2018
ACTIVITY REPORT

PUBLIC AND INTERNATIONAL REINSURER

GROUPE
CAISSE CENTRALE DE RÉASSURANCE

— The Caisse Centrale de Réassurance Group, owned by the French State and with more than 70 years' experience in public and open market reinsurance, is one of the 25 leading international reinsurers.

A public reinsurer serving the general interest, CCR provides State-guaranteed cover against natural disasters and uninsurable risks.

An international reinsurer, CCR RE is a subsidiary of CCR and offers Life, Non-Life and Speciality reinsurance in France and abroad.

Today, the Caisse Centrale de Réassurance Group is a key actor in the field of reinsurance, recognised for its high level of expertise in anticipating and managing risk. As at 31 December 2018, the Group had 268 employees in more than 30 roles. These employees are motivated by customer satisfaction and work to the highest professional standards. This commitment is the cornerstone of the Group's performance and enables it to meet the requirements of its missions and its shareholder's expectations.

THE CCR GROUP IN 2018

— 2018 was a year marked by another series of disasters, management of the consequences of Hurricane Irma and the continuation of the Group's transformation. The Group delivered good results in these challenging circumstances. CCR fulfilled its general interest mission and CCR RE achieved rapid, profitable growth.

Floods in Villegailhenc, in the Aude department of France, on 17 October 2018: residents begin to clean up after the torrential rains and the deadly flash flood wave in the historic centre of the town.


PUM

Severe drought. France experienced another severe drought in 2018 as a result of very low rainfall and periods of intense heat. September saw a very significant shortfall in precipitation, which was 70% below its normal level (average over the period 1981-2010). Cracks appeared in the walls and façades of hundreds of buildings, from the Massif Central to the North-East and to the South-East from the Île-de-France.

385 million euros

The cost of the damage insured under the natural disaster insurance system.

A new severe event of shrinkage and swelling of clay causes cracks on buildings.

Flooding of the Seine and Marne basins. The Seine and Marne basins were affected by floods for several weeks following the record levels of rainfall in December 2017 and January 2018.

505 municipalities
were declared to be in a state of natural disaster

Violent storms. Violent storms struck France in late May 2018, with a record number of lightning strikes, hail and torrential rain affecting the regions from Morbihan to the Île-de-France, the Hauts-de-France and the Vosges.

Following a violent storm in October, heavy rainfall affected three departments in south-east France: Aude, Hérault and Tarn. Water levels were very high and the scale of damage the highest since the natural disaster of 1999.

Floods in Languedoc in October 2018:
261 municipalities
declared to be in a state of natural disaster.

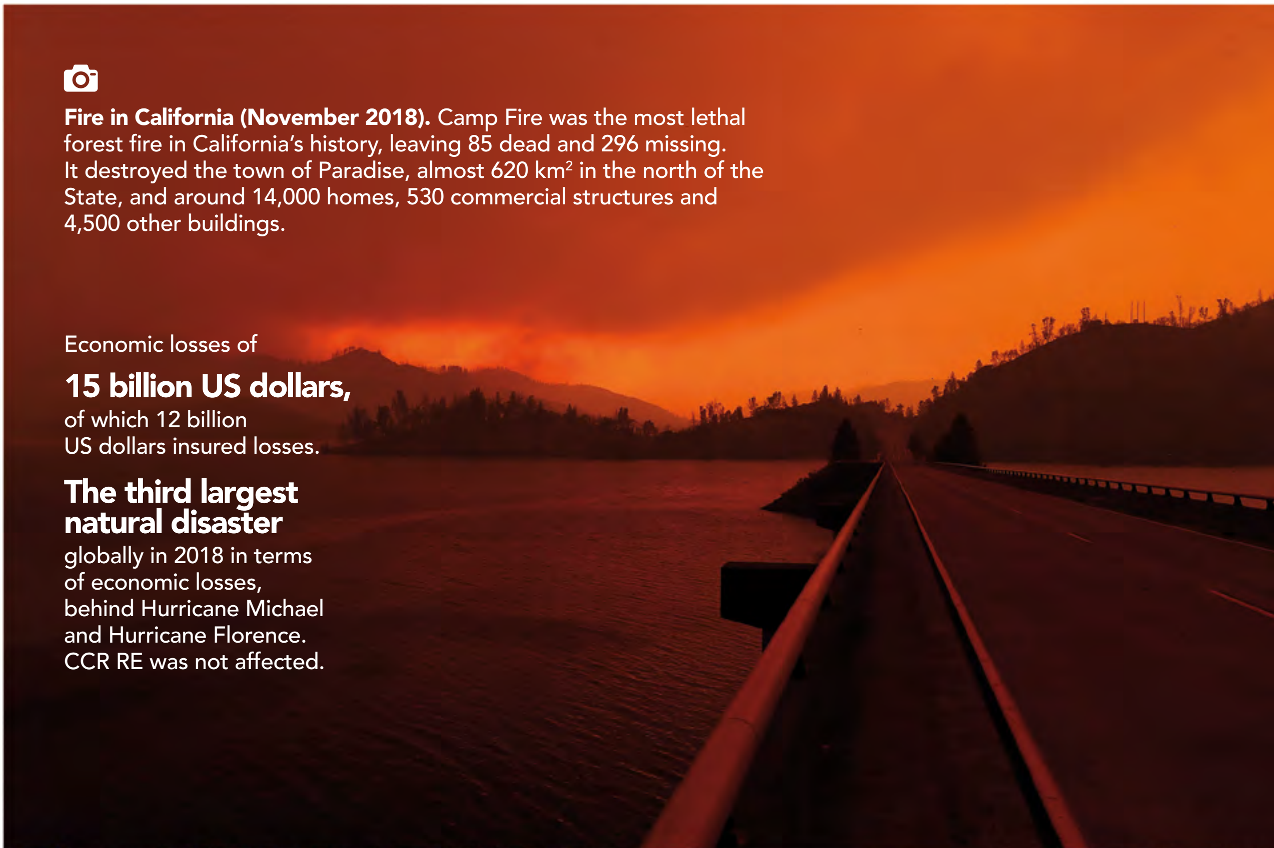
Storms in May-June 2018:
1,256 municipalities
declared to be in a state of natural disaster.

Japan severely affected by Typhoon Jebi (August 2018).
Typhoon Jebi was the most violent typhoon to hit the archipelago for 25 years. It left ten dead and hundreds injured in the south-west of Japan and caused considerable damage.

Economic losses estimated at

13 billion US dollars,

of which 8.5 billion US dollars insured.

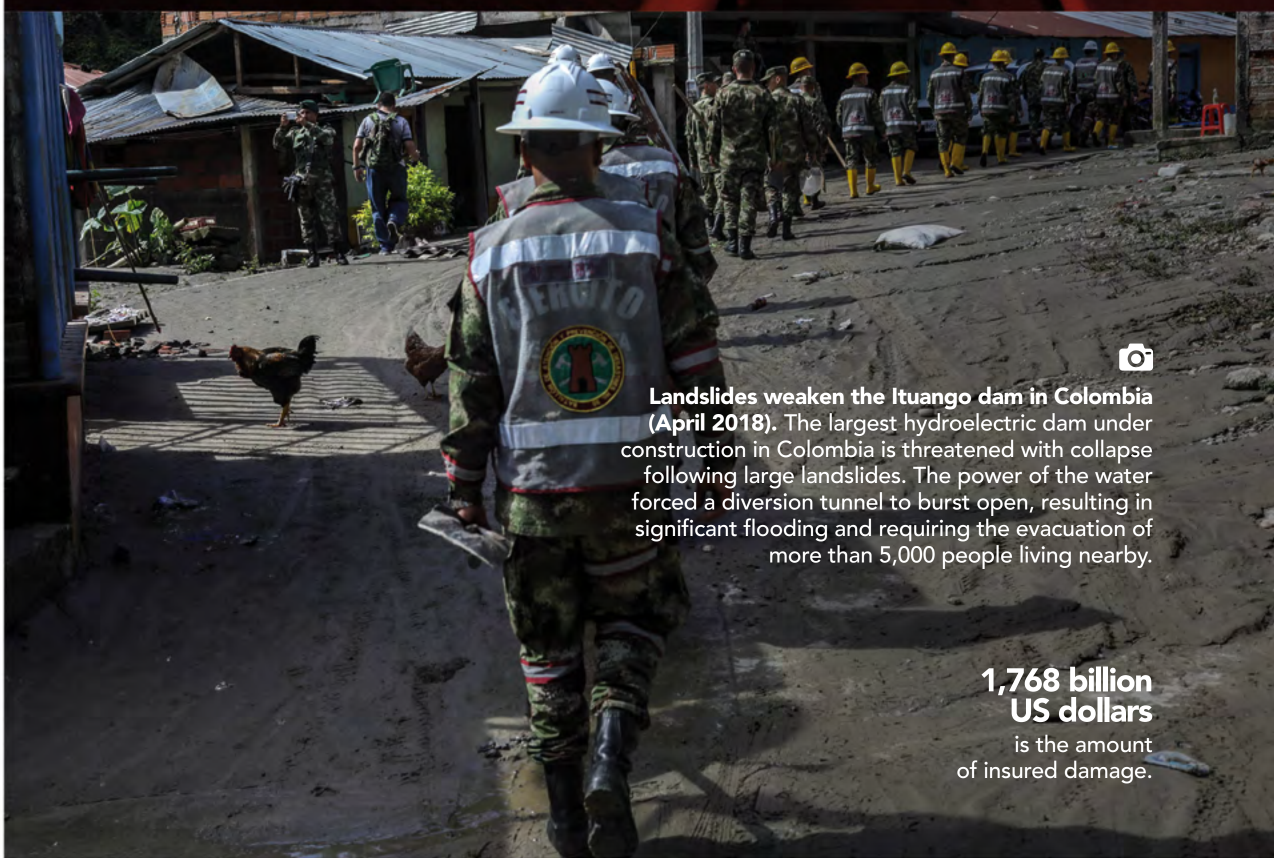


Fire in California (November 2018). Camp Fire was the most lethal forest fire in California's history, leaving 85 dead and 296 missing. It destroyed the town of Paradise, almost 620 km² in the north of the State, and around 14,000 homes, 530 commercial structures and 4,500 other buildings.

Economic losses of

15 billion US dollars,
of which 12 billion US dollars insured losses.

The third largest natural disaster
globally in 2018 in terms of economic losses, behind Hurricane Michael and Hurricane Florence. CCR RE was not affected.



Landslides weaken the Ituango dam in Colombia (April 2018). The largest hydroelectric dam under construction in Colombia is threatened with collapse following large landslides. The power of the water forced a diversion tunnel to burst open, resulting in significant flooding and requiring the evacuation of more than 5,000 people living nearby.

1,768 billion US dollars
is the amount of insured damage.

International meetings of the reinsurance market. Throughout the year, CCR RE participated in and contributed to the international meetings that were held in Mumbai (India RDV), Kigali (FANAF), Dubai (Dubai World Insurance Congress), Casablanca (RDV de Casablanca), Cape Town (IUMI), Manila (EAIC), Tel Aviv (International Reinsurance Conference), Lima (Alasa), Hammamet (GAIF), Monaco (RVS), Beirut (Fair), Madrid (World Forum), Gatineau (NICC), Moscow (Iftrip), Nice (Réavie), Baden Baden and Singapore (SIRC).

NAIAD. CCR organised a workshop in Paris on 1 and 2 October 2018 as part of the European NAIAD project. In this workshop CCR brought together partners and actors on the insurance market with the aim of raising awareness among and mobilising all 23 partners in 11 European countries with regard to the preventive development of natural solutions. It appears that the impact of some natural disasters can be reduced through the use of ecosystems and targeted prevention.

CCR Disaster Day.
The 9th CCR Disaster Day was held on 5 June 2018; the theme of the day was "Climate Change and Natural Disasters". More than 300 participants from the world of insurance, the scientific community and the disaster risk prevention sector shared their expertise.

PARI PROGRAMME DE RECHERCHE SUR L'APPRÉHENSION DES RISQUES ET DES INCERTITUDES

Chaire PARI. The CCR Groupe is a partner of Chaire PARI, a research programme on understanding risks and uncertainties.

STRENGTH, GROWTH AND INNOVATION

PIERRE BLAYAU, CHAIRMAN

In 2018 the CCR Group confirmed its strong momentum, producing satisfactory results in both public and open market reinsurance despite the rise in the level of claims. The CCR Group consolidated its positions in its core business and sustained the growth of its activities in France and abroad, while continuing its research and development around new types of risk. This capacity to innovate was also evident in the continuing transformation of the Group operating model, with increased use of digital technologies to serve partners and of artificial intelligence in advanced data processing.

CCR fulfilled its mission as public reinsurer on behalf of the State. France suffered numerous natural disasters in 2018. CCR handled these events as part of its general interest mission without recourse to the State's guarantee. At the same time, the Caisse Centrale de Réassurance made proposals to the public authorities concerning participation in risk prevention and raising public awareness and so modernising the natural disaster compensation system in line with the desire, expressed by President Macron in 2018, to achieve "a system that is quicker and more generous, but which also provides greater incentives as part of a sustainable strategy". More than ever, CCR is consistently and unfailingly fulfilling its role as public reinsurer.

