration of the carbon footprint of the investment, where possible during the selection process, the manager checks the impact of the new investment on the average temperature of the portfolio.

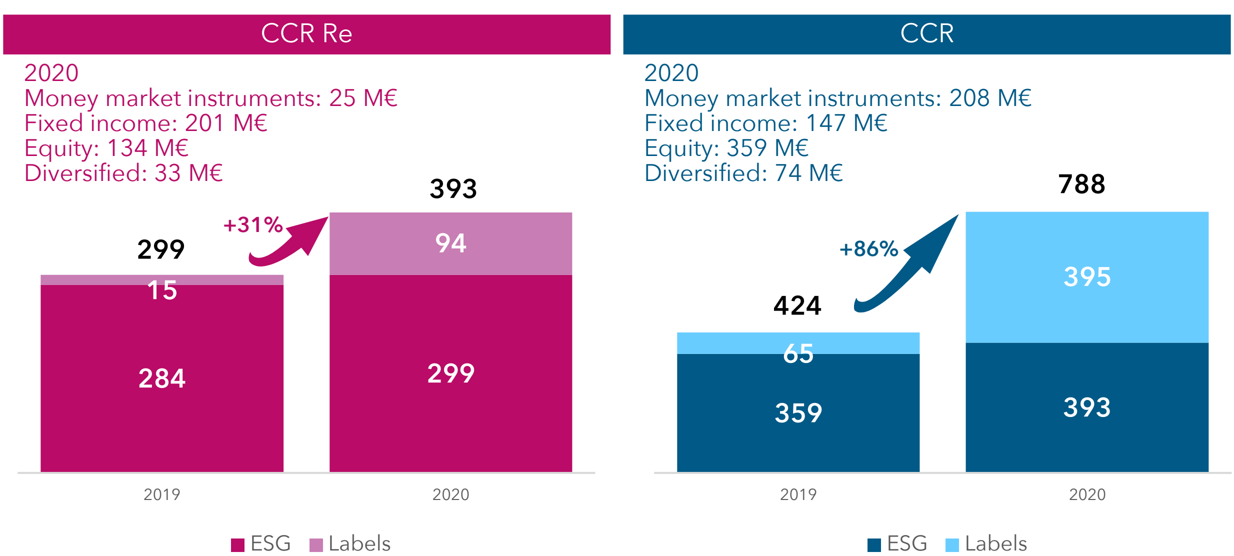
Delegated Management

In 2020, the CCR Group significantly extended the scope of climate and ESG analysis of collective funds through look-through analysis.

This coverage rate reached 61.6% in 2020.

CCR's delegated management teams continuously monitor the inclusion of ESG criteria by its fund managers in the conduct of their business and the quality of their methodology. ESG Climate issues are addressed during the selection process of external funds to understand to what extent and in what way the investment processes integrate this issue.

Table 18: Evolution of investments in ESG labelled or ESG policy funds and asset class breakdown



Source: CCR Group

CCR Group encourages its partners to roll-out ESG-Climate reporting for their funds. Partner companies in the portfolios should also have active voting and shareholder dialogue policies.

All dedicated fund management companies are signatories to the PRI, have formalised a responsible investment policy and have a team dedicated to ESG analysis. They have also implemented internal ESG integration models to assess the ESG performance of their portfolios, have a voting policy and maintain regular shareholder dialogue.

However, sector-based exclusion practices vary and few management companies have already integrated measurements of climate risk exposure into their portfolios.

As part of the ongoing dialogue with partner management companies and the renewal of management agreements, the CCR Group strives to gradually draft in the ESG commitments of management companies into management agreements. In the future, CCR Group's objective will be to align as much as possible the ESG practices of its partner management companies with the principles of its responsible investment charter.

The look-through risk analyses carried out on the portfolio under delegated management make it possible to identify areas for improvement in terms of ESG-Climate. The CCR Group's approach deliberately retains a fundamental and qualitative nature because of the evolving nature of the data over time and the diversity of approaches.

Failures or deviations that are not justified by particular constraints or specific to an asset class may lead to an investment proposal being rejected or to a position already in the portfolio being reconsidered.

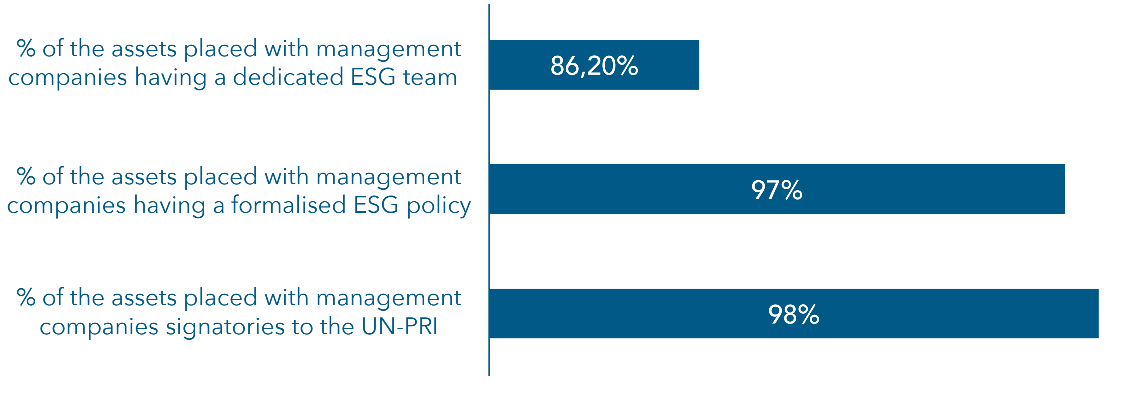
In 2020, the CCR Group strengthened its systematic analysis of the ESG practices in collective fund management companies.

The CCR Group therefore called on the expertise of Proxinvest to carry out a survey on the voting policy of management companies at 2020 general meetings in respect of ESG - Climate issues in equity funds. Questionnaires were sent to the management companies to analyse their positions in this area.

By the end of 2020, 98% of assets under delegated management will be entrusted to companies that are signatories to the United Nations Principles for Responsible Investment (UN-PRI). This indicator is interpreted as a commitment by fund management companies to take ESG-Climate issues into account in the management process of their range of funds.

The vast majority of partner management companies have a formalised ESG policy. They manage 97% of the assets under delegated management. Most of them also have teams dedicated to ESG risk analysis (86.2% of AUM).

Figure 19: Integration of ESG issues by Partner Management Companies



Source: EcoAct based on information from the CCR Group

3.5 ESG-Climate Policy for Real Estate Assets

The CCR Group's real estate assets are made up of residential and service-sector buildings mainly located in Paris, held directly or through subsidiaries.

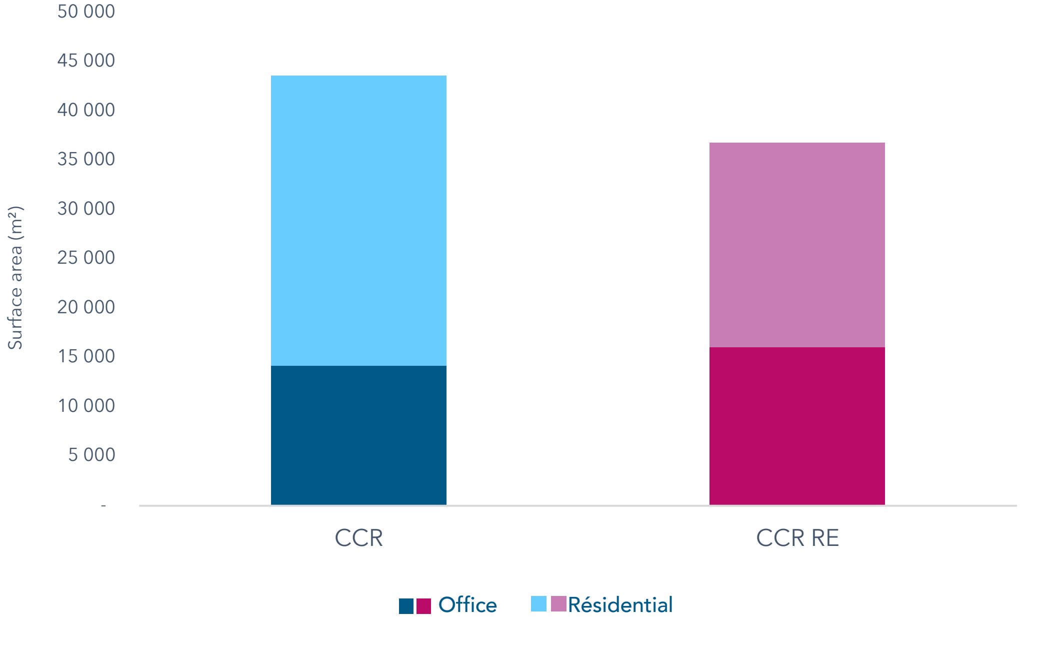
The property portfolios also include holdings in real estate funds (FCPI, OPPCI).

The real estate sector emitted 90 $MtCO_2e$ in 2017, i.e. 19% of national emissions (Scope 1) and 28% if we consider the emissions linked to the production of energy consumed in buildings (scope 2)[19]. The implementation of several regulations (RT 2005, RT 2012, the service-sector decree of 2019 and soon RE 2020), along with increasing climate-related investments in the sector - €22.8 billion in 2019[20], contributed to a 28% reduction in emissions in the residential sector and a 6% reduction in the service sector between 1990 and 2018. This effort will have to be sustained in order to reach the 2050 carbon neutral objective, which implies that the sector must reduce its emissions by 86% in 2050 compared to 2013.

In order to contribute to this objective, the CCR Group voluntarily carried out a greenhouse gas (GHG) assessment for all its directly-owned buildings.

The directly-owned real estate portfolio comprises 22 sites, mainly located in Paris, including 13 residential buildings (62% of the surface area expressed in m²) and 8 office buildings (38%). CCR owns 11 of the sites in the property portfolio (54% of the surface area) and CCR RE owns 11 sites (46%).

Figure 20: Breakdown of directly owned real estate by entity in the CCR Group



Source: EcoAct based on Ekodev data

19/ Source: National Low Carbon Strategy, March 2020, France

20/ "Panorama des financements climat Edition 2020", Maxime Ledez, Hadrien Hainaut, I4CE (Panorama of Climate financing – 2020 Ed.)