In open market reinsurance, CCR RE successfully pursued an ambitious development strategy and even exceeded in 2018 the targets set in its medium-term plan. This responsive and innovative reinsurance subsidiary also helps to enhance the reputation of Paris as a financial centre, as evidenced by the launch, in 2019, of a project that had been in preparation throughout the previous year and culminated in the creation of the first French sidecar, structured as a securitisation fund (*fonds commun de titrisation*) carrying a portion of the Non-Life risks underwritten by CCR RE.

All this we owe to a shared mindset and above all to each and every one of our colleagues, to their expertise and their commitment, but also to the renewal of the teams that make the CCR Group the unique organisation it is.

Buoyed by its positive results, the Group is responding to these challenges by seeking the greatest possible added value for the public authorities, its partners and all stakeholders, while staying true to its values.

"IN 2018, THE CCR GROUP CONFIRMED ITS STRONG MOMENTUM, PRODUCING SATISFACTORY RESULTS IN BOTH PUBLIC AND OPEN MARKET REINSURANCE, DESPITE THE RISE IN THE LEVEL OF CLAIMS."

FINE PERFORMANCES BY CCR AND CCR RE IN 2018

BERTRAND LABILLOY, Chief Executive Officer of CCR and Chairman and Chief Executive Officer of CCR RE

How would you characterise the CCR Group's activity in 2018? The CCR Group maintained its strong momentum during 2018, a year marked by a succession of natural disasters.

In public reinsurance, France suffered a series of natural disasters, such as the drought in the north-eastern third of the country, the floods following storm Eleanor (January), the Seine and Marne floods (January-February), the floods that struck the west of the country (June) and the Languedoc (October). The Caisse Centrale de Réassurance paid out 872 million euros for these events, once again fulfilling its mission of providing cover for natural disasters in France without having recourse to the State's guarantee. Despite this level of losses, CCR produced solid results.

CCR RE, for its part, had an excellent year, supported by a strategy focused on its ceding companies and broker partners. Premium income reached 464 million euros, up by 17%. CCR RE's net profit doubled to 35 million euros. The open market reinsurance subsidiary reached and exceeded the great majority of the objectives set in its 2017-2020 strategic development plan one year ahead of schedule, which makes us very optimistic for the future.

Generally, how is CCR responding to the expectations raised by the increase in natural disasters and global warming? Reform of the natural disaster compensation system, driven by the President of the Republic, is a major challenge. CCR is playing a full part in putting forward proposals to the public authorities and insurance companies, both through its recommendations and through the sophistication of its scientific research. Thus, the work being carried out in collaboration with Météo-France on the consequences of climate change on the cost of natural disasters in France by 2050 is being intensified to include the most recent data concerning the most at-risk areas. We are confident that this work will help stakeholders to have a better understanding of these issues and will provide useful input into the national debate. We are organising ourselves so as to continually improve the way we respond to the desire for high-quality advice through enhanced capacity for innovation in all areas.

How are you supporting the development of CCR RE and the transformation of CCR? The development of CCR RE and its internationalisation has seen the underwriting teams strengthened with the recruitment of 25% more colleagues with international profiles. At the same time, we are focusing on digitisation of processes where usage justifies this, and on the development of artificial intelligence to support research and the operational areas. In all these fields, we are capitalising on the talent and motivation of our people. The remote working agreements put in place for colleagues in CCR RE aim to enable them to work more flexibly and with greater autonomy and, generally, we want the transformation of the Group to allow each colleague to flourish in a calm and user-friendly environment.

What are the prospects for 2019? The agenda for the year includes renegotiating both the contractual clauses with ceding companies and the financial arrangements with the Directorate General of the Treasury to make the system more relevant and more robust. The aim is to provide CCR with the resources necessary to respond to the consequences of climate change and to improve the quality of the service provided to the country in the area of public reinsurance.

In 2019, CCR RE will seek to continue its healthy growth, in other words to develop its business on the global reinsurance market in an ordered and profitable way, ensuring compliance with risk diversification and solvency ratios. Underwriting capacity was increased by the launch of 157 RE in April 2019, the first sidecar domiciled in France, in the form of a securitisation fund (*fonds commun de titrisation*) carrying insurance risks underwritten by CCR RE. This vehicle will be developed over time according to the results of the underwriting activity and investors' interest. Initial market feedback has been very positive for both CCR RE and for the Paris market. Together, we will continue to work and invest in innovation in the service of the market. It is to this approach that we owe our success. This approach will be of decisive importance in the future.

A PRUDENT INVESTMENT POLICY

How have you rebalanced the portfolio, following Hurricane Irma? CCR's investment policy was significantly influenced throughout 2018 by the need to pay claims relating to Hurricane Irma, which occurred in September 2017. CCR had to sell assets to reduce its portfolio in a coherent way in order to maintain a balance and cover the exposures at the end of 2017. Good anticipation and prudent management enabled CCR to sell 600 million euros of assets on relatively favourable conditions and to realise the capital gains necessary to pay the claims. The portfolio's good liquidity and the balance achieved in terms of asset allocation meant that these large asset sales could be carried out on satisfactory conditions without suffering adverse market impacts.

Against a background of uncertainty on financial markets because of international trade tensions, Brexit and the instability of the coalition government in Italy, 2019 will see cash-flow remaining negative, with payment of the remaining Hurricane Irma claims and payment of new claims received in 2018 relating to events such as the drought and floods. Besides, CCR is increasing its investments in green bonds and in the FinTech sector in order to diversify its portfolio.

On this subject, how is the investment policy evolving? CCR RE was not affected by any large losses in 2018 and so was able to continue to invest. Its investment policy remains fairly prudent given the generally uncertain context. The weighting of cash investments has been reduced, while bond and credit investments have been increased. CCR RE's positions in diversified investments (convertible bonds, asset allocation funds, alternative asset management) have been strengthened, as have investments in private equity and funds that grant loans including in emerging countries. Given its international presence, CCR RE gives particular importance to currencies; an Israeli bond portfolio was created in 2018.

The equity portfolios of both CCR and CCR RE continue to be protected by overlays intended to limit the impact of sharp market declines. This system worked relatively well in 2018, making it possible to limit the impact of market downturns and reduce the volatility of assets invested in equities.

How did property assets perform in 2018? 2018 was a very good year with more than 30 billion euros invested in offices and commercial real estate in France, a record volume and up by 12% compared to 2017.

The volume of transactions, on the other hand, fell by 3% compared to 2017. Yields continued to fall and prices per square metre to rise. Paris attracted a lot of interest.

Our portfolios of properties, which are primarily situated in prime locations in Paris, especially the central business quarter, benefited from this interest. The vacancy rate for our office buildings is less than 1%.

Residential property attracted a lot of interest from investors but also from tenants. The vacancy rate in our residential properties is less than 4%, which is previously unheard of.

The value of CCR's and CCR RE's portfolios rose by 5% and rental income grew by 11%.

In this favourable context, what has the CCR Group's property investment policy been? We have remained active on the French market. We target offices

PIERRE COUMES,
Financial Investments Director

KARINE ROBIDOU,
Head of Property Investments

and commercial property assets located in the centre of Paris or the inner suburbs to ensure our property portfolio has good liquidity.

We are always very demanding in our choice of buildings and select properties that can evolve to respond to users' changing needs. In addition, we have continued our indirect investments through funds in order to diversify our portfolios in terms of both asset type and geographical location.

Through these funds we invest mainly in property asset classes such as logistics, hotels and retirement homes. These assets do not follow the same cycles as our direct property investments and enable us to achieve the expected yields.

Generally, we prioritise assets that offer the most sustainable and solid yields.

We have also undertaken significant maintenance programmes on our properties to ensure they function well and remain attractive.

What has been done to improve the energy performance of the property assets? Investment decisions will increasingly focus on environmental, social and governance (ESG) factors. Buildings are responsible for around 40% of global carbon emissions and businesses are placing an increasingly high monetary value on more energy efficient buildings.

Energy performance is a very important issue. When we invest, we select buildings that can be adapted to meet the energy challenges. We systematically act to improve the energy performance of the buildings we hold directly, by carrying out work on those buildings and taking advantage of opportunities to obtain ecolabels.

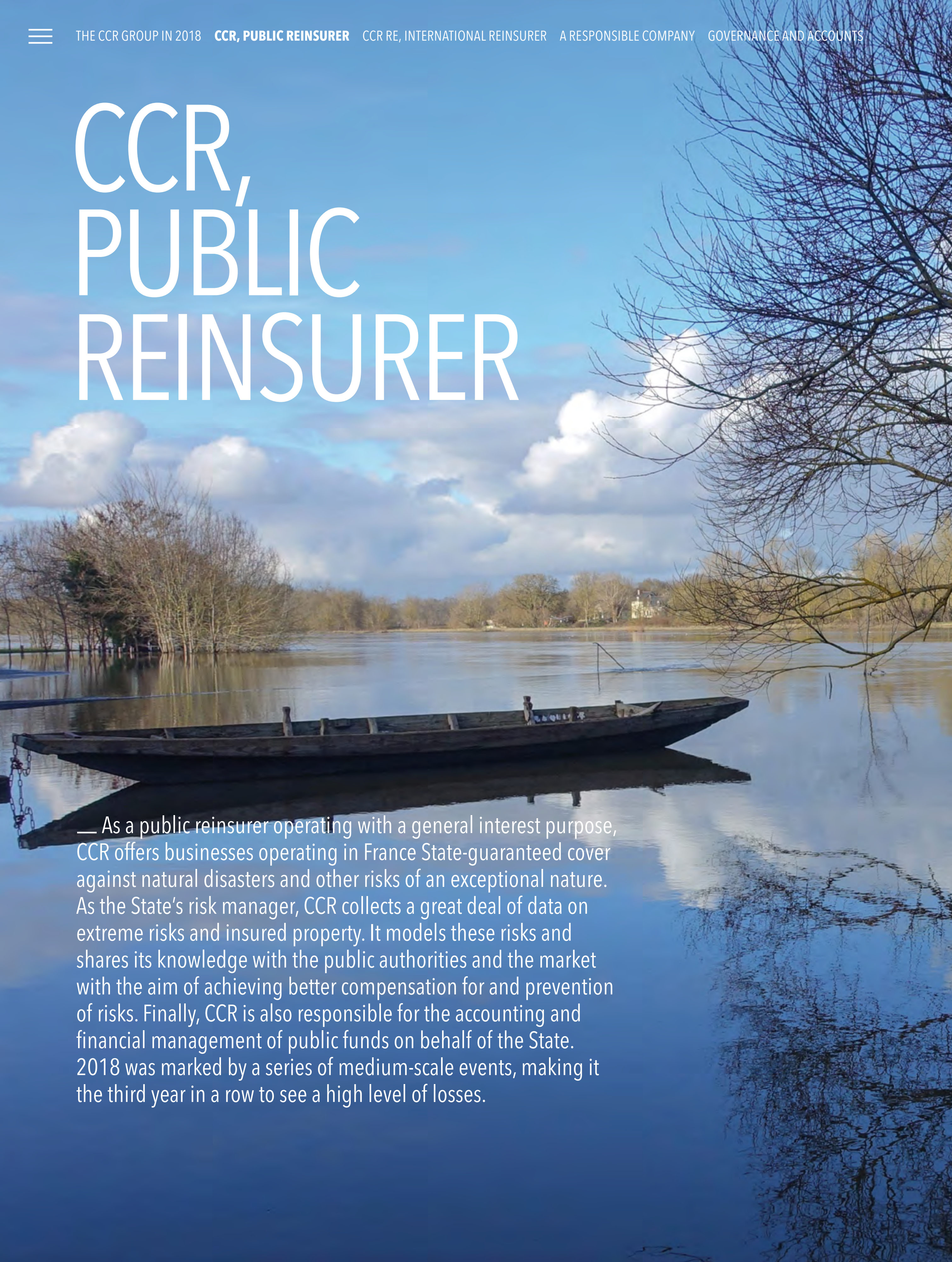
We also pay particular attention to energy issues when it comes to managing our buildings. In 2018, the CCR Group signed a contract with EDF under which all the office and residential buildings will be supplied by electricity from renewable sources.

As regards our indirect investments, we work with management companies that have an ESG approach and within these funds we prioritise properties that have been awarded ecolabels or are undergoing restructuring in order to do so.

What are the prospects for 2019? The next few years will be part of a product cycle that requires adaptability and detailed understanding of users. The property assets that will be valued will be those that can be adapted to new ways of working and living and fully meet people's expectations. The challenge will be to be able support users' needs, which requires us to reflect on future performance and to create value. New ways of occupying buildings are developing quickly (co-working, co-living) including new technologies and environmental issues.

We will focus on the search for value creation by managing our assets dynamically while continuing to upgrade and develop our properties that have very good fundamentals and, particularly, excellent locations.

We will not rule out selling those which present greater difficulties in terms of value creation and we will continue to source existing properties if they offer an expectation of good future performance as well as new builds that meet the highest standards, provided they are in locations that are sought after by users.



CCR, PUBLIC REINSURER

— As a public reinsurer operating with a general interest purpose, CCR offers businesses operating in France State-guaranteed cover against natural disasters and other risks of an exceptional nature. As the State's risk manager, CCR collects a great deal of data on extreme risks and insured property. It models these risks and shares its knowledge with the public authorities and the market with the aim of achieving better compensation for and prevention of risks. Finally, CCR is also responsible for the accounting and financial management of public funds on behalf of the State. 2018 was marked by a series of medium-scale events, making it the third year in a row to see a high level of losses.

Flooding of the Loire on 11 January 2018 in Souzay-Champigny (Maine-et-Loire): the Loire in heavy flood.

AN INCREASINGLY EFFECTIVE COMPENSATION SYSTEM

The Seine floods in 2016, Hurricane Irma in 2017 and a succession of medium-scale events in 2018 tested the natural disaster insurance system with an unusual accumulation of events of all kinds. This series of events following each other in rapid succession focused attention on the effectiveness of the natural disasters insurance system in France. Hurricane Irma is the largest event CCR has had to deal with since 1982, requiring a specific management approach because the areas concerned are islands. The lessons learned from Irma have fed into thinking and discussions about how to improve the natural disaster insurance system.

AN UNUSUAL ACCUMULATION OF MEDIUM-SCALE EVENTS

In 2016, the insured cost of the Seine floods was around one billion euros. In 2017, the total amount of insured damage following Hurricane Irma was around two

487 million euros
Floods (January, June and October 2018)

385 million euros
Drought (from summer 2018)

THIERRY COHIGNAC,
Deputy Director, Reinsurance and Public Funds

PARTICULAR CHARACTERISTICS OF IRMA

"Irma highlighted the particular nature of the overseas departments and territories, where the rate of insurance penetration is around 50% on average, even though the exposure to natural risks is very high. In addition, the insurance sector is much more concentrated there than in metropolitan France, with only 15 insurers. In comparison, the rate of insurance penetration in metropolitan France is close to 100%, with around a hundred Non-Life insurers. Premiums collected in the overseas territories and departments are around 25 million euros, with less than one million euros for the islands of Saint-Martin and Saint-Barthélémy, while the cost of Hurricane Irma alone was around two billion euros. These figures by themselves show the importance of the natural disaster system for covering the most at-risk territories. Without this system and the public reinsurance offered by CCR, these territories would not be insurable. Following Hurricane Irma, CCR made adjustments to its reinsurance conditions but retained the objective of enabling actors operating in the overseas territories to continue their activities without difficulty."

"HURRICANE IRMA DEMONSTRATES THE RELEVANCE OF THE PUBLIC REINSURANCE MODEL BASED ON SOLIDARITY. THIS SYSTEM MAKES IT POSSIBLE TO COVER ALL FRENCH TERRITORY, INCLUDING THE MOST AT-RISK AREAS."

ANTOINE QUANTIN,
Reinsurance & Public Funds Director

billion euros. 2018 differed from the two preceding years in that there was no single event as large as the Seine floods or Hurricane Irma. What 2018 did see was a succession of medium-scale events: the floods following Storm Eleanor, the flooding of the Seine and Marne basins, a series of violent storms in May and June, the deadly floods in the Aude region in October and a persistent drought in the North-East, covering more than a quarter of metropolitan France including the Paris region. CCR estimates the cost for the market of these events that occurred in 2018 as being of the order of 1.8 billion euros.

TOWARDS MODERNISATION OF THE NATURAL DISASTER INSURANCE SYSTEM

Because of its key role in the system of compensation for natural disasters in France, CCR learns from the events that occur and seeks to ensure the system is effective. When the President of the Republic visited Saint-Martin on 30 September 2018, he announced that "the State will arrange a consultation on an overhaul of the system of insuring against natural disasters, aiming for a system which is quicker and more generous but which also provides greater incentives. This overhaul will be presented by summer 2019."

CCR has worked closely with the public authorities to study how the system could change to make it easier to understand for insured parties affected by natural disasters and to increase the incentives for prevention, with particular regard to the management of drought risk and simplification of the system of deductibles.

Significant improvements were already rolled out in 2018. The iCatNat project, led by the French Interior Ministry, speeded up processing of requests for declarations of a state of natural disaster; the 2018 housing act (*loi ELAN*), adopted in late 2018, makes a soil survey compulsory for sales of land in an area exposed to the phenomenon of differential ground movement following drought and rehydration of the soil, which should reduce claims involving new builds. Finally, the work carried to produce the criteria for obtaining a declaration of a state of natural disaster on the grounds of drought should be completed in 2019, making the process quicker and easier to understand.

DAVID MONCOULON,
Head of the Disaster Risks Analysis and Modelling Department, Reinsurance and Public Funds Division

ANTICIPATING THE IMPACT OF CLIMATE CHANGE

CCR has been developing models for estimating the financial consequences of natural disasters (floods, drought, coastal flooding, earthquakes, and hurricanes) for 15 years.

"THIS INCREASE IN DAMAGE DEMONSTRATES THE NEED FOR PREVENTION POLICIES TO TAKE INTO ACCOUNT CLIMATE CHANGE."

In 2018, CCR carried out a prospective study on the current and future vulnerability of French territory in the context of climate change, in partnership with Météo-France.

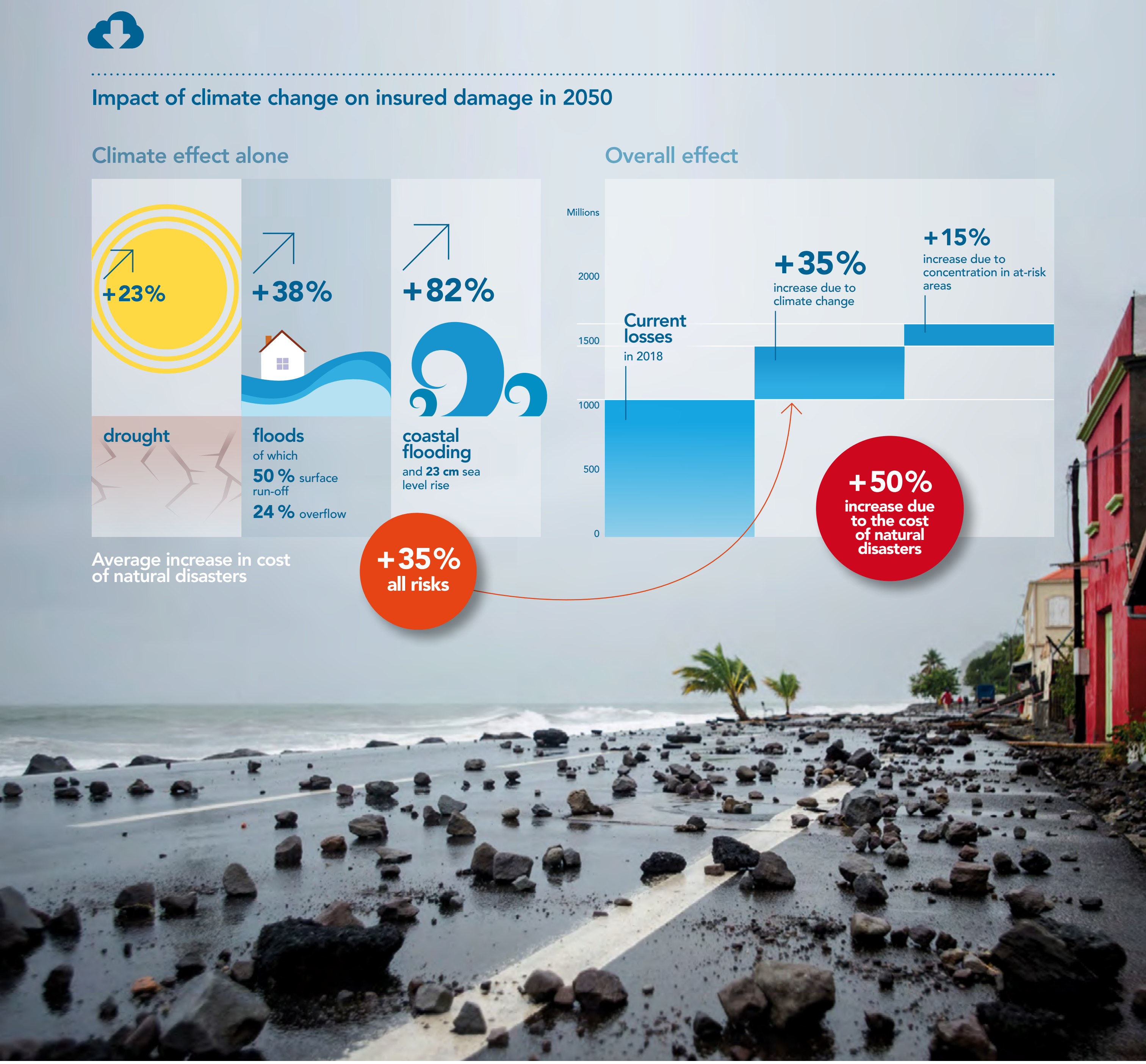
AN INNOVATIVE METHODOLOGY

Most models in the insurance sector assume that risks are independent of each other. In 2018, at CCR's initiative, all the climate risks were linked in a comprehensive simulation using Météo-France's ARPEGE-Climat model. The benefit of this approach is that it makes it possible to model the correlation between risks, particularly at extreme values. This means that the probability of major flooding and drought occurring in the same year can be studied. This work is based on an assumption of global warming that corresponds to the IPCC's most pessimistic scenario, i.e. RCP 8.5. In this scenario the rise in temperatures is between 2.4°C and 2.6°C by 2050 and between 2.6°C and 4.8°C by 2100, with sea levels rising by around 20 centimetres by 2050. Using its Arpège Climat model, Météo- France generated 400 years based on the current climate and 400 years based on the 2050 climate. These results were fed into CCR's hazard (flooding, drought and coastal flooding) and damage models.

WHAT IS THE IMPACT IN 2050?

The results show that loss ratios would be about 50% higher in 2050. The frequency and severity of events would account for 35% and concentration in at-risk areas for 15%. The spatial breakdown of the results highlights the sharp disparities between different areas. The Atlantic coast would see damage rise by 60% as a result of demographic changes and the rising sea level. The heightened

Impact of climate change on insured damage in 2050



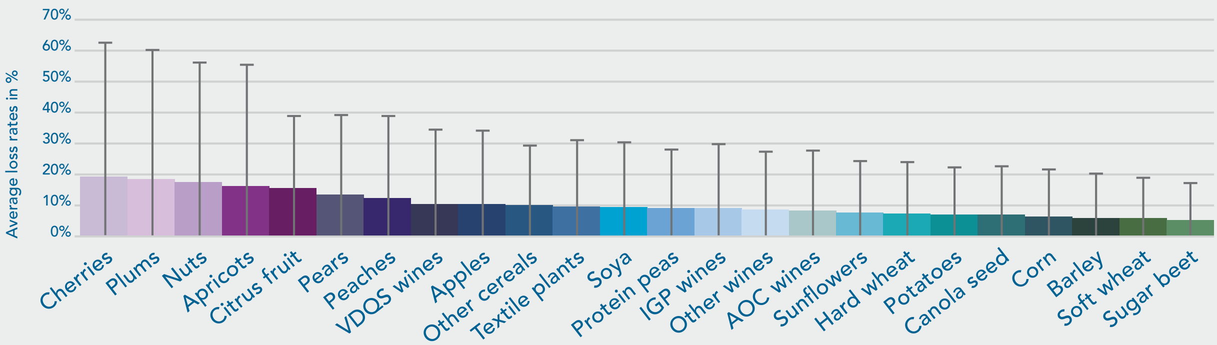
vulnerability of the Île-de-France would result in damage increasing by more than 40%, while the increase would be around 30% for the departments of the Mediterranean rim. These results also highlight the areas that could be the subject of specific prevention policies.

CCR and Météo-France will continue their joint research in 2019 with a study of the consequences of climate change for the overseas territories.

CLIMATE RISKS FOR CROPS

A thesis* is being written within CCR on the modelling of the impact of extreme weather events on crops in France to 2050

Average loss rates at farm level by crop in metropolitan France over the period 2000-2016 and quantiles [10-90]



* PHD student: Dorothée Kapsambelis
Director and co-director:
Jean Cordier (AgroCampus Ouest), David Moncoulon (CCR)

MONITORING MULTI-RISK CROP CLIMATE INSURANCE

Since 2018, CCR has been carrying out a five-year project to monitor multi-risk crop climate insurance for the French Agriculture and Food Ministry. This is an analysis of the insured portfolio in metropolitan France, including the creation of indicators for monitoring the development of this insurance. These indicators are determined at departmental level and by crop category (insured areas and capital, premium rates per hectare, amount of total premiums and premiums eligible for support, rate of diffusion, etc). This study is accompanied by an analysis of this insurance product in terms of geographical coverage, agricultural specialisation, type of insurance contract chosen and, more generally, how widespread this insurance is among farmers.

CCR presents the results of this work to farmers' representatives, insurers and the public authorities at the General National Council on Agricultural Risks (*Conseil National Général des Risques en Agriculture*). This study should provide a reference for the French Agriculture and Food Ministry to assist in decision-taking in its risk management policy. —

PHILIPPE ROBERT,
Director, Public Funds Department, Reinsurance and Public Funds Division

MANAGEMENT OF PUBLIC FUNDS: AN ADDITIONAL SOURCE OF EXPERTISE

CCR is responsible for the accounting and financial management of five public funds on behalf of the State:

– The National Fund for Management of Risks in Agriculture
– The Construction Insurance Risks Compensation Fund
– The Major Natural Risks Prevention Fund
– The Guarantee Fund for the Risks Associated with Agricultural Spreading of Urban or Industrial Sewage Sludge
– The Guarantee Fund for Damage Resulting from Acts of Prevention, Diagnosis or Treatment by Health Professionals

NICOLAS BAUDUCEAU,
Director, Public Funds and Prevention Department – Reinsurance and Public Funds Division

PREVENTION, A NEW OBJECTIVE FOR CCR

How can prevention limit the impacts of natural disaster events? Action can be taken in three areas.