3.5.1 Pillar 1: Mitigating climate change and supporting the low-carbon transition

Greenhouse gas emissions from directly owned real estate

Scope and Methodology

The CCR Group commissioned Ekodev to carry out a greenhouse gas (GHG) emissions assessment of all the sites in its real estate portfolio. The carbon footprint of its buildings was measured over 2020 according to the Bilan Carbone® method of the French Agency for Ecological Transition (ADEME) and following the methodological recommendations published by the French Ministry of Ecology, Sustainable Development, Transport and Housing (version 4, February 2015). The analysis carried out covers:

- Scope 1 direct GHG emission related to energy consumption from permanent or temporary facilities located in buildings (e.g. gas or fuel), excluding refrigerant leaks;
- Scope 2 indirect GHG emissions associated with the production of imported electricity, heat or steam (e.g. from a heating or cooling network);
- Scope 3 other indirect emissions related solely to the activities required upstream of energy production (mining, refining, transport).

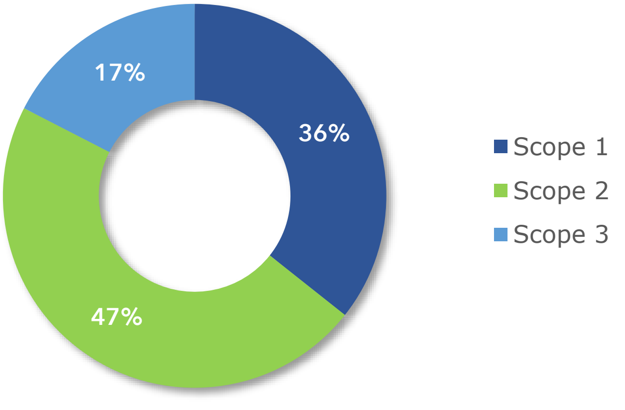
The building energy consumption data used for GHG emissions accounting was extracted from the Citron® platform mainly for district heating network, district cooling network, gas and electricity consumption in offices and common areas of buildings. Electricity consumption data for private areas, which is not available, was extrapolated on the basis of average consumption intensity for heating and by type of building[21] and according to the gross usable surface area of the buildings. Where data was only available for part of the year, an extrapolation was made to measure consumption over one year. It should be noted that the impact of Covid-19 on consumption was only partially captured through the actual consumption data provided and was not modelled due to the lack of sufficiently robust statistical data.

The emission factors and GWP (Global Warming Potential) used are those listed in ADEME's Base Carbone® database. For electricity, the emission factors correspond to the emissions of the French electricity network according to the "location-based" approach. This approach differs from the market-based approach, which uses emission factors linked to the electricity supplier from which the organisation buys its electricity. The "location-based" approach prescribed by the Bilan Carbone® method *de facto* does not take into account the purchase of guarantees of origin via green electricity supply contracts.

Results

In 2020, the CCR Group's buildings emitted 2,261 tCO_2e, of which 1,209 tCO_2e for CCR buildings and 1,051 tCO_2e for CCR Re buildings.

Figure 21: Breakdown of Emissions by Scope

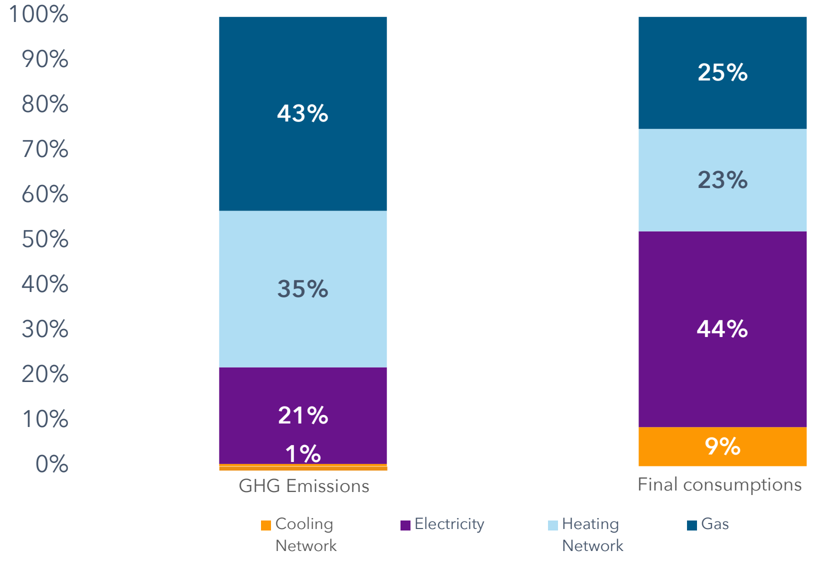


Source: EcoAct based on Ekodev data

Residential buildings, which account for 63% of the footprint, represent almost three quarters (73%) of the GHG emissions. While electricity accounts for the largest share of energy consumption, the main source of GHG emissions is gas (43%), ahead of emissions from the Paris district heating network (CPCU).

21/ Data. from the report « Chiffres clés du bâtiment – ADEME – Edition 2013 » (Key figures for the building industry – ADEME – 2013 Ed.)

Figure 22: Breakdown of Consumption and Emissions



Source : EcoAct based on Ekodev data

Compared to 2019, several changes were made this year, including:

- an improvement in the scope of analysis. The 2020 carbon footprint measurement covered all CCR sites, i.e. 22, while the 2019 carbon footprint only covered office buildings, i.e. 8 sites;
- a change in methodology with the non-inclusion, in 2020, of the purchase of guarantees of origin, in accordance with the "location-based" approach prescribed by the Bilan Carbone® method.

Conclusions and Ongoing Actions to reduce GHG Emissions

Despite this change in scope and methodology of the greenhouse gas footprint of its buildings, the CCR Group noted an 8% decrease in its final energy consumption between 2019 and 2020 (from 19,400 MWh to 18,000 MWh).

This decrease in consumption mainly concerned heating from the district heating network (-13%) and electricity (-7%). This decrease in consumption represented a 160 tCO_2e reduction between 2019 and 2020.

Green electricity contracts have been taken out for all CCR Group buildings.

This policy of buying Guarantees of Origin made it possible to avoid 138 tCO_2e in 2020.

All the electricity consumed in the common areas of residential buildings contributes to the production of renewable energy. This share comes up to 75% for electricity consumption in service-sector buildings (common and private areas).

In addition to a more exhaustive analysis of the carbon footprint of its buildings, which now includes residential buildings, the CCR Group has continued its actions to assess and improve its real estate assets, based in particular on the indicators defined by the OID (*Observatoire de l'Immobilier Durable*), to which the CCR Group contributes within the framework of the Sustainable Building Plan, to which it is a charter signatory.

With regard to heating consumption, more than 50% of the CPCU, to which a third of CCR's buildings are connected, comes from local, renewable and recovered energy, mainly through recovered household waste. In addition, all of the collective heating contracts for the CCR Group's buildings offset the generated emissions and approximately two-thirds for all of the assets. Following the example of electricity, CCR aims to take out renewable gas contracts within three years.

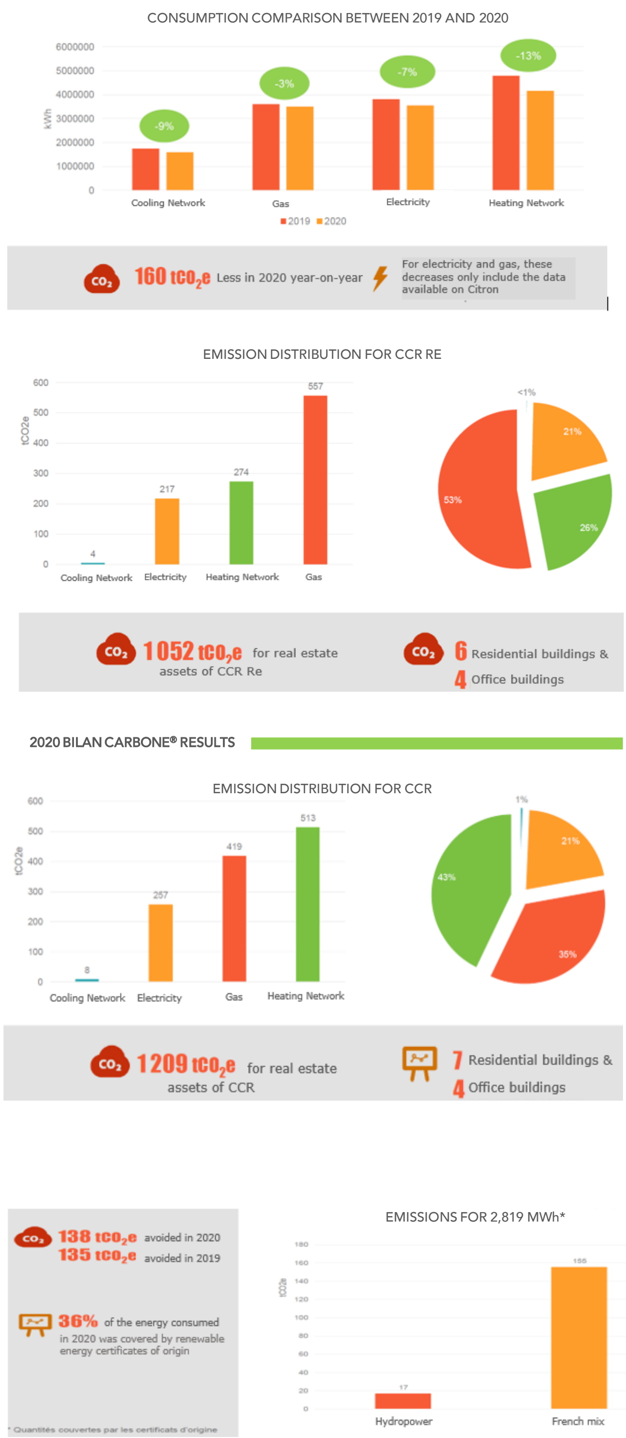
In terms of improving energy performance, CCR carried out several actions such as the renovation of the insulation of the heating networks and the fitting of insulating matting in 35% of the sub-stations, the replacement of 144 double-glazed windows in the residential buildings with the objective of systematically replacing them each time a property is vacated, and the installation of energy meters in two buildings on all heaters.

The group has decided to extend these actions and aims to devote between 25% and 30% of its work budget each year to improving energy performance. In addition, it intends to have all of its directly-owned real estate assets audited within two years.

These actions will be pursued and intensified, in particular with a view to achieving a reduction in the final energy consumption of service-sector buildings by at least 40% in 2030, 50% in 2040 and 60% in 2050, compared to 2010 as targeted by the service-sector decree[22].

Furthermore, in terms of adapting to climate change, the CCR Group has continued its actions to grow vegetation in its buildings. The head office now has a vertical garden wall and fully-planted terraces.