The first is better knowledge of the risks and of the exposure of people, property and human activities. It is essential to be able to diagnose, risk by risk, France's vulnerability on both a national scale in order to provide an overall strategic view, and on a local level in order to be able to take specific actions. The second is to seek to deal with the current situation resulting from types of urbanisation which developed in the past and which are sometimes ill-suited to at-risk areas. Several strategies are possible. In the most serious cases, where lives are directly threatened and where there is no financially sustainable alternative, the authorities can purchase properties either compulsorily or by amicable agreement. In less urgent situations, other means that do not require people to be moved can also be used, such as reducing the frequency or intensity of events (dykes, flood-regulating structures, rockfall protection netting or avalanche barriers...), structurally adapting property exposed to the risk (adapting buildings, resilient urban renewal...) or changing behaviour, promoted by awareness raising but also forecasting where that is possible and preparing for the occurrence of a crisis.

Finally, the third consists of avoiding a worsening of the situation in the future by putting in place normative or innovative systems that make it possible for at-risk areas to change and develop into urban systems that are better urban systems that are better adapted and better prepared to face natural disasters.

Is it possible to measure the effectiveness of preventive measures? Yes, in part, and it is essential to make progress in this area in the future. Prevention is undervalued. When it is fully effective, it is transparent and remains unseen. The risk then is that interest in it is lost. Where it is only partly effective, damage occurs and it becomes the target of criticism. Carrying out a prevention policy is therefore an unusual kind of battle in which, in terms of image, you risk losing whatever happens. That is why we are currently developing a specific activity designed to measure the effectiveness of prevention arrangements currently in place or which will be put in place in the future, both nationally and locally. We are currently in the testing phase where we are using our modelling tools and our loss data to explore the possibilities. In 2018 we were able to measure the effectiveness of the reservoir lakes of the Seine basin in the January floods. They enabled insured damage to be reduced by almost 30%. We also carried out a statistical analysis which demonstrated that flood risk prevention plans limit the growth in the number of losses in municipalities which have these plans. Our aim is to evaluate and support the prevention policies currently being implemented.

To what extent do you work together with the public authorities? We have established the basis for a sustainable collaboration with the French Ministry for the Ecological and Inclusive Transition and some of its decentralised departments. This collaboration is built around an experiment to test the benefit of combining the data of CCR and the Ministry to measure the relevance and effectiveness of the natural risks prevention policy implemented through the Barnier Fund. We have also begun to work with some regional and local authorities that are very active in implementing prevention policies. Here again our aim is to assist and support the public authorities in order to contribute to boosting preventive actions.

PIERRE TINARD,
Senior Modeller,
Disaster Risks Analysis and Modelling,
Reinsurance and Public Funds Division

TERRORISM, THE NEW RISKS

The emergence of new forms of terrorism and the prospect of new types of risks, both human and economic, means that modelling is required to provide input for discussion and consideration of these developments and to assess their potential impacts.

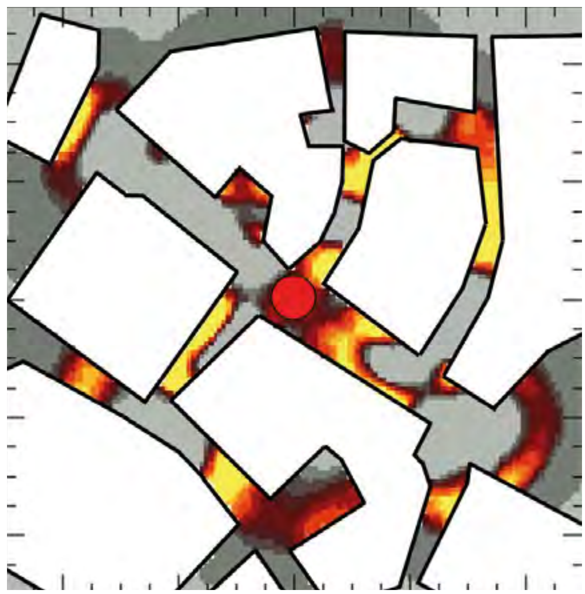
In its role as public reinsurer, CCR reinsures direct material damage resulting from acts of terrorism occurring on French territory, with unlimited cover. Non-Life insurance policies have been required to include cover for damage to property resulting from terrorist acts and attacks since 1986. This mandatory cover includes terrorist acts committed using nuclear, biological, chemical or radiological (NBCR) substances and material damage suffered on French territory resulting from an attack committed outside the country's borders, such as contamination by radioactive substances. France is one of the countries with the broadest cover for terrorism-associated risks in Non-Life insurance.

UNLIMITED COVER

In October 2017, the "Terrorism" risk protection scheme was renewed for the period 2018-2021. There are two complementary schemes that make it possible to offer unlimited cover for losses: large risks, which fall under GAREAT reinsurance, and small and medium risks that fall under reinsurance of insurers or groups of insurers.

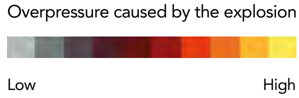
Large risks are defined as those where the insured capital is 20 million euros or more. GAREAT Grands Risques protects its members by placing on the market a common annual stop-loss reinsurance programme, for which the ceiling was 2.6 billion euros in 2018.

Small and medium risks are defined as those where the insured capital is less than 20 million euros. Since 2006, CCR has been authorised by law to offer unlimited cover backed by the guarantee of the State to any insurance company that requests this.



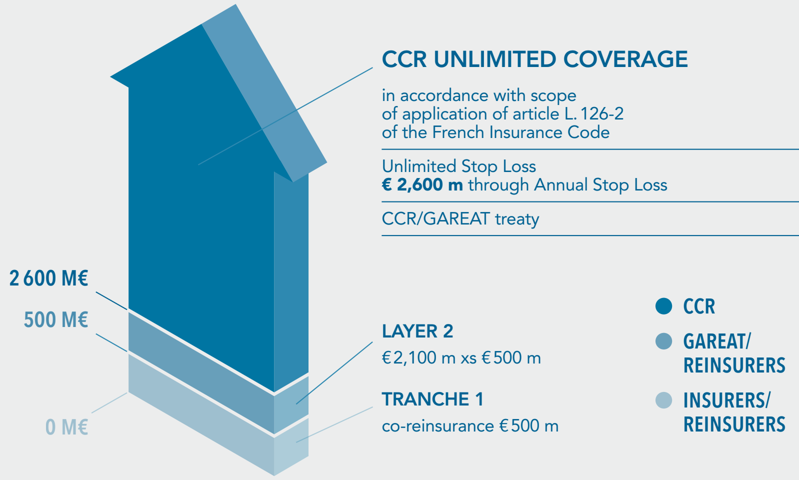
Simulation of shock wave propagation following an explosion (red circle) in an urban environment, overhead view of the buildings (white polygons). The waves are channelled along and reflect off the buildings.

Overpressure caused by the explosion



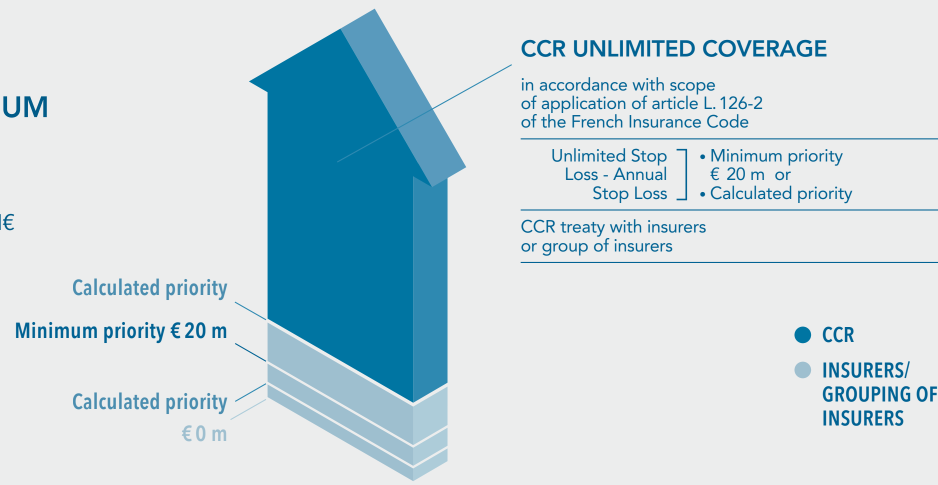
COVERAGE OF LARGE RISKS IN 2018

- Large risks: insured amounts ≥ 20 M€
- Fixed premium (revised annually)
- Basis: Year of occurrence 2018
- 2018: Estimate of premium base € 210 m



COVERAGE OF SMALL AND MEDIUM RISKS IN 2018

- Small and medium risks: insured amounts < 20 M€
- Fixed rate
- Basis: Year of occurrence 2018



MORE ACCURATE MODELLING

Since 2012, CCR has developed a database of more than a hundred scenarios incorporating factors that can influence the consequences of terrorist attacks, such as wind speed and direction, rain, the quantity of explosives or the quantity of NBCR substances used. In 2018, the model was enhanced with the inclusion of more accurate treatment of the effects of explosions, such as the propagation of shock waves. For this, CCR has a database of all the buildings in France with their ground coverage and elevation to enable it to produce a 3D reconstruction of the buildings in a specific area. An algorithm is used to model the propagation of shock waves, including their reflection off buildings and their channelling along streets. For small and medium risks, this new modelling provides a more realistic view of the damage and gives an idea of the maximum possible cost. It provides a tool for dialogue with insurers to demonstrate the benefits of the reinsurance system.

MODELLING EXTENDED TO INCLUDE NUCLEAR ACCIDENTS

The tools used for terrorism are also used to simulate the impacts of nuclear accidents, such as the propagation of radioactive materials. Recent changes in French legislation have increased the limits of cover for nuclear third-party liability (Paris Convention). The terrorism model has been adapted for nuclear accidents by a change of scale and by creating different scenarios based on existing preventive measures for France's nuclear plants.

CCR
Key figures in 2018 in millions of euros

908
Gross written premiums

7,720
Assets managed, at market value

95.1%
Net combined ratio

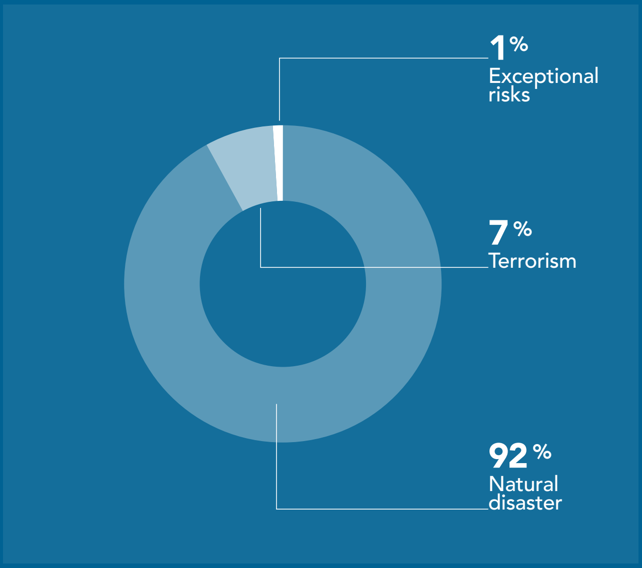
5,276
Solvency 2 eligible own funds

1.8%
Return on investment

4,500
CCR natural disaster loss absorption capacity at market level without the State's intervention

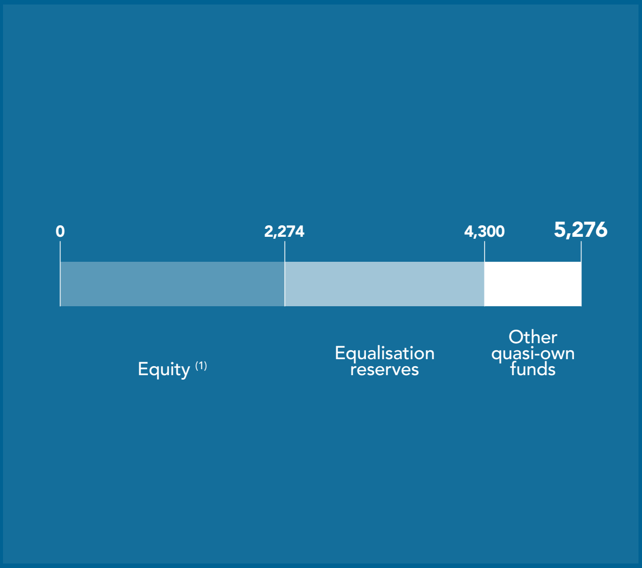
147
Net income

Breakdown of premium income



Solvency 2 eligible own funds

(in millions of euros)



(1) Valued according to the French GAAP principles, excluding valuation of unrealised capital gains and losses and excluding equalisation reserves

CCR RE, INTERNATIONAL REINSURER

— CCR RE continued to grow in 2018 against the background of a difficult and turbulent global reinsurance market. Premium income was up 17% and net profit doubled. This disciplined growth is the result of the work of CCR RE's teams and its specific positioning as a business that is close to its clients. CCR RE's corporate values are demonstrated in its close and stable relationships with its customers, the way it listens carefully to ensure it has a thorough understanding of their needs, the speed with which it responds and its long-term partnership approach.