Figures 23: Energy consumption trends 2019-2020



22/ Article L111-10-3 of the French Building and Housing Code. French Decree 2019-771 of 23 July 2019 on obligations to reduce final energy consumption in service-sector buildings

3.5.2 Pillar 2: Adapting to physical climate risks and supporting the transition to climate change resilience

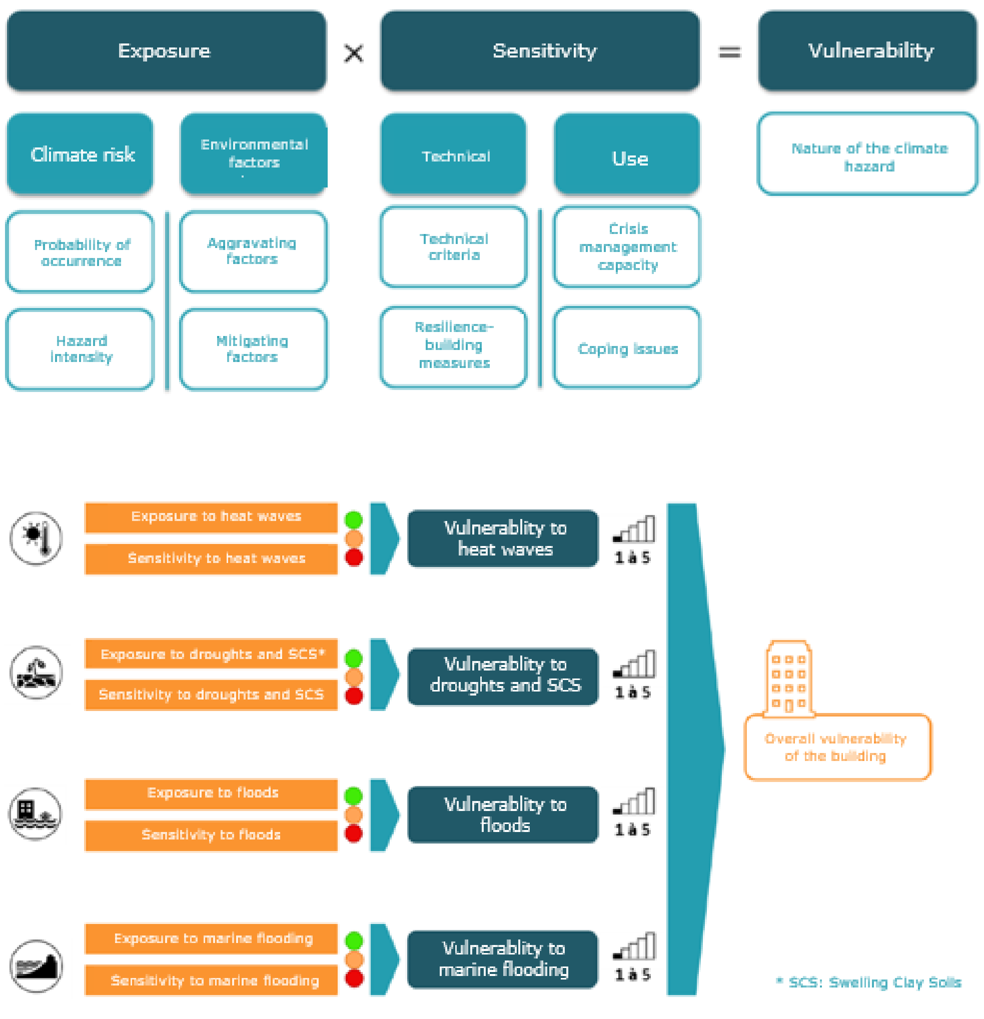
Thanks to its expertise, the CCR Group has a very detailed analysis of the exposure of its directly held real estate assets to the risks of natural catastrophes and those linked to climate hazards. All of these assets held by CCR are subject to physical risk mapping using the "BAT-ADAPT" (Bâtiments-ADAPTés) tool, developed by OID in partnership with the City of Paris, ADEME, the Paris Climate Agency, the Association of Real Estate Directors and the Sustainable Building Plan.

Bat-ADAPT is a mapping tool that analyses climate risk at the location of the building with time projections to 2030, 2050, 2070 and 2090. Heat waves, droughts, floods and marine flooding are assessed.

A cross analysis of the climate risks and the sensitivity of the building makes it possible to obtain the vulnerability to the various hazards on a scale of 1 to 5.

The tool provides a diagnosis of the climate vulnerability of a building with the use of the following methodology:

Figures 24: Methodologies for vulnerability scoring



Based on the summary mapping of the impact of floods in France, CCR developed a fifth complementary indicator specifically addressing the exposure of buildings to flood-risk areas. This methodology is based on the overlay of an actual loss indicator based on data relating to the costs and frequencies of historical claims recorded by CCR and a potential loss indicator based on CCR's probabilistic modelling and "OSO Theia" land use data. The summary of impacts is classified into 6 categories from "very low" to "major".

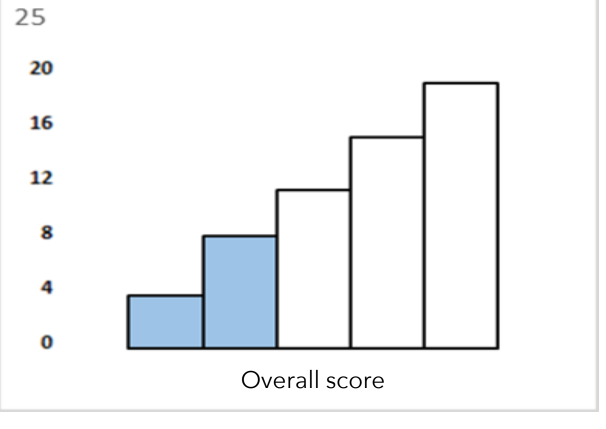
All of these indicators are consolidated in a specific tool developed by CCR to effectively monitor the exposure of its directly-owned real estate to climate risks. The results obtained by CCR's flood indicator on its property portfolio are generally more conservative than those of BATADAPT.

The CCR and CCR RE real estate portfolios have a moderate vulnerability score of 8/20.

This initial mapping and assessment of physical risks enables the identification of areas for improvement to preserve the value of the assets and the well-being of the occupants.

The CCR Group's buildings are mainly located in Paris and are not very exposed. However, the escalation of climate risks would, if nothing changes, subject them to certain risks inherent to climate change in the Paris basin, namely the increase in the occurrence of heat waves[23] and the increase in the risk of flooding and rapid rise of the Seine River.

Figure 25: Results of CCR's score by 2030



Source: BATADAPT-CCR

3.5.3 Pillar 3: Supporting societal transition

ESG Analysis of Directly Owned Real Estate

As mentioned above, the CCR Group conducts a detailed analysis of the ESG impact of its direct real estate investments based on the 29 indicators defined in the ODI questionnaire. All the E, S and G dimensions are taken into account, allowing CCR to set objectives and measure the impact of the actions implemented.

As an example, CCR set itself the objective that all new acquisitions of new or renovated commercial buildings should be subject to environmental labelling or certification (HQE, LEED, BREAM, etc.). The proportion of service-sector buildings with a label is currently 50%.

The OID categories and indicators do not focus solely on climate and energy issues, but also on broader environmental issues such as water consumption, the impact on biodiversity and waste recovery, as well as social and governance issues.

On the environmental side, for example, CCR has reduced its total water consumption by 10% - from 63,756 m^3 to 57,775 m^3 - compared to 2019, mainly in its service-sector buildings.

Finally, when acquiring new assets, ESG criteria are systematically integrated into the ex-ante assessment. Consideration is currently being given to strengthening the tools for analysing and assessing these criteria for future acquisitions. The group also intends to strengthen its responsible purchasing policy by creating a specific charter and integrating ESG criteria into each new contract.

Real Estate Assets Indirectly Owned by the CCR Group

The CCR Group also has indirect real estate investments owned through holdings in OPPCI and FCPI. The group is attentive to the consideration of ESG criteria when selecting fund management companies and themes.

The majority of fund management companies publish ESG reports and are signatories to the PRI. One third of the funds publish GRESB (Global Real Estate Sustainability Benchmark) reports.

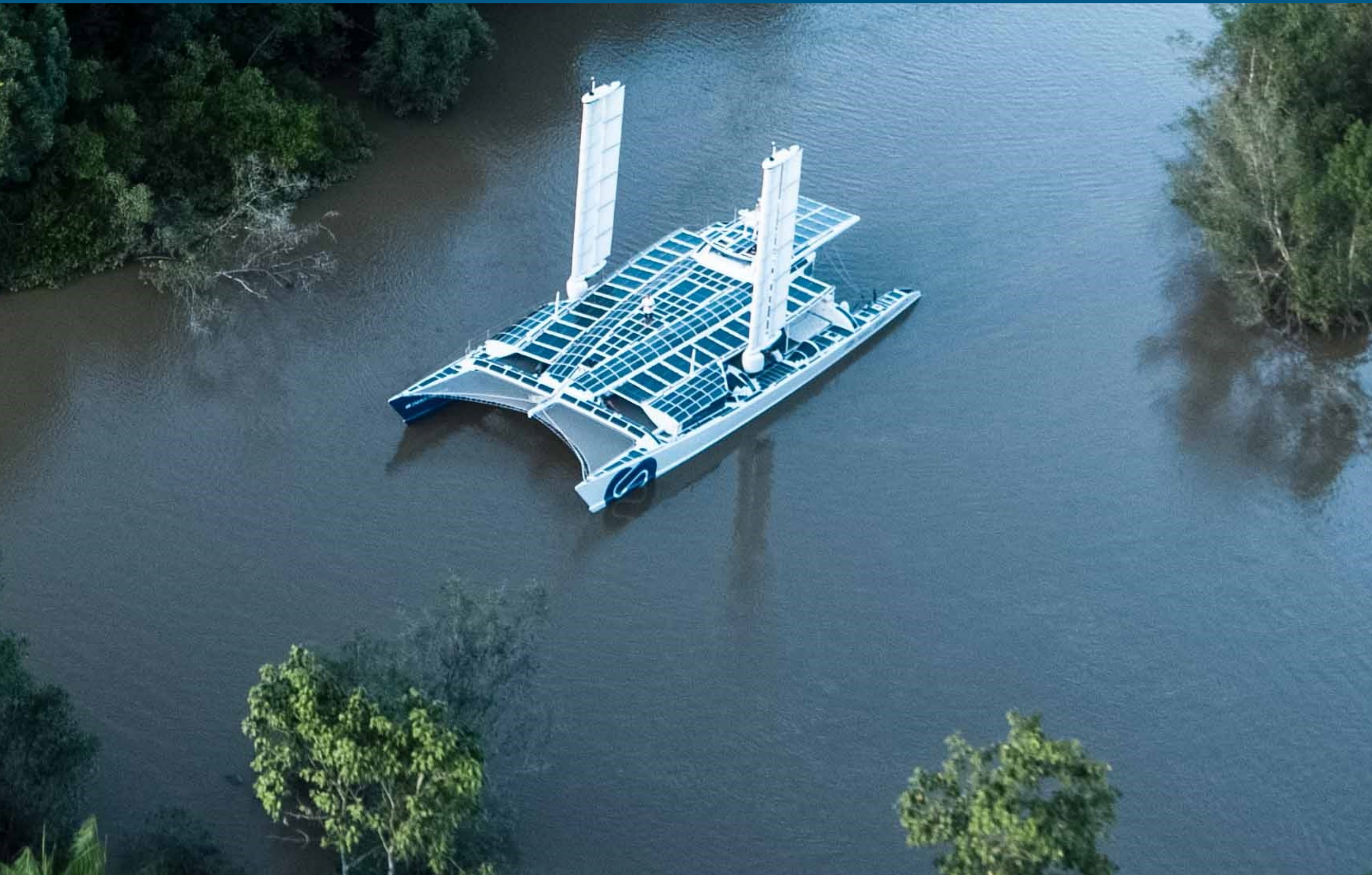
Since 2018, CCR has been investing in thematic funds for the construction of senior residences and the rehabilitation of industrial sites in urban areas. One of these funds is currently in the process of obtaining SRI labelling.