Typhoon Jebi in Japan.

HEALTHY AND PROFITABLE GROWTH

BERTRAND LABILLOY,
Chairman and Chief Executive Officer

LAURENT MONTADOR,
Deputy Chief Executive Officer

CCR RE has created expectations since it was established: where was the open market reinsurance subsidiary at the end of 2018? CCR RE continued to grow strongly and premium income was 17% up at 464 million euros, with new business accounting for 20%. The significant boost in business allowed the portfolio to be diversified in both the geographical spread and lines of businesses. Growth was dynamic on both Middle-East and Asian markets. Life business grew by 18% while the P&C book rose by 17%, mainly driven by agricultural and fire risks. This overall expansion is a diversified and healthy growth. Underwriting profitability improved, with a P&C combined ratio falling by 5 points to 99.4%. The growth was also achieved while the expense ratio decreased, from 7.2% in 2017 to below 6% in 2018. This reduction was the result of process improvements and reorganisation. CCR RE achieved growth without costs growing at the same rate while investing in technological innovation, enabling it to be responsive and market-oriented. By the end of 2018, CCR RE had reached or even exceeded the great majority of its targets and was a year ahead of schedule under its 2017-2020 strategic plan.

"OUR PARTNERSHIP WITH CEDING COMPANIES AND BROKERS IS STRENGTHENED BY THE BUSINESS'S DIGITAL TRANSFORMATION."

LAURENT MONTADOR

CCR RE achieved strong growth in its business whilst the Group's solvency ratio reached 189%. We were, in fact, able to limit the effects of financial market declines through a disciplined investment policy. In addition, our provisioning and capital management policy remained prudent, with a transfer of 15 million euros to the equalisation reserves, in addition to the net profit of 35 million euros that was fully capitalised, making CCR Re more robust.

What are CCR RE's resources and organisation after two years of existence? Following the creation of CCR RE at the end of 2016 and a successful first year in 2017, we embarked upon a policy of strengthening its infrastructure, modernising its processes and renewing its

"WE ARE AHEAD OF SCHEDULE, WITH GOOD RESULTS IN TERMS OF PROFITABILITY AND SOLVENCY."

BERTRAND LABILLOY

teams. To ensure we remain responsive and competitive, we adopted the agile method, which provides us with a transverse, multi-disciplinary view in the digital transformation processes, including artificial intelligence tools such as machine learning. In this, we are supported by our excellent information system and the electronic management of all documents, which began more than 20 years ago. We are building on this and developing unstructured data analysis, which opens up a whole new sphere of concrete applications, improving our view of risk and the quality of service provided to our clients and broker partners. This innovation includes the involvement of external actors, including start-ups specialising in our areas of activity.

What are the prospects for growth in 2019? As regards underwriting, we are seeking to reduce the potential volatility of our results that is associated with natural disasters by extending underwriting beyond the core target markets, particularly in Latin America and soon in sub-Saharan Africa. We also would like to develop our Life book by providing support to the clients with whom we already have a well-established P&C partnership.

With a more risk friendly underwriting philosophy that fits within a disciplined and predefined framework, CCR RE is renewing its teams in order to raise its international profile while capitalising on its in-house skills and client relations.

CCR RE is putting in place innovative forms of financing and retrocession to support its development, using the full range of tools available on the finance and reinsurance markets. Thus, CCR RE has just created 157 Re, the first sidecar based in Paris, as part of the geographical diversification of its disaster underwriting. This launch, which was welcomed by the French Ministry of the Economy and Finance in a press release, strengthens CCR RE's underwriting capacity, which has joined the list of reinsurers that have at their disposal this tool for the management and optimisation of their capital. CCR RE is contributing to the Paris market's financial flexibility and capacity for innovation at the time of Brexit.

A DIVERSIFIED AND DISCIPLINED UNDERWRITING POLICY

HERVÉ NESSI,
Market Underwriting Director

PATRICK DELALLEAU,
Global Underwriting Director

Since it was launched, CCR RE has seen, in 2017, a very challenging year in which reinsurance markets faced an exceptionally high level of natural disaster losses, together with large additional loadings with regard to motor reserving provisions in Great Britain as a result of the regulatory changes (Ogden Tables). CCR RE had already begun to diversify its portfolio both geographically and in terms of the weighting of the lines of business, together with an increase in its Life and Speciality books, which enabled it to absorb this challenge. Buoyed by this initial success, CCR RE continued its efforts to achieve 2018 renewal objectives. The business success and relevance of the strategy are demonstrated by a growth of 17% in premium income and by a 100% enhancement in net profits.

CCR RE's teams are increasing their efforts in a highly competitive environment despite high levels of losses, while continuing to diversify geographically and in terms of business lines.

"THE FIGURES SPEAK FOR THEMSELVES. VOLUME OF PREMIUMS PROFIT AND SOLVENCY ARE GOING UP WHEREAS THE EXPENSE AND COMBINED RATIOS ARE GOING DOWN. WE ARE AHEAD OF OUR BUSINESS PLAN AT THE END OF 2018."

HERVÉ NESSI

Regarding the geographical spread, in addition to the growth markets in the Middle East, Asia and the Caribbean, CCR RE is developing its business in Central and South America and in Africa.

In terms of business lines, CCR RE is not only focusing on Life, which already accounts for more than a third of our portfolio, but also on Agricultural, Credit, Natural Disasters and Terrorism.

Teams are able to look at taking more significant positions in other classes depending on how their markets evolve.

"IN A CHANGING INDUSTRY, CCR RE HAS REMAINED ON COURSE. WE ARE MAKING GOOD SPEED, WITH ALL HANDS ON DECK, ENJOYING FAVOURABLE WINDS, EVER ON THE LOOKOUT FOR NEW OR CHANGING RISKS AND READY TO TACK AS NECESSARY."

PATRICK DELALLEAU

CCR RE is supported in this by its clients companies and broker partners, who appreciate CCR RE's long-term and holistic partnership approach, CCR RE remains reliable and transparent with its partners about what it can offer, providing a more risk-friendly policy, while maintaining profit expectations in line with its shareholder's objectives.

This greater acceptance of risk is being implemented gradually, within a highly disciplined and closely-monitored, predefined framework. The proactive retrocession policy not only provides protection against possible accumulations of exposure from diverse risks, but also becomes an instrument of underwriting policy in its own right.

Buoyed by its conviction that CCR RE enjoys a good reputation among market actors, its clients and partners and by the stability of its international teams, it will continue to seek healthy and disciplined development in terms of both underwriting and portfolio diversification.

TEAMS IN CANADA AND LEBANON TO DEVELOP BUSINESS IN AMERICA, MIDDLE EAST AND AFRICA

On the right, **Pierre Salameh,** Director, Non-Life, CCR RE Lebanon Representative Office in Beirut, with **Chadi Abou-Rjeily** Assistant to the Director, Non-Life, Lebanon Representative Office.

LEBANON

CCR RE has been present in Beirut for 20 years and is a major reinsurance actor in the Mediterranean, covering an area from the countries of the Levant to those of the Gulf and North Africa. Lebanon's strategic position, in both geographical and cultural terms, enables CCR RE's local team to build and maintain a business network and develop long-term trusted relationships with their P&C clients. CCR RE has become a key reinsurer in the region in Motor, Fire and Health insurance. The market outlook is promising in these three classes. The absence of a social security system means it is necessary to take out private insurance. The economic dynamism of the area with reconstruction and the development of new towns and cities creates >

> a highly favourable environment for the next few years. Premium income from the MENA market was up almost 25% at 1st of January 2019.

Pierre Dionne Senior Vice President and Chief Agent with **Robin Darby,** Senior Underwriter.

CANADA

CCR RE established itself in Canada almost 20 years ago, in 2000. Its local presence in Toronto means it has in-depth knowledge and understanding of local regulation of insurance, which is considered one of the most restrictive in the world. CCR RE has developed business in the Non-Life classes of Fire, Motor, Surety, Property Damage, Casualty and Natural Disasters. In 2018, CCR RE signed new Health and Sickness treaties. This new underwriting covers Disability, Accidental Death and Travel Insurance.

There is a large disaster insurance market in Canada, with frequent events such as forest fires, floods, hail storms, tornadoes and violent storms affecting all provinces. The experience CCR has acquired in natural disaster prevention is of great interest to the Canadian authorities. The local market is growing by 2% to 3% each year. In 2017, CCR RE signed new treaties in the Caribbean covering property risks. Since then, CCR RE Canada has quadrupled its premium income in this region. —

INTERNATIONAL TEAMS COMBINING TECHNICAL EXPERTISE AND COMMERCIAL EXPERIENCE

"Trusted experts you can rely on" captures the approach of CCR RE's 70 employees, who work each day in cross-disciplinary teams to respond to clients' needs as quickly and effectively as possible.

Yang Du, Actuary-Underwriter and **Georges Guzman,** Disaster Modeller – P&C Pricing and Underwriting Support.

Yang Du joined CCR RE in September 2018, having worked in Zurich as an actuary at a global reinsurer, taking up the position of actuary-underwriter responsible for development of the Chinese market. "When I am working as an underwriter, my actuarial and commercial skills complement each other extremely well. I need to analyse several types of information before taking my underwriting decision: the market context, the client's situation, the changes in the reinsured portfolio, the history of past results and, obviously, the expected profitability. When the time comes for renewal of disaster business in the Chinese market, I share with Georges the knowledge I have acquired from discussions during my frequent meetings with the client or the broker. These details enable him to fine tune his rating. It is important for us to exchange information and views to capture the full complexity of the risk".

Opposite, **Hande Yildiz Fuchs,** Underwriter Benelux and Turkey, alongside **Alpha Bah,** Head of the Pricing Department and Disaster Unit.

Georges Guzman, joined CCR's Actuarial and Risk Division in 2016, after working as a natural disaster modeller for a well-known global reinsurer. His work consists of modelling different risks for the portfolios of insurance companies across the world seeking reinsurance protection. "At CCR RE, the Actuarial Risk Division and the underwriting team communicate regularly. We work together very effectively, sharing our understanding of the issues, and we each know the other's expectations. Yang's expertise allows the results to be challenged. Teamwork does not just provide a sum of the members' skills – it multiplies them. It is an invaluable resource for CCR RE and our clients."

Alpha Bah joined CCR's open market reinsurance team in 2011. Currently head of the pricing department and CAT unit within CCR RE, he covers all the geographical areas. Alpha and his team of actuaries support the underwriter on the most complex business such as Specialty, Disaster and Motor Third-Party. "Our discussions with the underwriters lead to a better understanding of the business and result in a more accurate rating, which improves underwriting quality. For large accounts or complex business, we team the underwriter up with an advising actuary to support them in finding the brokers or clients and monitoring them throughout the year. This makes it possible to build a shared view of the business."

Hande Yildiz Fuchs joined CCR RE in August 2018 as an underwriter, assuming responsibility for the Benelux and Turkish markets. Born in Turkey, she has also worked in the Netherlands for one of the leading global insurers. "CCR RE has a clear strategy, is good at anticipating market changes and has a desire to grow. My role is a perfect match for my profile and expectations. The markets I work on are highly specialised and complex to rate. I share my knowledge of these two markets, the clients and the treaties with Alpha's team in order achieve the most accurate pricing." —

CCR RE
2018 key figures in millions of euros

464
Gross written premiums

2,315
Assets managed, at market value

99.4%
Net combined ratio

2.2%
Return on investment

6.9%
Life technical margin

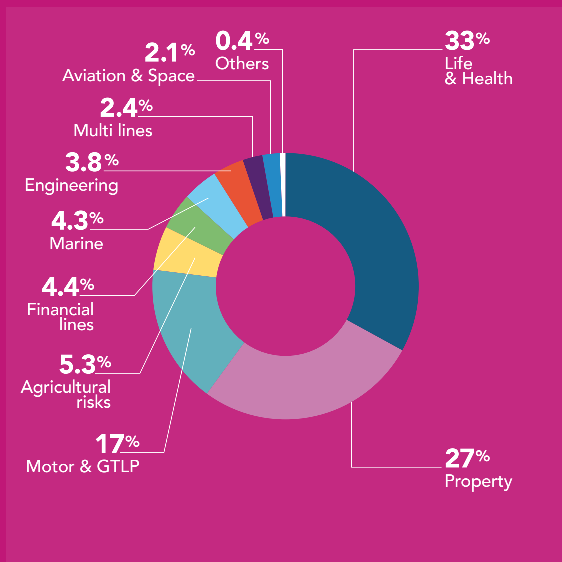
864
Solvency 2 eligible own funds

46
Current income before equilization reserve

189%
S2 ratio

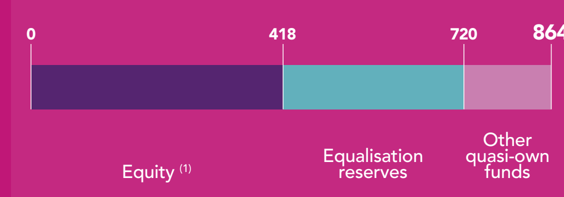
35
Net income

Breakdown of premium income by insurance class



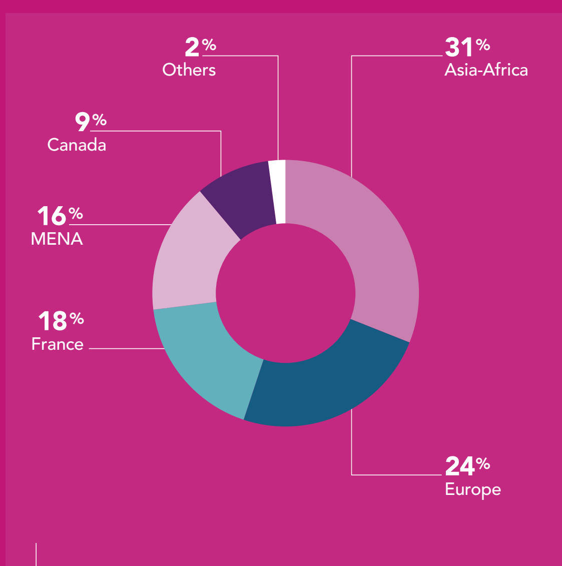
Solvency 2 eligible own funds

(in millions of €)