Finally, over the next three years, the group plans to develop new tools such as questionnaires and risk mapping as part of its indirect management.

23/ https://www.apc-paris.com/actualite/canicule-ou-vague-chaleur

4

INTEGRATION OF ESG-CLIMATE ISSUES ON LIABILITIES SIDE



4

4.1 Climate Issues on the Liabilities side

As a public and international reinsurer, the liability business of the CCR Group could be particularly exposed to both physical and transitional climate risks.

Exposure to Physical Risks

The global warming scenarios of scientific organisations forecast a significant increase in physical climate hazards over the course of the century, both in terms of extreme events - such as floods, storms, heat waves, fires and droughts - and chronic phenomena - such as sea-level rise and global temperature increases.

These physical risks will disrupt the business models of the affected organisations and ultimately translate into financial impacts. This increase in the frequency and/or severity of natural catastrophes is therefore expected to result in an increase in the frequency and/or severity of claims for many industries. Climate change is therefore expected to lead to increased property damage, business interruptions and business losses.

In addition to increasingly destructive climate events directly affecting natural and human systems, physical climate hazards can also cause indirect effects, such as pressure on resources like water or food, increased pandemics, threats to biodiversity, forced migration, social tensions, political crises, etc. Climate change is therefore also likely to affect the well-being, health and mortality of populations.

All these consequences, modelled in the most severe global warming scenarios, could profoundly transform the risk universe and have a strong impact on insurability and profitability in the long term. CCR Re's underwriting businesses (Life, Non-Life or Specialty) could be particularly impacted by changes in the location, frequency and/or severity of certain natural events.

Exposure to Transition Risk

Transition risk related to the adoption of regulations, the development of new technologies, market changes or reputational risks could also have an impact on the activities of the CCR Group. Underwriting activities could be impacted by changes in the regulatory and voluntary framework in high-stake, carbon-intensive sectors involving reputational risk (such as fossil fuels and coal). Sector concentration within these particularly transition-sensitive business sectors could therefore represent a risk. As companies become more resilient and sustainable, demand for (re)insurance may decrease, especially in the highest emitting sectors.

In addition, the development of new activities in low-emission sectors such as renewable energy could entail unforeseen risks and costs, especially if they involve new technological knowledge and skills. With economic growth likely to be negatively affected by the transition, life reinsurance may see fewer business opportunities.

4.2 The ESG-Climate Risk Management Strategy on the Liabilities side

The Caisse Centrale de Réassurance Group is a key player in the field of reinsurance, recognised for its expertise in risk management, its agility and the quality of its scientific research. The Group's role is to protect organisations and individuals and help them manage the risks they face; hence the long-standing integration of climate change into its risk measurement and management policy for liabilities.

There are many strategies for the management of ESG-Climate risks for an insurance or reinsurance group:

- identification of risks during the underwriting process,
- modelling of potential impacts related to climate risks,
- implementation of specific policies and a diversification strategy to avoid the effects of geographical, sectoral or peril concentration,
- use of risk transfer and retrocession mechanisms,
- implementation of a specific follow-up to support the ceding companies,
- ultimately, adjustment of pricing or non-renewal of policies for at-risk clients or sectors.

However, measures to limit risk exposure must be reconciled with CCR's historical missions on French soil, which are to cover exceptional events such as natural catastrophes, terrorist attacks or incidents, as well as other uninsurable risks. The actions rolled out in terms of responsible liability policy therefore differ in nature between CCR and CCR Re.

Beyond these intrinsic differences, the entire group is committed to common goals aimed at better preventing and mitigating potential risks:

- Understanding in detail the evolution of climate risks, through constant improvement of the group's modelling tools and capacities,
- Assessing the vulnerability of systems to natural catastrophes,
- Sharing its knowledge with the public authorities and the market,
- Raising awareness and supporting underwriters and ceding companies in their risk management and monitoring strategies.

4.2.1 Climate Risk Management at CCR

CCR differs from other reinsurance companies in that it operates with a state guarantee to reinsure risks that are uninsurable on French soil under market conditions. As a result of this specificity related to its general interest mission and the principle of solidarity, CCR is able to provide unlimited coverage of direct property damages for the entire French market, without distinction of sector, geography or peril. Because of this public interest mission, CCR cannot implement selection processes or differentiated policies, which does not prevent it from identifying and finely modelling the climate risks likely to impact it.

Pillar 1: Transition Risk Management

As an example, CCR pays attention to its coal exposure in the context of liability transition risk prevention. The final exit from its coal exposure - currently 20 mining concessions and 4 coal-fired power stations at the end of their lives - depends more on the national timetable for the closure of these entities than on its own management policy.

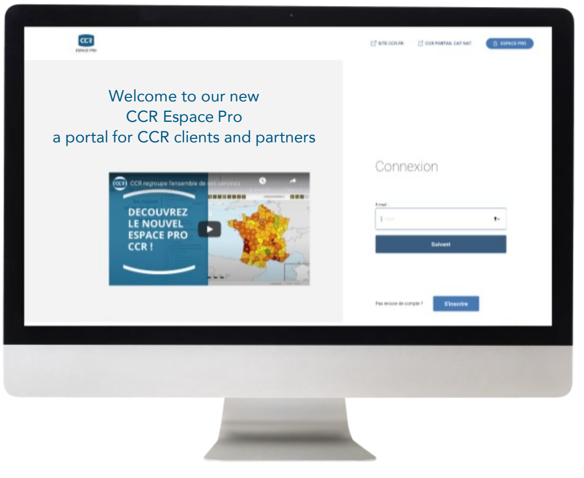
Pillar 2: Physical Risk Management

The core objective of CCR's action is to boost natural risk prevention in order to consolidate the Nat Cat system in view of the increasing exposure of the French territory, particularly in relation to climate change.

CCR uses its natural catastrophe forecasting models to assess its portfolios and to price its reinsurance programmes. These tools are based on physical models of risk occurrence in relation to Météo France climate projections for 2050. CCR is a state-owned risk manager that collects a large amount of data on extreme risks and insured assets, and uses this data to calculate exposure and claims on a very precise geographical scale, of around ten metres for flood risks. These climate models cover all types of weather perils - floods, droughts, marine flooding, or storms - and allow the simulation of financial impacts and pricing. They are regularly adjusted and enriched with new elements, such as the recent work on the damage caused by the shrinkage and swelling of clay soils during intense drought phenomena.

2020 is part of CCR's ongoing commitment to cooperate with ceding companies to provide them with assistance and support in the management of natural catastrophe claims through several measures:

- Access to a database of Nat Cat decrees available on the CCR professional space accessible to insurers;
- Development of a tool to help manage Nat Cat claims with the addition to the treaties of a compensation guide listing the most important case law as well as a repository of good practices;
- Conduct of claim visits to promote technical discussions and to ensure that insurers cover all claims in the same way but also that claims are compensated in accordance with the public reinsurance scheme of compensation for natural catastrophes;
- Ongoing support for claims teams to provide technical advice and assistance to ceding companies in the follow-up of major claims and large-scale events.



espacepro.ccr.fr
a portal for CCR clients and partners

Moreover, the health crisis of 2020, which is still ongoing, raises new challenges for CCR's public reinsurance missions. The increase in the occurrence of pandemics linked to global warming and the erosion of biodiversity could lead CCR, in support of the public authorities, to develop new reinsurance models dedicated to the pandemic context in parallel with, and in addition to, the Nat Cat scheme.

Physical Climate Risk Models developed by CCR

CCR pays particular and systemic attention to the consequences of climate change. CCR has developed internal tools with the support of scientific partners to model natural catastrophes. These models are based on a forward-looking physical approach using, in particular, the climate change models developed by Météo France (e.g. floods, heavy rainfall, etc.). Based on this data, CCR is able to estimate the financial impact of these natural catastrophes.

CCR has conducted numerous research and development activities in recent years, such as the evolution of cyclone risk in the French Overseas Territories by 2050, the modelling of the financial impacts associated with droughts, and more recently the modelling of floods in Morocco.

In 2018, CCR carried out a study on the consequences of climate change on the cost of natural disasters in France by 2050. This prospective analysis is based in particular on IPCC scenarios in terms of the evolution of greenhouse gas emissions. CCR has estimated that the RCP 8.5 scenario of a business-as-usual temperature increase of between 1.4°C and 2.6°C in 2050 and between 2.6°C and 4.8°C in 2100 would result in a 35% increase in average annual losses associated with all hazards, including 23% for drought, 38% for floods and 82% for sea-level rise and marine flooding. The cost of natural catastrophes could increase by 50% due to the increased frequency and severity of extreme events, rising sea levels and the concentration of populations in areas at risk. This study was used by several authorities and namely, in 2020, the French Ministry of Finance took it up in the context of a report on the "Financial Impacts of Climate Change" (July 2020).

In 2020, CCR carried out a new study on the evolution of cyclone risk in the French Overseas Territories by 2050 in partnership with Météo France and Risk Weather Tech. The study highlights the consequences of extreme cyclonic events and assesses the vulnerability of the territories exposed to them. By 2050, the results show that the loss experience would increase by 20% in the French Overseas Territories due to the increase in the average frequency of cyclones (according to the CORDEX model) and rising sea levels. Thanks to a precise mapping of the areas exposed to extreme events, the study recommends the implementation of prevention measures adapted to a local scale, taking into account all the perils associated with the occurrence of cyclones.

In addition, since the beginning of 2020, CCR has developed a methodology as well as a summary map of the impact of floods in France (overflow of the main rivers, rainwater runoff on the entire hydraulic network, marine flooding and historical loss areas). This mapping is based on the results of the CCR probabilistic flood model and on geolocalised historical flood loss data. A layer represented as a hexagon with an area equivalent to a 250x250 m square can be viewed on the interactive map of the CCR Nat Cat Portal (catastrophes-naturelles.ccr.fr). A layer with a finer 25-metre resolution is available to CCR customers and partners via Espace Pro (espacepro.ccr.fr).

Finally, in Q2 2020, CCR, together with Risk Weather Tech and Atmoterra, won a project tender submitted by the World Bank to develop a Cat flood model for Morocco. This international cooperation project aims to provide Morocco's Solidarity Fund against Catastrophic Events (FSEC) and the insurance sector with the necessary tools to manage and monitor flood risk throughout the Kingdom of Morocco. It includes several deliverables: implementation of a hydrological model, constitution of a risk portfolio and development of a damage module to assess flood-related losses. These different steps were carried out by the consortium in close collaboration with the FSEC and its partners in Morocco, notably the CAT (Transport Insurance Company), the FMSAR (Moroccan Federation of Insurance and Reinsurance Companies) and the SCR (Central Reinsurance Company).

4.2.2 Results of Climate Stress Tests on CCR's Liabilities

CCR shared its expertise as reinsurer in the context of the climate stress-testing exercise recently conducted by the ACPR. The physical climate risk scenario used for this exercise was assessed with the help of CCR. More specifically, the impacts of the increase in the frequency and intensity of extreme weather events in mainland and overseas France on insurers' claims were projected until 2050 using the Météo France granular model, applied by CCR. The insurance organisations participating in the exercise could also opt for their own loss-projection models.

Methodology and Data used specifically on Liabilities

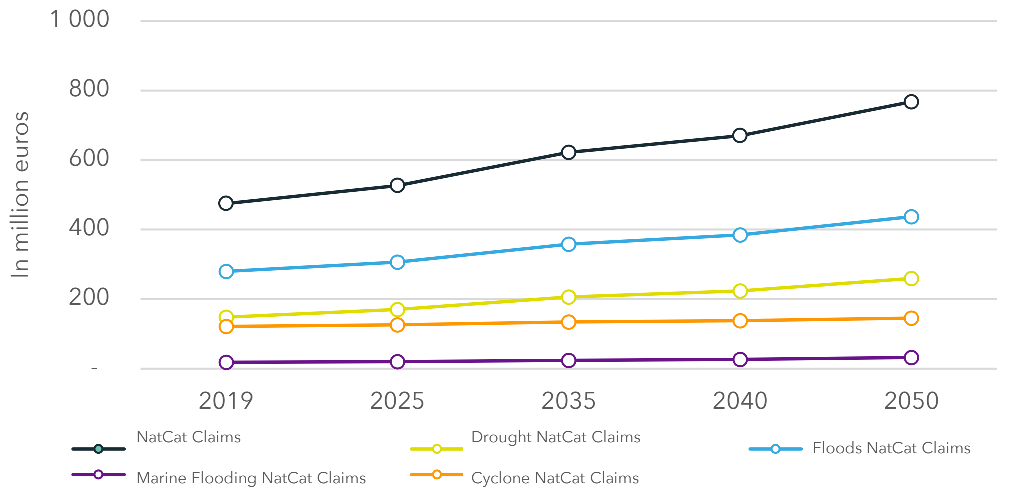
The main methodological elements are described below:

- A long-term period 2020-2050,
- A scenario analysis based on the IPCC RCP 8.5 physical risk scenario, which reflects a laissez-faire climate policy resulting in a level of warming in the range of 1.4°C to 2.6°C by 2050. The scenario developed for this exercise takes into account an increase in the frequency and cost of extreme weather events as well as the spread of vector-borne diseases and respiratory illnesses caused by the increased frequency and duration of heat waves,
- In France and in Overseas France, the estimate of the damage suffered concerns the following risk factors: droughts, floods, marine floods and cyclones for the ultra-marine territories,
- An international dimension, to take into account the global nature of the activities of financial institutions, and the differentiated impacts of climate change in different regions of the world monde;
- The assumption of an increase in the insurance protection deficit of certain assets due to the increase in the cost and frequency of extreme weather events.

Main results

The results of CCR for the "Nat Cat" part, linked to an increased frequency and severity of extreme weather events, are presented below. According to the model, NatCat claims would increase by 62% between 2019 and 2050. Claims associated with marine flooding and drought are expected to increase by 78% and 76% respectively over the period.

Figure 26: Nat Cat claims modelling results, by physical risk factor



Source : CCR

Main findings

The results of this unprecedented pilot exercise show an increase in claims for all the perils studied up to 2050 in the case of a "*laissez-faire*" policy. This market test thus makes it possible to raise awareness throughout the financial system and more broadly to public opinion on the need to act collectively in favour of climate change mitigation and adaptation initiatives.

4.2.3. Climate Risk Management at CCR Re

CCR Re's actions in measuring exposure and managing liability risks are quite different from that of CCR, as it operates as a competitive business in the international market. Unlike CCR, CCR Re does not have the backing of the French State guarantee to provide unlimited guarantees. It thus purchases its own reinsurance cover on its contracts.

In recent years, CCR Re has demonstrated its ability to maintain underwriting discipline and to further diversify its portfolio by shifting its business mix. As a result, CCR Re increased the geographical scope of its activities in Latin America, sub-Saharan Africa and selected markets in Asia and Central Europe. It also reinforced its strengths in both Life and Non-Life in the Middle East, Europe and Asia.

Pillar 1: Transition Risk Management

With regard to transition risks, CCR Re does not have a specific contract on coal or lignite risks. As part of its coal policy, CCR Re plans to go further by strengthening the dialogue with ceding companies to obtain more information on the coal exposure of contracts and the envisaged exit policy.

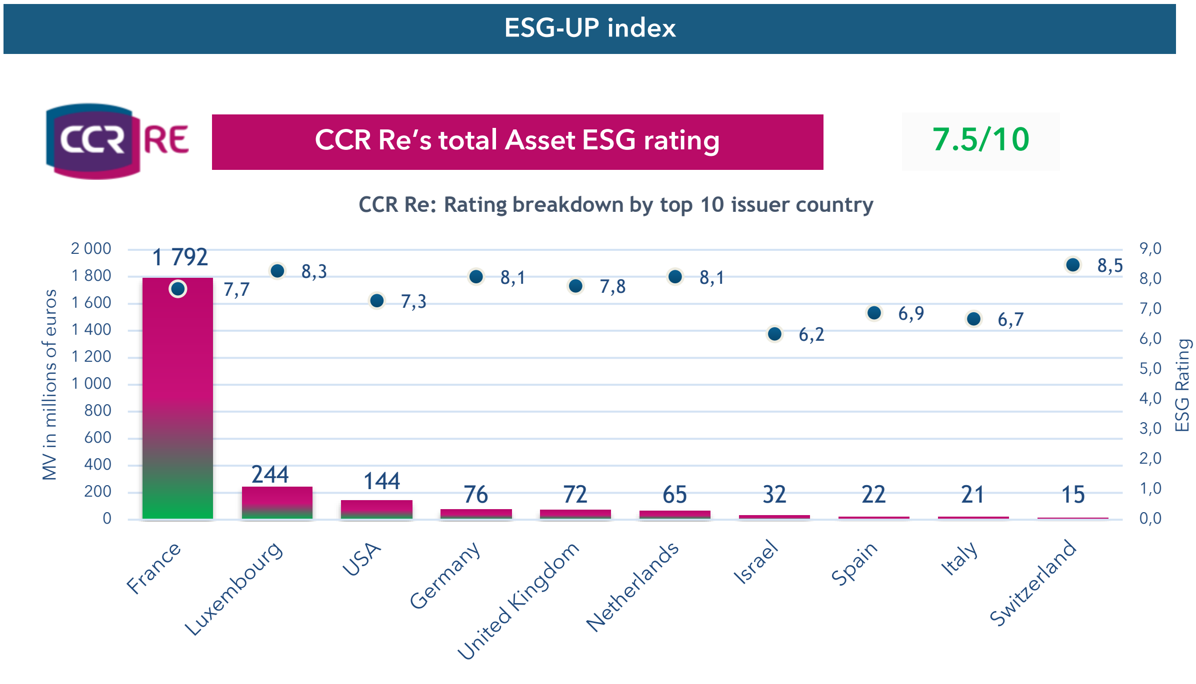
Pillar 2: Physical Climate Risk Management

CCR Re also assesses its exposure to natural and physical hazards using modelling tools, and monitors the evolution of perils, and the risks of geographical concentration around hot spots, such as ports in major cities. CCR Re has equipped itself with a high quality information system and state-of-the-art technology for these analyses, including computer robots and artificial intelligence components. This tool has proven its effectiveness this year, allowing for a quick and accurate assessment of exposure to major claims such as the Covid, or the explosion in Beirut. Finally, the results of these analyses are used to inform the vertical and/or horizontal retrocession policy in order to protect CCR Re's balance sheet against perils of increasing frequency and magnitude.

Pillar 3: ESG Risk Management

As part of its ESG analysis, CCR Re assesses the exposure of its underwriting business to ESG risk based on the ESG score of the countries in which it operates.