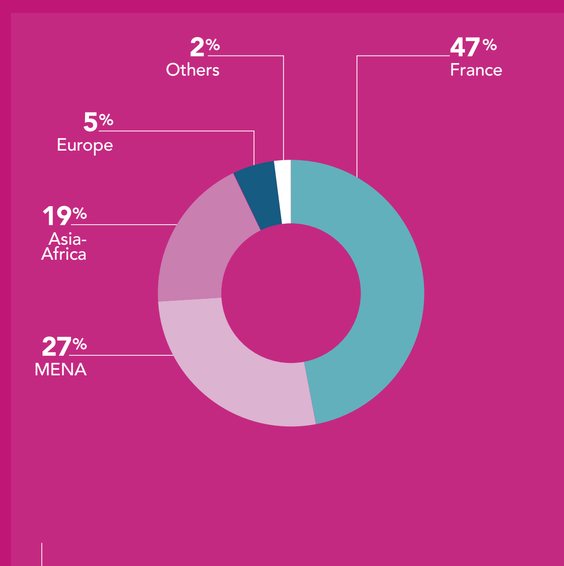


(1) Valued according to the French GAAP principles, excluding valuation of unrealised capital gains and losses

Breakdown of premium income by geographical area



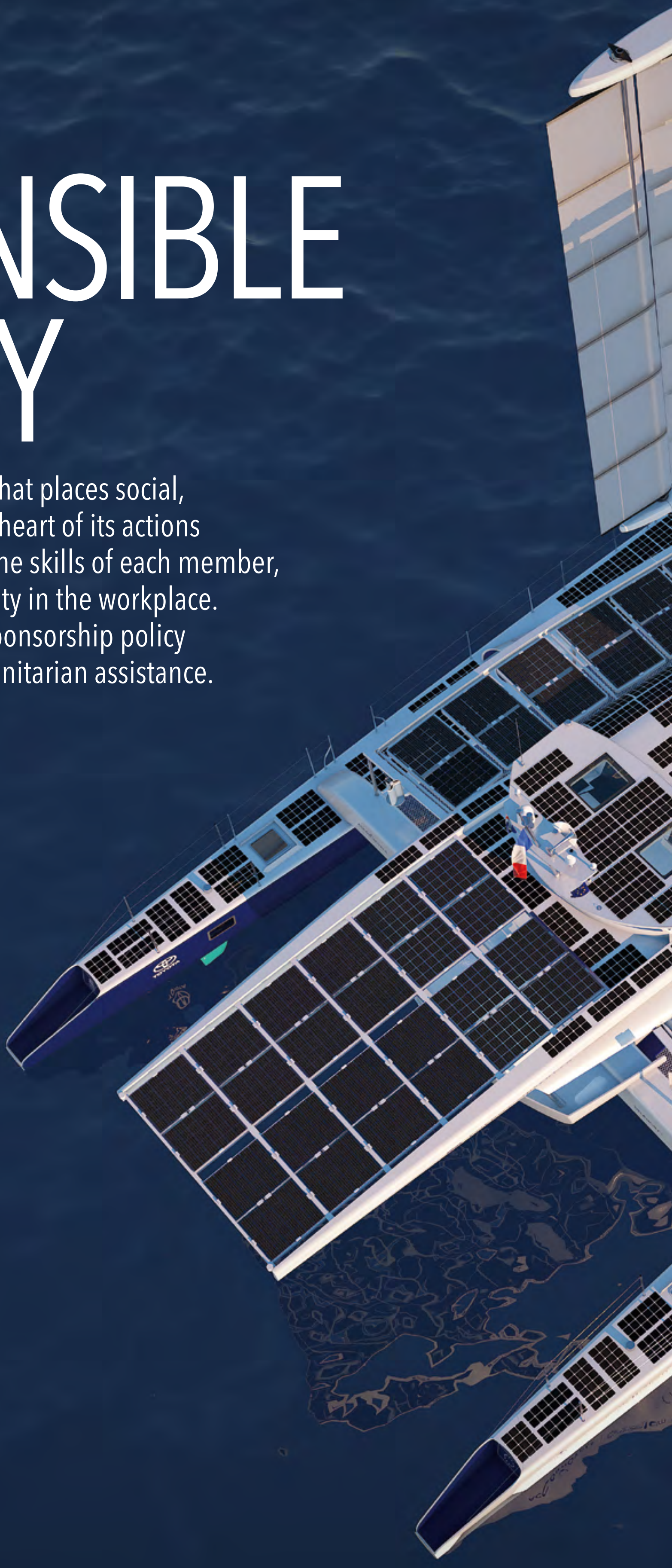
Non-Life premium income 2/3



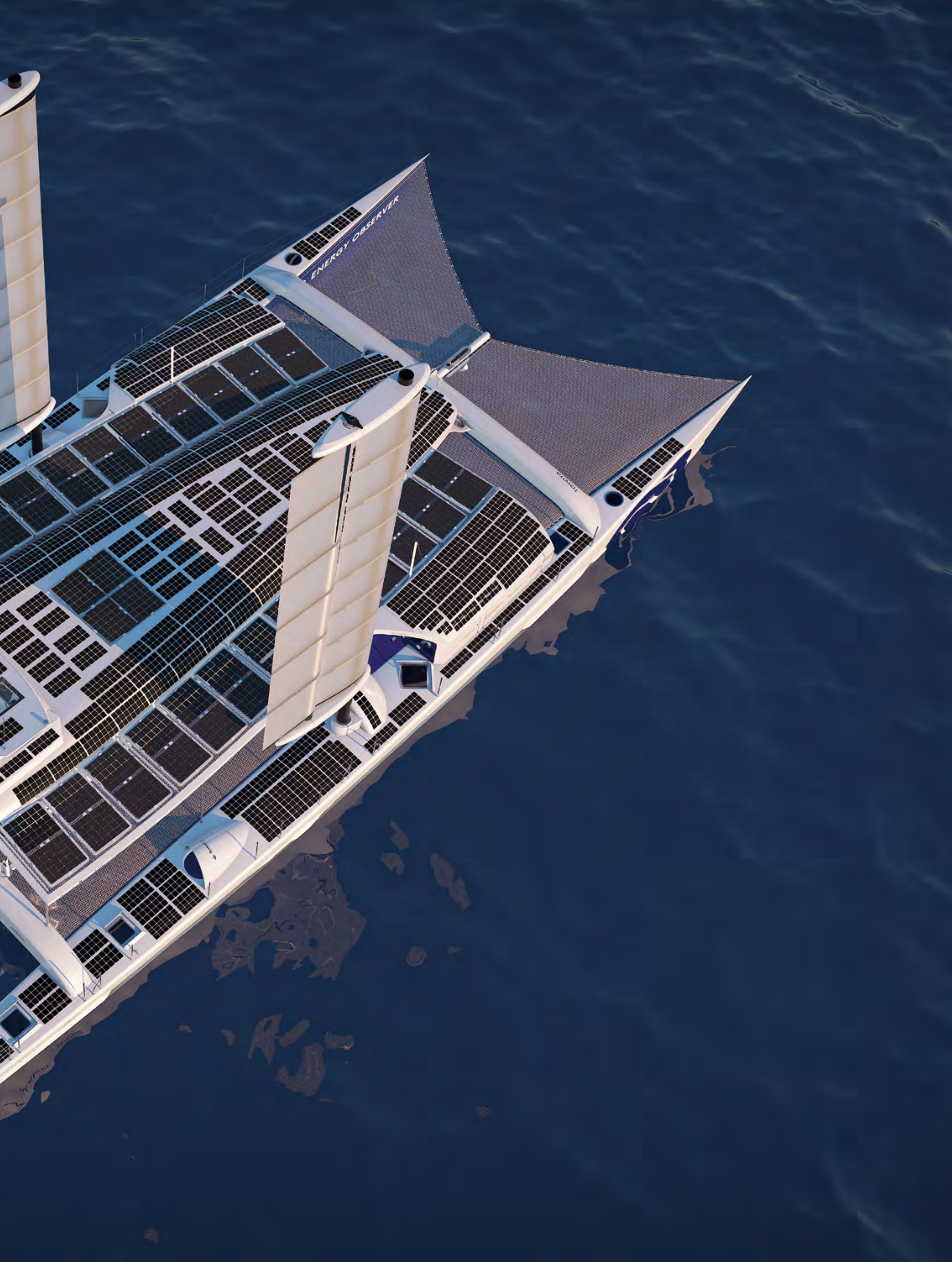
Life premium income 1/3

A RESPONSIBLE COMPANY

— CCR is a responsible and innovative group that places social, environmental and technological issues at the heart of its actions and thinking. Teams are managed to develop the skills of each member, observing the principles of equality and diversity in the workplace. In 2018, the CCR Group also implemented a sponsorship policy promoting the environment, culture and humanitarian assistance.



Energy Observer 2019: $27m^2$ more solar panels, increased thermal storage and two Oceanwings wings to provide greater speed and produce hydrogen by electrolysis of sea water. A new energy model.


ENERGY OBSERVER

THE PEOPLE AT THE HEART OF THE GROUP'S POLICY

268 employees
12 trainees on work-linked training programmes
Almost **4 out of 5 employees** completed at least one training activity in 2018

Against the background of the challenges of modernising the CCR Group and improving its performance, the results of organisational and cultural change are due to the efforts of our colleagues, who have all contributed to the transformation carried out since the creation of CCR RE.

The CCR Group's sustainable performance is built on reconciling the pursuit of successful financial performance with the attention paid to colleagues. That is why we have put in place a framework intended to promote the long-term quality of working life by signing, in 2018, company-level agreements on gender equality at work and the quality of working life.

REMOTE WORKING AT CCR RE

A remote working agreement was signed in 2018 to support the development of a working environment that promotes a better work-life balance. By reducing its employees' travelling, CCR RE is also promoting sustainable development. A third of CCR RE's employees benefit from this new form of work organisation.

COLLABORATIVE SPACES

A casual area was created in 2018, designed to enable activities to be carried out more effectively in a setting that promotes the cooperation and sharing of information required for high-quality working relationships. A 100 m^2 fitness centre was opened to promote wellbeing and encourage physical and sporting activity. These innovative spaces improve the environment and creativity.

PREPARING FOR THE FUTURE

The Human Resources Division supports the transformation of the Group through a dynamic policy aimed at identifying colleagues with potential to progress using succession plans, annual employee reviews and two-year development plans offering an attractive pace of training and progression.

Each year, the CCR Group's support functions or operating departments host interns and trainees on work-based training programmes. In 2018, the "Analysis and Modelling" and "Data Science and Actuarial" teams of the Public Reinsurance practice had 5 PhD students and 5 students on the final placements of their studies at an *école d'ingénieurs* or masters studies. This immersion in the business makes it possible to identify talent while offering students the opportunity to continue their training and, for some, to be recruited on permanent contracts.

MARLÈNE LARSONNEUR,
Human Resources Director

THE DISABILITY POLICY IS A PRIORITY FOR THE CCR GROUP

The CCR Group is committed to helping people with disabilities by putting in place actions to raise awareness in partnership with Agefiph, the French association that manages funding to bring people with disabilities into the workforce. A communications campaign on disability was rolled out for Group colleagues, culminating in an awareness day on the theme "Breaking through on Disability". According to Marlène Larsonneur, Human Resources Director at CCR Group, "The aim of this awareness session is to work together to change how we view disability and to create a climate of confidence around this subject, which can be a sensitive one at work". More than 80% of disabilities are not visible, such as hearing or sight impairments. In view of this, the Group is encouraging colleagues to have their disability recognised and is providing them with support to do this. In 2018, partnerships were developed with preferred disability organisations such as IFPASS and the FFA's Mission Handicap.

The CCR Group also provides financial assistance to associations that support disabled people as part of its humanitarian sponsorship policy. In 2018, Olagarroa and H@ndi-@ltitude, two associations supported by employees of the CCR Group, received subsidies.

A portion of the 2018 apprenticeship tax was paid to schools catering for students with disabilities.

CCR, A RESPONSIBLE INVESTOR

Environmental, Social and Governance (ESG) criteria are now included for all asset classes. Discussions and experiments are under way to provide the CCR Group with an information system for the extra-financial element of its activities. For two years the Group has published an ESG-Climate report setting out the actions taken by CCR and CCR RE to contribute to the energy and ecological transition.