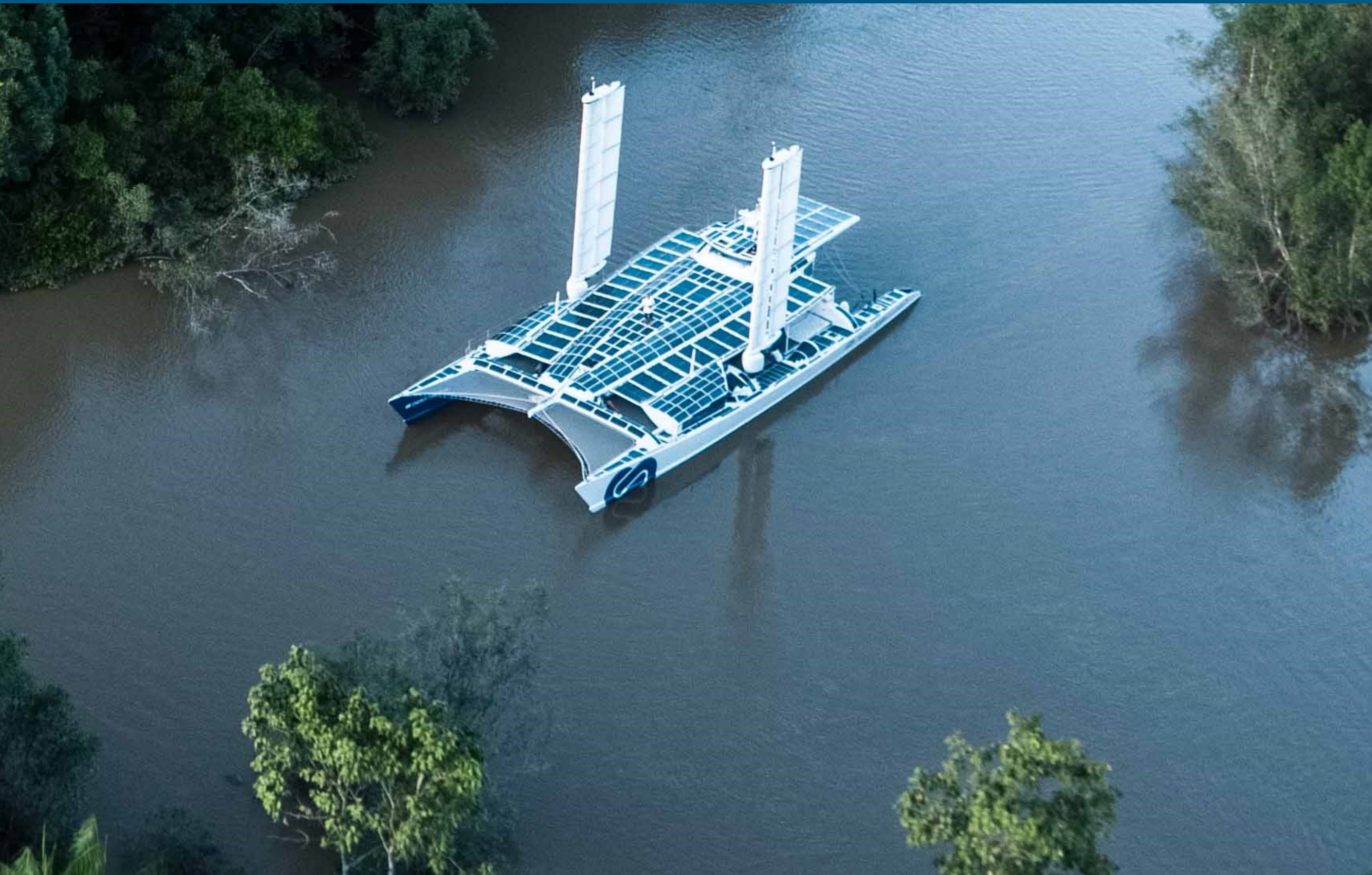
Figure 27: Country Sustainabiliity Score



CCR data/RobecoSAM's country sustainability ranking : The country sustainability score is based on 40 indicators of which 3 environmental with a weight of 20%, 5 social with a weight of 30% and 7 governance with a weight of 50%. The score ranges from 1 to 10 and should be interpreted as a grade, the highest grade is 10 and the lowest 1. Purpose of the score is to compare countries on basis of ESG indicators that we consider to be relevant for investors

5

CCR GROUP’S CSR COMMITMENTS



5.1 Participation in Scientific Research and Partnerships

With a *raison d'être* since 2019, the CCR Group values societal and environmental dimensions. Its expertise in the field of natural disaster assessment and modelling is recognised in a range of areas including climate risk.

At the heart of the scientific ecosystem, the CCR Group participated in 2020 as an advisor and expert to the French Prudential Supervisory and Resolution Authority (ACPR) in the project on modelling the impacts of climate change to prepare the climate stress tests of financial market players. CCR shared its expertise in physical weather risks on French soil with the regulator and the market.

This unprecedented initiative launched by the Banque de France aims to measure both physical and transitional risks, to which financial institutions are exposed until 2050. The work in which the CCR Group participated thus focused on the assessment of scenarios, in particular physical risk scenarios representative of a *laissez-faire* policy and based on IPCC's most pessimistic scenario. They contributed to the formulation of the transition scenarios as well as to the different variables and assumptions through the models developed.

CCR also continued its research and development work in partnership with leading scientific organisations, such as Météo France and BRGM, either bilaterally or within collaborative research projects funded by the French National Research Agency or by the EU. For example, in 2020, CCR supervised five doctoral theses to improve knowledge on natural catastrophes and their damaging consequences.

For several years, CCR has also been strongly committed to strengthening the prevention of natural risks in order to reduce their consequences. This commitment is made to the various stakeholders:

- To support the French Public Authorities: CCR, through information from the data it collects and the results of its modelling, can help analyse the relevance of public prevention policy and assist in prioritising the measures to be implemented. CCR is namely a member of the Conseil d'Orientation pour la Prévention des Risques Naturels (COPRNM) and the Commission Mixte Inondation (CMI);
- To support insurers: CCR assists its clients in promoting good practices among their policyholders to reduce the damaging consequences of natural catastrophes;
- In conjunction with the other prevention players, by disseminating information on the loss experience and on the exposure of territories to natural catastrophes.

Every year CCR wants to highlight, support and encourage innovative and original research work in the fields covered by the French Reinsurance and Public Funds Directorate (NatCat). This should allow for a better understanding of the theoretical aspects but also the practical issues of the subject covered. The CCR Nat Cat Award is open to all European countries and is awarded to a winner selected by a jury of academics and experts from the research and insurance community, and CCR representatives. The 2020 winner was Audrey Michaud-Dubuy for her work on "Dynamics of Plinian eruptions: re-assessment of volcanic hazard in Martinique" [24].

5.2 Patronage

Despite the disruption caused by the health context and the shutdown of several activities, the CCR Group reasserted its support for several associations, institutions and humanitarian projects in 2020 as part of its patronage policy. The Group's patronage committee thus supported eight associations.

Partner of Energy Observer

As a patron of Energy Observer since 2017, the CCR Group supports a human adventure that showcases French know-how around an experiment which may revolutionise sea freight by limiting the extent of climate change. The Energy Observer team set itself a challenge that is both a people and technological challenge, with the completion of a round-the-world odyssey to showcase its innovative solutions on board the first energy self-sufficient boat with no greenhouse gas or fine particle emissions, propelled by hydrogen and renewable energy, thanks to the energy mix.

This year, the CCR Group has contributed to the production of a series of videos on Energy Observer Solutions, initiatives by men and women around the world who are devoting their energy to creating sustainable solutions. These solutions cover a wide range of issues, including school bicycle transport, plastic recycling at river estuaries, home water recycling, biodiversity conservation and permaculture.

24/ https://www.ccr.fr/prix-ccr-cat-nat

This support was also promoted internally within the CCR teams through the organisation of a virtual guided tour of the Energy Observer and screenings of awareness-raising documentaries: Season 2 of "Odyssey for the Future" and "Energy Observer, the messengers of the Earth".

Humanitarian and Environmental Patronage

Since 1996, the CCR Group has been committed to humanitarian and environmental patronage, providing financial support each year to humanitarian, social or environmental associations supported by its employees. The associations and organisations supported this year focus in particular on disability, the fight against poverty, support for early childhood, the integration of immigrant workers and support for the sick, the underprivileged and the isolated.

On the environmental front, the CCR Group provided support to ECOACTEURS, a French non-profit association which promotes the great outdoors, heritage and sustainable development actors in the Médoc region. It organises its actions around environmental education and sustainable development, agri-environment and ecotourism. The patronage focused on a project called "*On the road to zero waste!*" as part of the 2nd edition of the European Week for Waste Reduction and raised awareness among all employees of the challenges of environmental protection and waste reduction.

Cultural Patronage

As the cultural sector is particularly affected by the current context, the CCR Group has renewed its support for Museums through their action programme to promote access to culture for the most disadvantaged. Thus, since 2018, the CCR Group has been committed to the Rodin Museum by contributing to the enrichment, conservation and restoration of the works. The Group's patronage is in line with the desire to support the museum's artistic and cultural education initiatives.

CCR's social and environmental commitment to its employees

For CCR, the commitment of its employees goes hand in hand with the commitment of the Group, particularly in social and environmental matters.

In 2020, the CCR Group organised a competition entitled "Young Talent Competition" to promote the best initiatives of employees aged between 20 and 35, with the aim of creating value for the company and highlighting the talent of its employees.

The candidates had 8 months to put together their projects, which was presented to an ad'hoc committee composed of COMEX members. The presentations of the projects allowed the jury to assess the projects according to their quality, originality and impact on the CCR Group. 12 teams presented projects and 3 of them were selected:

- **1st Prize « Speak, spoke, spoken »** proposing the creation of one or more discussion groups with the aim of improving the oral expression of its participants in a foreign language in the form of collaborative games or debates;
- **2nd Prize « Climate Change Responsibility »** proposing to obtain an Ecolabel for all the actions carried out by the Group to fight against climate change;
- **3rd Prize « Young people at CCR »** to develop the CCR Group's Corporate Social Responsibility, by bringing together employees and young people from Priority Education Areas (ZEPs).

All of these projects will be rolled out within the Group in 2021.

5.3 The CCR Group's Commitment to Diversity and Support for Disability

The CCR Group's commitment to promoting human capital (e.g. investing in employees, offering fair compensation, promoting an inclusive culture) contributes to the economic value of the company.

In recent years, the human resource policy has been inclusive in many respects by ensuring the application of the principle of gender equality, by developing work-study programmes and inter-generational mentoring, by integrating disabled employees, by permanently seeking atypical profiles, and by developing recruitment on different continents.

This mix in all areas of human resources policy enriches the Group's culture and develops the innovation necessary for the development of CCR and CCR Re.

The CCR Group has been committed for several years to promoting diversity and supporting people with disabilities both within its own organisation and through external actions.

CCR and CCR Re have signed the Diversity Charter, which attests to the determination of the two entities of the Group to fight against discrimination and to develop inclusive management. The charter's commitments focused on supporting young people, who are strongly affected by the health context, by pre-recruiting numerous interns and work-study students and organising a "young talent" competition (see box).

The first commitment was to young people, who were actively supported despite the particular context of the health crisis: this year, we welcomed a large number of interns and 27 apprentices for pre-recruitment within one of the group's 32 business lines: an induction and integration process supports their arrival within our company, as well as regular monitoring throughout their work experience in our teams.

The CCR Group is also genuinely committed to disability by setting up awareness-raising actions in partnership with Agefiph, by giving meaning to this approach and by translating it into practical action through active participation, each year, in the IFPASS Disability Club forum, with the aim of promoting the inclusion of their participants in our organisations.

The group also pursued its efforts to increase the number of women in management and high-potential positions by signing an amendment to the agreement on working hours with staff representatives, which opened up the possibility of working under an employment agreement with a fixed number of days per annum.

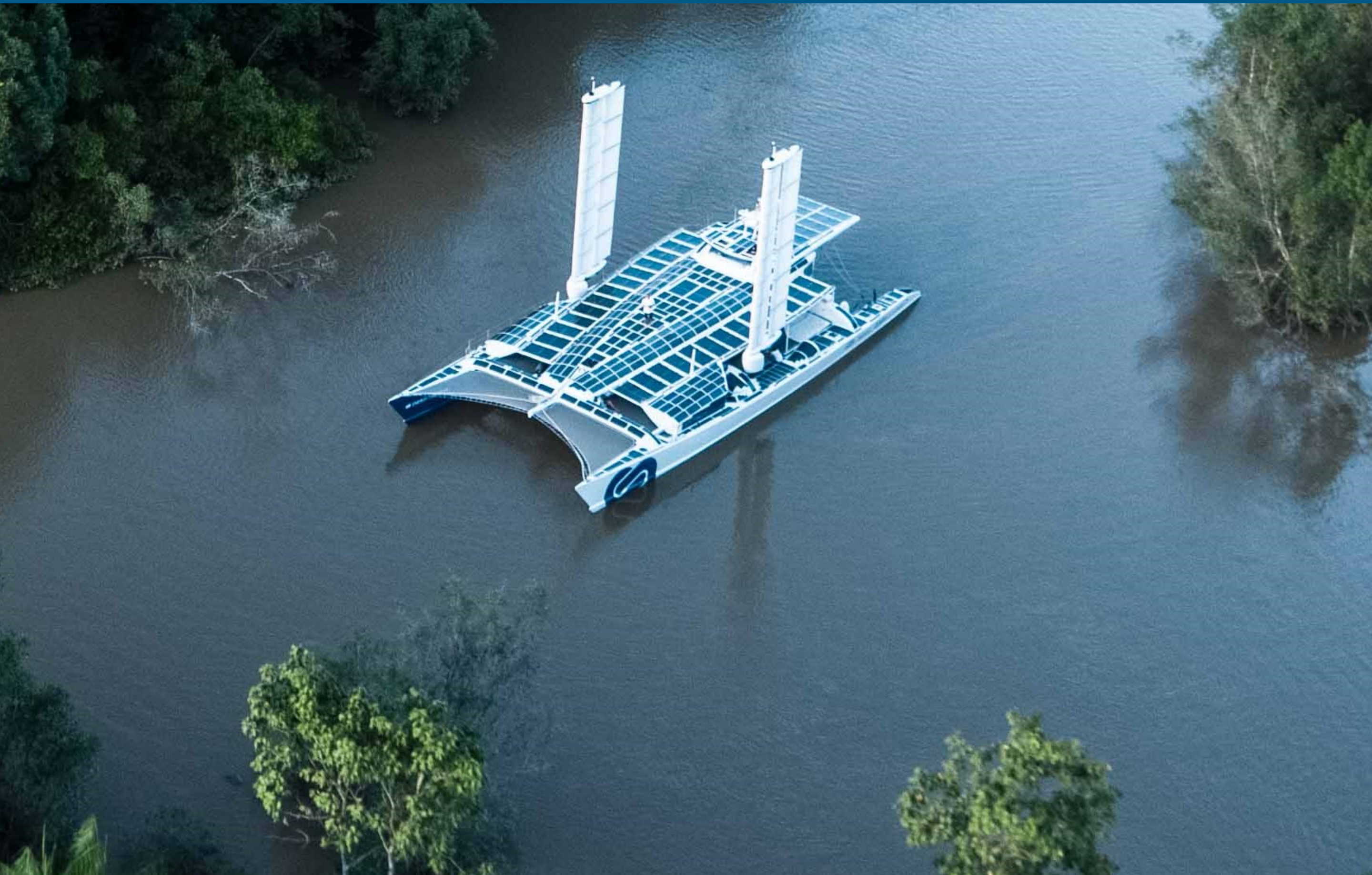
Since 2015, at CCR and CCR Re, gender equality agreements are applicable and particular attention is paid to this topic during wage negotiations and annual staff reviews.

The group now has 52% women on permanent contracts and 40% women on the Group Executive Committee since 2018. At the end of 2020, 40% of managers were women.

In addition, the group has entered into a partnership with Agefiph, which aims to support the employment of disabled people by offering services and financial aid. Awareness-raising actions have been put in place, such as participation in the IFPASS Disability Club forum and the integration of RQTH (Recognition as a Disabled Worker) employees.

As part of its patronage policy, the CCR Group also supports Jakadiroule, an association that aims to enable people with reduced mobility, whether they are totally dependent or not, to access sports and culture to forge social links.

APPENDIX



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Glossary

Notions	Définition
Adaptation	Adaptation to climate change refers to strategies and initiatives to reduce the vulnerability of natural and human systems to the effects of global warming.
Article 173-VI	Article 173 of the French Energy Transition Act of 17 August 2015 defines the information obligations of institutional investors concerning their consideration of environmental and social parameters.
Mitigation	Activity that contributes to the stabilisation or reduction of GHG concentrations in the atmosphere to a level that prevents dangerous anthropogenic interference with the climate system.
Carbon budget	The upper limit of total carbon dioxide emissions that would allow to remain below a given global average temperature.
Business-as-usual scenario (BAU)	Scenario that assumes no change in regulatory policies and greenhouse gas emission trends.
Carbon Value at Risk (cVAR)	A measure of the carbon price sensitivity risk of a financial portfolio.
Climate change	Climate change refers to a change in the state of the climate that can be identified by changes in the mean and/or variability of its properties and that persists over an extended period of time. Climate change can be due to natural internal processes or external forcing such as modulations of solar cycles, volcanic eruptions and persistent anthropogenic changes in atmospheric composition or land use. (IPCC - AR5)
Energy Performance Certificate (EPC)	An EPC is a thermal diagnosis carried out by a professional which assesses the energy performance of a dwelling. This document is mandatory for any sale or rental of a house or flat.
Primary energy (pe)	All unprocessed energy products, directly used or imported (mainly crude oil, natural gas, biomass, solar radiation, etc.)
Final energy (fe)	Energy delivered to the consumer for final consumption (electricity in the home, petrol pump, etc.).
CO_2 equivalent (CO_2e)	The amount of CO_2 that would have the same global warming potential as a given amount of another greenhouse gas, obtained by means of a conversion factor: the global warming potential (GWP).
Energy label	For the real estate sector, energy labels are used to assess the energy consumption of a building and its impact in terms of GHG emissions.
Emission factor (EF)	An emission factor is used to transform a physical activity data (of a company or a community) into a quantity of greenhouse gas emissions.
Refrigerant	A refrigerant is a fluid that enables a refrigeration cycle to take place.
Carbon intensity	Carbon intensity is a ratio between CO2 emissions and a given level of production.
Energy intensity	The energy intensity of a property portfolio is usually measured by the ratio of final energy consumption to total surface area.

Glossary

Notions	Définition
Greenhouse gases (GHG)	A greenhouse gas is a gaseous substance that has the characteristic of absorbing infrared radiation produced by the Earth. Greenhouse gases are one of the causes of global warming. Water vapour (H2O), carbon dioxide (CO2), nitrous oxide (N2O), methane (CH4) and ozone (O3) are the main greenhouse gases in the Earth's atmosphere.
Carbon neutrality	A state in which human activities have no net effect on the climate system. To achieve this state, residual emissions would have to be balanced out by the removal of emissions (carbon dioxide) and account would have to be taken of regional or local bio-geophysical effects of human activities that, for example, affect surface albedo or local climate. (IPCC - AR5)
Energy performance	The energy performance of buildings is the amount of energy actually consumed or estimated to be consumed to meet the various needs associated with a standardised use of the building.
Thermal regulations (RT)	Thermal regulations are a set of rules to be applied in the field of construction to increase the comfort of the occupants while reducing the energy consumption of buildings. The thermal regulation currently in force is RT 2012.
Climate risk	Climate risk is a risk linked to the increased vulnerability of companies to changes in climate indices (temperature, rainfall, wind, snow, etc.).
Transition risk	Transition risk covers the uncertain financial impacts that result from the effects of the implementation of a low-carbon economic model on agents.
Low-carbon and climate-resilient transition	Transition to a “decarbonised” economy and society so as to reduce or eliminate the contribution to climate change. In France, the National Low-Carbon Strategy (SNBC) defines a trajectory for reducing greenhouse gas emissions and aims to achieve carbon neutrality by 2050.
Climate change scenario	Scenarios that aim to determine the change in the state of the climate (temperature, rainfall, natural catastrophes, etc.), which can be detected by changes in the mean and/or variability of its properties and which persists over a long period of time. These forecasts represent the action that underpins climate change mitigation and adaptation policies and strategies.
Transition scenario	A transition scenario takes into account assumptions on the changes in the socio-economic context restricted by the achievement of a climate target of 2°C or 1.5°C, which translates into a constraint on GHG emissions.
Scope 1	Direct Greenhouse gas emissions.
Scope 2	Indirect greenhouse gas emissions from energy consumption.
Scope 3	Other indirect Greenhouse gas emissions.

Glossary

Notions	Définition
Sustainable Finance Disclosure Regulation (SFDR)	The SFDR deals with sustainability reporting in the financial services sector and therefore covers all players - banks, insurance companies, management companies, financial advisors, etc. - offering financial services in the EU.
Stratégie Nationale Bas Carbone (SNBC) [National Low Carbon Strategy]	Introduced by the French Energy Transition Act for Green Growth, the SNBC fights against climate change. Its two ambitions are carbon neutrality in 2050 and reducing the carbon footprint of the French.
Stranded / Stranding	According to the CRREM method, assets not aligned to the reference trajectories are considered "stranded". The stranded part is assessed in a forward-looking way up to 2050, and consolidated in various ways at portfolio level - in terms of value, surface area or number of assets.
EU Taxonomy	The EU Taxonomy is a standardised classification tool for the assessment of the sustainability of 70 economic activities in the EU according to different criteria. The aim is to be able to highlight the sectors of activity where it is preferable to invest to enable the EU to achieve carbon neutrality by 2050.

Initiatives	Définition
Paris Agreement	International climate agreement signed in 2015 as part of COP21. It aims for collective action on a global scale to reduce global warming below 2°C to 1.5°C by 2100.
ADEME	The Agency for Ecological Transition, formerly the Agency for the Environment and Energy Management, is a public institution under the supervision of the French Ministry of Ecological Transition and the French Ministry of Higher Education, Research and Innovation.
International Energy Agency (IEA)	The IEA is an international organisation founded by the OECD in 1974 which is based in Paris. This intergovernmental organisation facilitates the coordination of the energy policies of member countries.
United Nations Conference on Trade and Development	UNCTAD is a UN programme that aims to integrate developing countries into the world economy. UNCTAD seeks to affirm the cohesion of the countries of the South for rebalanced trade and develops the concept of a New International Economic Order (NIEO).
EcoAct	Consulting firm specialising in energy and climate. Founded in 2005.
European Insurance and Occupational Pensions Authority (EIOPA)	EIOPA contributes to maintaining the stability of the EU financial system. This independent body ensures the transparency of financial markets and products and helps to protect pension scheme stakeholders.