ESG CRITERIA AND INVESTMENTS IN EQUITIES AND PROPERTY

For several years now, environmental, social and governance criteria have been gradually included and significant consideration is given to them when researching new investments, reviewing assets in the portfolio and deciding on the investment approach.

The investment team is in the process of strengthening its skills and continuously monitoring good practice. It has begun a dialogue with the asset management companies and other financial partners to obtain full information on the ESG aspects of the investments in the portfolio, with the aim of strengthening the extra-financial dimension of the investment activity. The team uses an ESG-Climate dashboard built around qualitative and quantitative indicators to guide the investment policy with regard to these criteria. For risks associated with climate change, CCR has developed an innovative method and a management tool for assessing the exposure of the financial asset portfolios to the physical risks of climate change (Climate Risk & Impact Screening) in partnership with Carbone 4, the leading consultancy firm specialising in the energy transition and climate change adaptation.

For its property investments, the CCR Group has worked with the start-up DEEPKI to put in place indicators that monitor buildings' energy consumption to enable it to carry out an energy audit. Sources of energy saving are identified building by building, enabling action plans to be prepared. Lease agreements for office buildings generally have an environmental schedule containing details on the actions aimed at reducing energy consumption, water consumption and levels of waste.

ESG CRITERIA AND BOND INVESTMENTS

The CCR Group is increasing its investments in green bonds, whether these are bonds that finance the ecological and energy transition, social bonds which finance projects promoting access to essential assets for disadvan-

taged communities and sustainability bonds which finance projects combining environmental and social objectives.

Through social bonds, CCR is financing several projects in Africa through the African Development Bank (supply of water, education and vocational training, agricultural equipment and rural irrigation, connection of rural areas to telecommunication systems).

The CCR Group has increased its investments in disaster bonds through specialist funds. These bonds help to protect insurers and support economic recovery following serious destruction of property.

RESEARCHING PERFORMANCE INDICATORS

Improving the information system available for the extra-financial elements of investments is a priority for the CCR Group. The group has chosen the Morningstar/Sustainalytics solution, which allows a single methodology to be used for the fund portfolio. This analysis tool provides an understanding of the dynamics of the fund portfolios in terms of ESG-Climate criteria and identifies any problematic situations concerning the relevance of certain choices or because deviations from a fund's profile have emerged. A warning system identifies any significant deterioration of a profile or the introduction of securities that should be excluded.

«THE CCR GROUP IS INCREASING ITS INVESTMENTS IN RESPONSIBLE BONDS: GREEN BONDS, SOCIAL BONDS AND SUSTAINABILITY BONDS."

The carbon footprint of the internally-managed bond portfolio is calculated using a tool offered by Bloomberg. The coexistence of these two approaches (Morningstar for delegated management and Bloomberg for direct management) is not a major problem at this stage, since the ESG dimension of investments is handled autonomously for each type of management before an overall reconciliation is carried out. Nevertheless, research is currently going on to find more homogenous financial indicators that could be used for all the financial assets.

CCR, ENVIRONMENTAL, CULTURAL AND SOCIAL SPONSOR

ENERGY OBSERVER

The CCR Group has been sponsorship partner for Energy Observer since 2017, supporting a human adventure which is showcasing French know-how in an experiment that aims to revolutionise ocean transport to limit the scale of climate change.

MUSÉE RODIN (1)

The CCR Group signed a sponsorship agreement with the Musée Rodin in 2018, adding to those with Musée d'Orsay, Musée de l'Orangerie and Musée du Quai Branly Jacques Chirac.

LES ENFANTS D'ABORD

Improves the quality of healthcare in order to reduce maternal and infant mortality at the new Mother and Child department of the new Saint-Paul university hospital in Addis Ababa (Ethiopia).

CULTURE DU CŒUR CHAMPAGNE-ARDENNE

Facilitates access to culture for people in a precarious social and economic position in order to combat their exclusion and promote their social inclusion.

OLAGARROA SPORT ADAPTÉ ET LOISIRS

Develops group activities for social inclusion of young people with a disability. With the CCR Group's support, the association was able to continue offering the skiing activity for the 2018-2019 season.

FORM'ACCUEIL (3)

Promotes the integration of immigrant workers by offering them literacy and French language courses and arranging cultural trips.

UNITED SPIRIT

Promotes social contact in order to promote personal development.

NEGAR (4)

Seeks to raise the educational level of young people in hard-to-access regions of Afghanistan through local actions ranging from arranging transport to paying teachers, purchasing supplies or carrying out maintenance of schools.

AHVEC (5)

(*Association Axe Humanitaire des Volontés Européennes et Camerounaises*) creates a refuge and educational centre for abandoned children in Baleveng in the north-east of Cameroon.

H@NDI-@LTITUDE (2)

Offers people with a disability the opportunity to start or return to practising a sport, including through parachute jumps at discovery weekends.

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GOVERNANCE AND ACCOUNTS

The building at 157 Haussmann that has housed the CCR Group's head office for 5 years obtained the BBC (low energy consumption building) label after significant restructuring work.

CCR,
BOARD OF DIRECTORS


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14

PIERRE BLAYAU (1)
CHAIRMAN

DAMIEN ANDRIES (2)

SYLVIE CHANH (3)

LIONEL CORRE (4)

FRANÇOIS DESMADRYL (5)

PATRICE FORGET (6)

GÉRARD LANCNER (7)

PAULINE LECLERC-GLORIEUX (8)

SYLVIE LEGENDRE (9)

PATRICK LUCAS (10)

ANTOINE MANTEL (11)

DAVID MONCOULON (12)

DIDIER SUARD (13)

LAURE TOURJANSKY (14)

CCR RE,
BOARD OF DIRECTORS


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BERTRAND LABILLOY (1)
CHAIRMAN AND CHIEF EXECUTIVE OFFICER

PIERRE BLAYAU (2)

PATRICK CERCEAU (3)

JOHN CONAN (4)

CHARLES LEVI (5)

ANTOINE MANTEL (6)

CCR GROUP,
EXECUTIVE COMMITTEE


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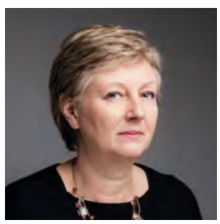
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15

BERTRAND LABILLOY (1)
CHIEF EXECUTIVE OFFICER

LAURENT MONTADOR (2)
DEPUTY CHIEF EXECUTIVE OFFICER

HERVÉ BARROIS (3)
LEGAL DIRECTOR AND SECRETARY TO THE BOARD OF DIRECTORS

CHRYSTELLE BUSQUE (4)
FINANCE DIRECTOR

THIERRY COHIGNAC (5)
DIRECTOR, DEPARTMENT OF TECHNICAL STUDIES, PUBLIC REINSURANCE

PIERRE COUMES (6)
FINANCIAL INVESTMENTS DIRECTOR

PATRICK DELALLEAU (7)
GLOBAL UNDERWRITING DIRECTOR

ISABELLE DELVAL (8)
HEAD OF COMMUNICATIONS, SECRETARY TO THE EXECUTIVE COMMITTEE

VINCENT GROS (9)
GENERAL COUNSEL

JÉRÔME ISENBART (10)
RISK DIRECTOR

MARLÈNE LARSONNEUR (11)
HUMAN RESOURCES DIRECTOR

HIND MECHBAL (12)
INFORMATION SYSTEMS DIRECTOR

HERVÉ NESSI (13)
MARKET UNDERWRITING DIRECTOR

ANTOINE QUANTIN (14)
REINSURANCE AND PUBLIC FUNDS DIRECTOR

KARINE ROBIDOU (15)
HEAD OF PROPERTY

ACCOUNTS AT 31 DECEMBER 2018

CCR GROUP, CONSOLIDATED FINANCIAL STATEMENTS YEAR ENDED DECEMBER 31, 2018

CONSOLIDATED INCOME STATEMENT

(in thousands of euros)			2018	2017
	Non-Life reinsurance	Life reinsurance	Total	Total
Written premiums	1,302,667	68,526	1,371,193	1,287,691
Change in unearned premium reserves	(20,510)	(8,020)	(28,530)	(11,237)
Earned premiums	**1,282,157**	**60,506**	**1,342,663**	**1,276,454**
Other operating revenue	1,153	159	1,312	4,176
Investment income, net of expenses	114,885	3,382	118,267	117,401
Revenue from ordinary activities	**116,038**	**3,541**	**119,579**	**121,577**
Reinsurance claims expenses	(1,025,539)	(40,998)	(1,066,537)	(974,293)
Income and expense, net	(112,756)	(2,775)	(115,531)	(94,376)
Administrative expenses	(120,838)	(9,792)	(130,630)	(139,315)
Expenses from ordinary activities	**(1,259,133)**	**(53,565)**	**(1,312,698)**	**(1,207,984)**
Income from ordinary activities	139,062	10,482	149,544	190,047
Other income and expenses, net	-	-	47,159	41,853
Non-recurring items	-	-	50	52
Employee profit sharing	-	-	-	-4,106
Income tax	-	-	(64,295)	(182,893)
Consolidated net profit	-	-	132,458	44,953
Basic earnings per share (in euros)	-	-	44.15	14.98
Diluted earnings per share (in euros)	-	-	44.15	14.98

BALANCE SHEET – ASSETS

(in thousands of euros)	2018	2017
Intangible assets	**3,376**	**3,576**
Reinsurance investments	**8,022,184**	**8,574,966**
Real estate investments	283,148	287,167
Investments in affiliates and participating interests	6,200	6,250
Other investments	7,510,786	8,085,903
Cash deposits with ceding insurers	222,050	195,646
Reinsurers' share of technical reserves	**6,943**	**9,918**
Other receivables	**392,259**	**166,828**
Other assets	**560,834**	**515,368**
Property, plant and equipment	2,537	2,814
Other	558,297	512,554
Accrued income and prepaid expenses	**572,787**	**537,894**
Deferred acquisition costs	36,970	31,166
Deferred tax assets	129,959	178,072
Other accrued income and prepaid expenses	405,858	328,656
Total assets	**9,558,383**	**9,808,550**

BALANCE SHEET – EQUITY AND LIABILITIES

(in thousands of euros)	2018	2017
Equity	**2,460,890**	**2,344,932**
Share capital	60,000	60,000
Additional paid-in capital	-	-
Reserves and retained earnings	2,268,432	2,239,979
Investment grants	-	-
Profit for the year	132,458	44,953
Gross technical reserves	**6,917,080**	**7,253,055**
Life technical reserves	176,261	326,114
Non-Life technical reserves	6,740,819	6,926,941
Provisions	**14,576**	**26,096**
Other liabilities	**122,745**	**140,223**
Deferred revenue and accrued expenses	**43,092**	**44,244**
Total equity and liabilities	**9,558,383**	**9,808,550**

CCR, FINANCIAL STATEMENTS YEAR ENDED DECEMBER 31, 2018

INCOME STATEMENT

(in thousands of euros)			2018	2017
	Gross	Reinsurance	Net	Net
NON-LIFE TECHNICAL ACCOUNT				
Written premiums	907,836	95,947	811,889	802,933
Change in unearned premium reserves	3,403	7,794	(4,391)	(7,638)
Earned premiums	**911,239**	**103,741**	**807,498**	**795,295**
Investment income allocated from non technical account	**84,440**	-	**84,440**	**82,811**
Other underwriting income	**348**	-	**348**	**540**
Paid claims and expenses	(1,193,762)	(22,835)	(1,170,927)	(446,626)
Change in outstanding claims reserves	388,777	9,605	379,172	(1,319,846)
Claims expenses	**(804,985)**	**(13,230)**	**(791,755)**	**(1,766,472)**
Profit commission	**(526)**	**(524)**	**(2)**	**(4)**
Acquisition costs	(14,351)	-	(14,351)	(30,185)
Administrative expenses	(5,089)	-	(5,089)	(6,125)
Reinsurance commissions received	-	(799)	799	4,733
Acquisition and administrative expenses	**(19,439)**	**(799)**	**(18,640)**	**(31,578)**
Other underwriting expenses	**(7,599)**	-	**(7,599)**	**(8,454)**
Change in equalization reserves	**49,747**	-	**49,747**	**1 101,684**
Non-Life reinsurance underwriting result	**213,224**	**89,188**	**124,036**	**173,820**
LIFE TECHNICAL ACCOUNT				
Earned premiums	**494**	**494**	-	-
Investment revenue	-	-	-	-
Other investment income	-	-	-	-
Realized Gains from Investments	-	-	-	-
Investment income	-	-	-	-
Other underwriting income	-	-	-	-
Paid claims and expenses	(430)	(426)	(4)	(12)
Change in outstanding claims reserves	39	39	-	-
Claims expenses	**(391)**	**(387)**	**(4)**	**(12)**
Life premium reserves	(32)	(32)	-	-
Change in Life premium reserves and other technical reserves	**(32)**	**(32)**	-	-
Reinsurer's share of underwriting result	**(57)**	**(57)**	-	-
Acquisition costs	(7)	-	(7)	(498)
Administrative expenses	(3)	-	(3)	(28)
Reinsurance commissions received	-	(7)	7	517
Acquisition and administrative expenses	**(9)**	**(7)**	**(3)**	**(9)**
Internal and external investment management costs and interest	-	-	-	-
Other investment expenses	-	-	-	-
Realized Losses from Investments	-	-	-	-
Investment expenses	-	-	-	-
Other technical expenses	-	-	-	-
Life reinsurance technical result	**5**	**11**	**(6)**	**(21)**

(in thousands of euros)			2018	2017
	Gross	Reinsurance	Net	Net
NON-TECHNICAL ACCOUNT				
Non-Life reinsurance underwriting result	-	-	**124,036**	**173,820**
Life reinsurance underwriting result	-	-	**(6)**	**(21)**
Investment revenue	-	-	104,461	112,994
Other investment income	-	-	5,141	8,973
Realized Gains from Investments	-	-	46,972	36,542
Non-Life investment income	-	-	**156,573**	**158,508**
Internal and external investment management costs and interest	-	-	(8,607)	(9,173)
Other investment expenses	-	-	(12,646)	(17,638)
Realized Losses from Investments	-	-	(13,015)	(16,427)
Non-Life investment expenses	-	-	**(34,268)**	**(43,238)**
Investment income transferred to the Non-Life technical account	-	-	**(84,440)**	**(82,811)**
Other income	-	-	**215**	**121**
Other expenses	-	-	**(311)**	**(145)**
Non-recurring income	-	-	876	1,979
Non-recurring expenses	-	-	-	(167)
Non-recurring items	**-**	**-**	**876**	**1,813**
Employee profit sharing	-	-	-	**(4,106)**
Income tax	-	-	**(15,913)**	**(170,921)**
Profit for the year	**-**	**-**	**146,762**	**33,021**

BALANCE SHEET – ASSETS

(in thousands of euros)			2018	2017
	Gross amount	Amortization, depreciation & provisions	Net amount	Net amount
Intangible assets	**72,488**	**69,119**	**3,369**	**3,570**
Real estate investments	168,621	28,009	140,612	142,186
Investments in affiliates and participating interests	435,929	-	435,929	435,979
Other investments	6,017,244	-	6 017	6,660,381
Cash deposits with ceding insurers	9,216	-	9,216	7,910
Investments	**6,631,011**	**28,009**	**6,603,002**	**7,246,457**
Non-Life unearned premium reserves	1,053	-	1,053	633
Life reinsurance reserves	3,205	-	3,205	
Life outstanding claims reserves	597	-	597	6,381
Non-Life outstanding claims reserves	137,807	-	137,807	144,612
Other Life technical reserves	-	-	-	8,206
Reinsurers' share of technical reserves	**142,662**	-	**142,662**	**159,833**
Reinsurance receivables	262,276	59	262,217	116,389
Prepaid payroll costs	-	-	-	-
Prepaid and recoverable taxes	73,043	-	73,043	13
Other receivables	80,047	70,691	9,356	12,138
Receivables	**415,366**	**70,750**	**344,617**	**128,541**
Property and equipment	12,838	10,408	2,430	2,689
Current accounts and cash	398,934	-	398,934	335,818
Other assets	**411,772**	**10,408**	**401,364**	**338,507**
Accrued interest and rental revenue	34,930	-	34,930	42,757
Life and Non-Life deferred acquisition costs	616	-	616	765
Other accrued income and prepaid expenses	163,967	-	163,967	126,261
Accrued income and prepaid expenses	**199,513**	-	**199,513**	**169,783**
Total assets	7,872,812	178,286	7,694,526	8,046,691

BALANCE SHEET – EQUITY AND LIABILITIES

(in thousands of euros)	2018	2017
Share capital	60,000	60,000
Additional paid-in capital	-	-
Revaluation reserves	2,751	2,751
Other reserves	-	-
Special net long-term capital gains reserve	-	-
Guarantee fund reserve	1,627	1,884
Special reserve for exceptional and nuclear risks	240,277	237,072
Special reserve for natural disaster risks	1,652,573	1,652,514
Special reserve for terrorism risks	141,756	128,268
Other reserves	8,654	8,654
Special reserve for specific credit insurance risks	19,970	19,963
Reserve for the purchase of original works by living artists	73	54
Retained earnings	-	-
Profit for the year	146,762	33,021
Shareholders' equity	**2,274,442**	**2,144,180**
Non-Life unearned premium reserves	314,267	309,457
Life reinsurance reserves	3,205	11,464
Life outstanding claims reserves	597	3,124
Non-Life outstanding claims reserves	3,045,423	3,431,383
Equalization reserves	1,881,241	1,930,988
Other Life technical reserves	-	-
Gross technical reserves	**5,244,733**	**5,686,415**
Provisions	**13,483**	**22,071**
Insurance payables	-	-
Reinsurance payables	-	83
Other borrowings, deposits and guarantees received	1,218	1,152
Accrued payroll costs	9,636	6,808
Accrued taxes	3,481	36,310
Other payables	99,855	92,318
Other liabilities	**114,190**	**136,671**
Deferred revenue and accrued expenses	**47,677**	**57,354**
Total equity and liabilities	**7,694,526**	**8,046,691**

CCR RE, FINANCIAL STATEMENTS YEAR ENDED DECEMBER 31, 2018

INCOME STATEMENT

(in thousands of euros)			2018	2017
	Gross	Reinsurance	Net	Net
NON-LIFE TECHNICAL ACCOUNT				
Written premiums	395,692	17,540	378,152	253,290
Change in unearned premium reserves	(16,119)	-	(16,119)	3,424
Earned premiums	**379,573**	**17,539**	**362,033**	**256,714**
Investment income allocated from non-technical account	**30,445**	-	**30,445**	**28,398**
Other underwriting income	**805**	-	**805**	**3,018**
Paid claims and expenses	(207,717)	(2,472)	(205,245)	(182,186)
Change in outstanding claims reserves	(45,397)	3,168	(48,565)	(7,907)
Claims expenses	**(253,114)**	**696**	**(253,810)**	**(190,092)**
Change in other technical reserves	**(12,118)**	-	**(12,118)**	-
Profit commission	**(7,442)**	**(281)**	**(7,161)**	**(1,677)**
Acquisition expenses	(80,447)	-	(80,447)	(68,080)
Administrative expenses	(9,684)	-	(9,684)	(8,124)
Reinsurance commissions received	-	(303)	303	501
Acquisition and administrative expenses	**(90,131)**	**(303)**	**(89,828)**	**(75,703)**
Other underwriting expenses	**(4,444)**	**25**	**(4,468)**	**(4,880)**
Change in equalization reserves	**(10,873)**	-	**(10,873)**	**(5,947)**
Non-Life reinsurance underwriting result	**32,702**	**17,677**	**15,025**	**9,831**
LIFE TECHNICAL ACCOUNT				
Earned premiums	**60,505**	**3,661**	**56,843**	**114,565**
Investment revenue	3,796	-	3,796	6,000
Other investment income	18	-	18	588
Realized Gains from Investments	4,195	-	4,195	7,926
Investment income	**8,009**	-	**8,009**	**14,514**
Other underwriting income	**159**	-	**159**	**617**
Paid claims and expenses	(30,340)	(6)	(30,334)	(20,463)
Change in outstanding claims reserves	(2,392)	(410)	(1,982)	4,116
Claims expenses	**(32,732)**	**(416)**	**(32,317)**	**(16,347)**
Life premium reserves	(2,515)	-	(2,515)	(69,143)
Other technical reserves	-	-	-	-
Change in Life premium reserves and other technical reserves	**(2,515)**	-	**(2,515)**	**(69,143)**
Profit commission	**(5,729)**	**(452)**	**(5,277)**	**(11,278)**
Acquisition costs	(8,250)	-	(8,250)	(15,383)
Administrative expenses	(1,103)	-	(1,103)	(1,888)
Reinsurance commissions received	-	-	-	-
Acquisition and administrative expenses	**(9,353)**	-	**(9,353)**	**(17,271)**
Internal and external investment management costs and interest	(1,108)	-	(1,108)	(2,745)
Other investment expenses	(379)	-	(379)	(938)
Realized Losses from Investments	(2,211)	-	(2,211)	(2,961)
Investment expenses	**(3,698)**	-	**(3,698)**	**(6,644)**
Other underwriting expenses	**(437)**	-	**(437)**	**(919)**
Investment income transferred to the non-technical account	**(929)**	-	**(929)**	**(1,679)**
Life reinsurance underwriting result	**13,280**	**2,793**	**10,487**	**6,416**

(in thousands of euros)			2018	2017
	Gross	Reinsurance	Net	Net
NON-TECHNICAL ACCOUNT				
Non-Life reinsurance underwriting result	-	-	**15,025**	**9,831**
Life reinsurance underwriting result	-	-	**10,487**	**6,416**
Investment revenue	-	-	34,166	27,519
Other investment income	-	-	161	2,698
Realized Gains from Investments	-	-	37,757	36,355
Investment income	-	-	**72,084**	**66,572**
Investment income allocated from the Life technical account	-	-	**929**	**1,679**
Internal and external investment management costs and interest	-	-	(9,974)	(12,588)
Other investment expenses	-	-	(3,412)	(4,304)
Realized Losses from Investments	-	-	(19,897)	(13,580)
Investment expenses	-	-	**(33,282)**	**(30,473)**
Investment income transferred to the Non-Life technical account	-	-	**(30,445)**	**(28,398)**
Other income	-	-	**549**	**148**
Other expenses	-	-	**(442)**	**(111)**
Non-recurring income	-	-	83	53
Non-recurring expenses	-	-	(89)	(236)
Non-recurring items	-	-	**(6)**	**(182)**
Employee profit sharing	-	-	-	-
Income tax	-	-	**(269)**	**(8,582)**
Profit for the year	-	-	**34,630**	**16,900**

NOTES

Change in accounting methods

—

During the year, the method of allocating treaties written by the Life business unit was reviewed. Following this review, certain adjustments were made to the allocation of accounting flows between the Life and Non-Life accounts, in application of the principles described in Article 410-1 of Regulation ANC 2015-11 dated November 26, 2015.

In line with this article, reinsurance of accident and disease-related bodily injury risks is included in the Non-Life technical account in the Company's income statement.

Detailed financial and accounting information relating to the financial statements of CCR RE, established as of 2018 is included in the "2018 Annual Financial Report". This document is available online on **ccr.fr**

BALANCE SHEET – ASSETS

(in thousands of euros)			2018	2017
	Gross amount	Amortization, depreciation & provisions	Net amount	Net amount
Intangible assets	**87**	**80**	**6**	**6**
Real estate investments	178,241	32,955	145,286	147,731
Investments in affiliates and participating interests	6,200	-	6,200	6,200
Other investments	1,493,594	51	1,493,543	1,425,522
Cash deposits with ceding insurers	212,833	-	212,833	187,734
Investments	**1 890,868**	**33,005**	**1,857,863**	**1,767,188**
Non-Life unearned premium reserves	1	-	1	-
Life outstanding claims reserves	862	-	862	547
Non-Life outstanding claims reserves	5,987	-	5,987	9,279
Other Life technical reserves	-	-	-	-
Reinsurers' share of technical reserves	**6,850**	-	**6,850**	**9,826**
Reinsurance receivables	43,529	2,383	41,146	34,741
Prepaid and recoverable taxes	8,111	-	8,111	7,895
Prepaid payroll costs	-	-	-	-
Other receivables	6,112	78	6,033	5,259
Receivables	**57,752**	**2,462**	**55,290**	**47,895**
Property and equipment	509	403	106	125
Current accounts and cash	159,363	-	159,363	176,736
Other assets	**159,872**	**403**	**159,469**	**176,861**
Accrued interest and rental revenue	3,704	-	3,704	3,216
Life and Non-Life deferred acquisition costs	36,355	-	36,355	30,641
Other accrued income and prepaid expenses	209,866	-	209,866	173,343
Accrued income and prepaid expenses	**249,924**	-	**249,924**	**207,200**
Total assets	**2,365,354**	**35,951**	**2,329,403**	**2,208,975**

BALANCE SHEET – EQUITY AND LIABILITIES

(in thousands of euros)	2018	2017
Share capital	90,082	90,082
Additional paid-in capital	-	270,847
Revaluation reserves	-	-
Other reserves	293,762	6,014
Profit for the year	34,630	16,900
Shareholders' equity	**418,474**	**383,844**
Subordinated debt	**75,000**	**75,000**
Non-Life unearned premium reserves	146,502	103,572
Life reinsurance reserves	73,323	199,214
Life outstanding claims reserves	63,868	126,870
Non-Life outstanding claims reserves	1,465,955	1,281,397
Life policyholders' surplus reserve	3,134	-
Equalization reserves	26,198	15,325
Other Life technical reserves	35,936	-
Gross technical reserves	**1,814,917**	**1,726,377**
Non technical provisions	**2,811**	**6,637**
Cash deposits received from reinsurers	**157**	**-**
Reinsurance payables	953	195
Other borrowings, deposits and guarantees received	960	963
Accrued payroll costs	4,585	1,487
Accrued taxes	2,413	1,204
Other payables	7,133	9,322
Other liabilities	**16,045**	**13,171**
Deferred revenue and accrued expenses	**2,000**	**3,946**
Total equity and liabilities	2,329,403	2,208,975

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Activity Report published by CCR - April 2019

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Design, editing, production: **story-building.fr**
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Typhoon Jebi in Japan, 4 September 2018 in Nishinomiya, a city in the Hyogo prefecture: a fire breaks out following the passage of a coastal flooding wave.

Cover: Flooding of the Seine in Paris, 27 January 2018. The Seine covers the Île aux Cygnes up to the feet of the Statue of Liberty before the towers of the Front de Seine, Beaugrenelle (15th arrondissement).

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