Glossary

Initiatives	Définition
European Securities and Market Authority (ESMA)	ESMA was created in 2010 by an EU regulation. Its role is to ensure the stability and efficiency of the financial system in the European Union in the short, medium, and long term.
Food and Agriculture Organization Corporate Statistical Database (FAOSTAT)	FAOSTAT is a database on food and agriculture managed by the United Nations with the objective of collecting, analysing, interpreting, and disseminating reliable data to fight malnutrition, world hunger and for development.
FCBA	The FCBA technological institute is a French industrial technical centre for research, consultancy, certification, standardisation, training and testing in the forestry, furniture, timber construction and cellulose sectors.
IPCC	The Intergovernmental Panel on Climate Change, open to all UN member states, is tasked with assessing the risks of human-induced global warming.
GHG Protocol	Common greenhouse gas accounting and reporting framework, developed by the World Resources Institute and the World Business Council for Sustainable Development
Institute for Climate Economics (I4CE)	French general interest association dedicated to climate economics research. Founded in 2015 by the Caisse des Dépôts and the Agence Française de Développement.
Network for Greening the Financial System (NGFS)	The NGFS is a network of 83 central banks and financial supervisors that aims to accelerate the scaling up of green finance and to develop recommendations on the role of central banks in respect of climate change.
Partnership for the Carbon Accounting Financials (PCAF)	A global partnership of financial institutions working together to develop and implement a harmonised approach to assessing and disclosing the GHG emissions associated with their loans and investments.
Prudential Regulation Authority (PRA)	The PRA works within the Bank of England to ensure that businesses operate safely and reduce the risk of financial distress. The PRA supervises about 1,500 financial institutions including banks and insurance companies.

Appendix 1:
Cross-reference table with the information required by French Decree No. 2015-1850 of 29 December 2015 on extra-financial reporting by investors

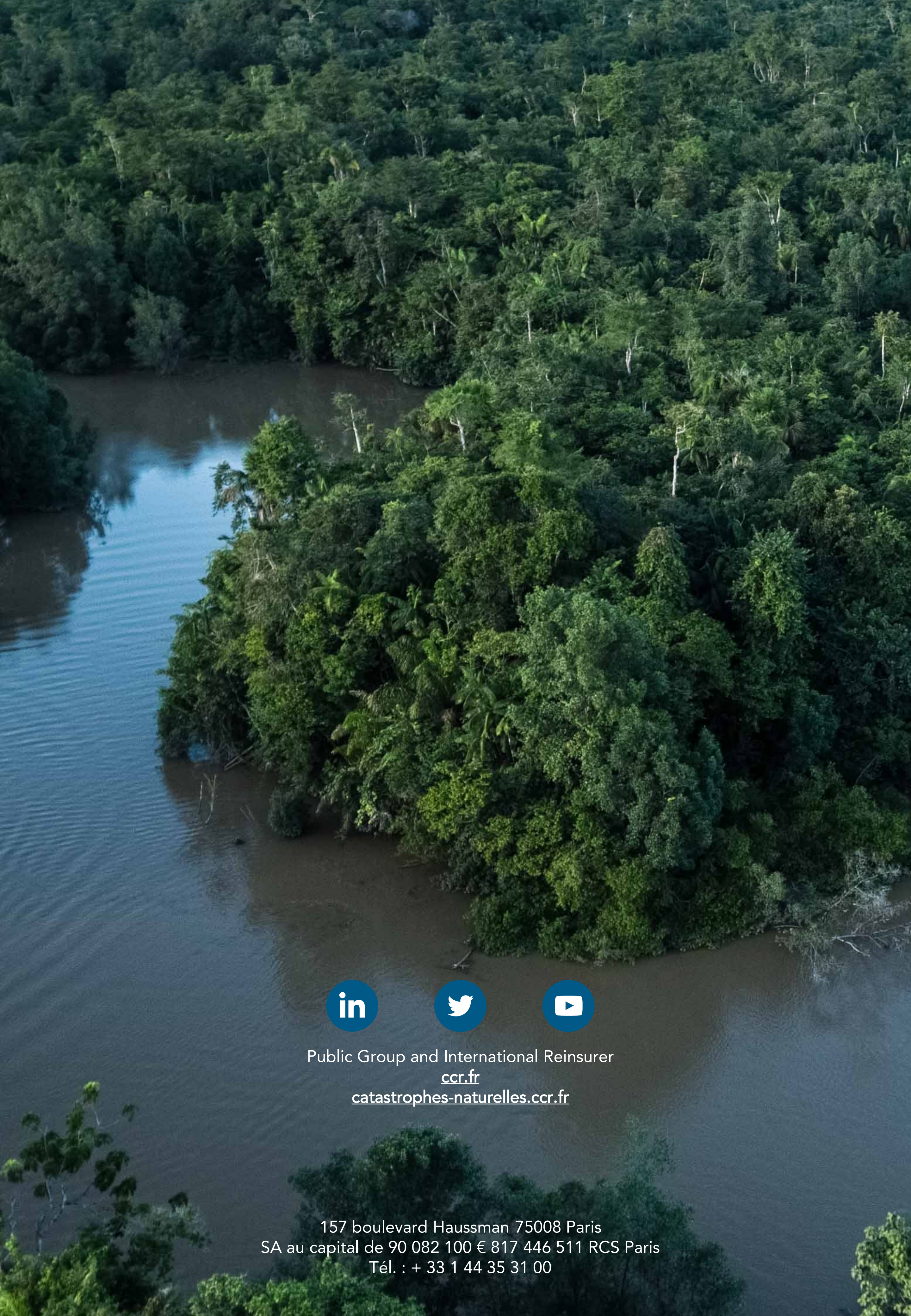
Indicative nomenclature of the decree provisions	Content of the 2020 CCR ESG - Climate report
Common obligations for all entities under IV(1).	
Entity information for entities that have elected to "comply" with II(1).	
General approach	1.2 CCR Group's Responsible Strategy 2.2 The Responsible Investment Charter
Content, frequency and means	ESG Climate Report 2020
AUM (PMC)	3.1 Portfolio Structure and Scope of Analysis
Joining an initiative	1.1 Introduction and 5.1 Participation in Scientific Research and Partnerships
Procedure for identifying ESG risks	2.1 Governance
Entity information for those having chosen not to report ("explain") Section II(4).	
Reason for not providing information	n.a
Availability and accessibility of information IV.	
Website	http://www.ccr.fr/detail-d-une-publication
Annual report	Annual ESG – Climate report
Additional requirements for entities with a balance sheet over EUR 500 million or UCIs with more than EUR 500 million of AUM.	
Information on the consideration of ESG criteria from II(2) and (3); III.	
Distinguishing information	3.1 Portfolio Structure and Scope of Analysis
Nature of the criteria considered: Description of the nature of the main criteria considered in relation to these social, environmental and governance objectives	
Choice of ESG criteria	2.2 The Responsible Investment Charter
Consideration of climate risks	2.2 The Responsible Investment Charter 4.1 Climate Issues on the Liabilities side 4.2 The ESG-Climate Risk Management Strategy on the Liabilities side 5.1 Participation in Scientific Research and Partnerships
Consideration of long-term environmental objectives	3.2 Climate Analysis of Financial Assets

Appendix 1:
Cross-reference table with the information required by French Decree No. 2015-1850 of 29 December 2015 on extra-financial reporting by investors

Information used for the analysis of issuers: Description of the general information used for the analysis of issuers on criteria relating to compliance with social, environmental and governance quality objectives	
Nature of the information used	2.2 The Responsible Investment Charter Details in the sections 3.2 Climate Analysis of Financial Assets 3.3 Thematic Investments 3.4 ESG Policy 3.5 ESG-Climate Policy for Real Estate Assets
Methodology and results of the conducted analysis: Description of the methodology of the analysis conducted on the criteria relating to social, environmental and governance quality objectives, and its results	
Description of methodologies	"Methodology" paragraphs in the sections 3.2 Climate Analysis of Financial Assets 3.3 Thematic Investments 3.4 ESG Policy 3.5 ESG-Climate Policy for Real Estate Assets
Clarification of environmental methodologies	Assets: "Methodology" paragraphs in the sections 3.2. Analyse climat des actifs financiers 3.3 Thematic Investments 3.5 ESG-Climate Policy for Real Estate Assets Liabilities: 4.2 The ESG-Climate Risk Management Strategy on the Liabilities side
Integration in the investment policy: Description of how the results of the analysis carried out on criteria related to compliance with ESG objectives, including exposure to climate risks, are integrated into the investment policy	
Information on the achievement of long-term environmental objectives (including indicative targets)	"Main results" and "main findings" paragraphs in the sections 3.2 Climate Analysis of Financial Assets 3.3 Thematic Investments 3.5 ESG-Climate Policy for Real Estate Assets
Changes made	2.1 Governance
Strategy for issuer engagement	3.4 ESG Policy
Strategy for PMC engagement	3.4 ESG Policy

Appendix 2:
Cross-reference table with the information required by TCFD regulation

TCFD regulation	Content of the 2020 CCR ESG - Climate report
Governance Disclose the organization's governance around climate-related risks and opportunities.	
Recommended Disclosure a) Describe the board's oversight of climate related risks and opportunities.	2.1 Governance
Recommended Disclosure b) Describe management's role in assessing and managing climate related risks and opportunities.	2.1 Governance
Strategy Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	
Recommended Disclosure a) Describe the climate related risks and opportunities the organization has identified over the short, medium, and long term.	1.2 CCR Group's Responsible Strategy 4.1 Climate Issues on the Liabilities side 4.2 The ESG-Climate Risk Management Strategy on the Liabilities side
Recommended Disclosure b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	1.2 CCR Group's Responsible Strategy 2.2 The Responsible Investment Charter
Recommended Disclosure c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	3.2 Climate Analysis of Financial Assets 4.2 The ESG-Climate Risk Management Strategy on the Liabilities side
Risk Management Disclose how the organization identifies, assesses, and manages climate-related risks	
Recommended Disclosure a) Describe the organization's processes for identifying and assessing climate related risks.	2.1 Governance 4.2 The ESG-Climate Risk Management Strategy on the Liabilities side
Recommended Disclosure b) Describe the organization's processes for managing climate related risks.	2.1 Governance
Recommended Disclosure c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	2.2 The Responsible Investment Charter 4.1 Climate Issues on the Liabilities side
Metrics and Targets Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	
Recommended Disclosure a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	3.2 Climate Analysis of Financial Assets 3.3 Thematic Investments 3.5 ESG-Climate Policy for Real Estate Assets
Recommended Disclosure b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	3.2 Climate Analysis of Financial Assets 3.5 ESG-Climate Policy for Real Estate Assets
Recommended Disclosure c) Describe the targets used by the organization to manage climate related risks and opportunities and performance against targets	1.2 CCR Group's Responsible Strategy 2.2 The Responsible Investment Charter 3.2 Climate Analysis of Financial Assets



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