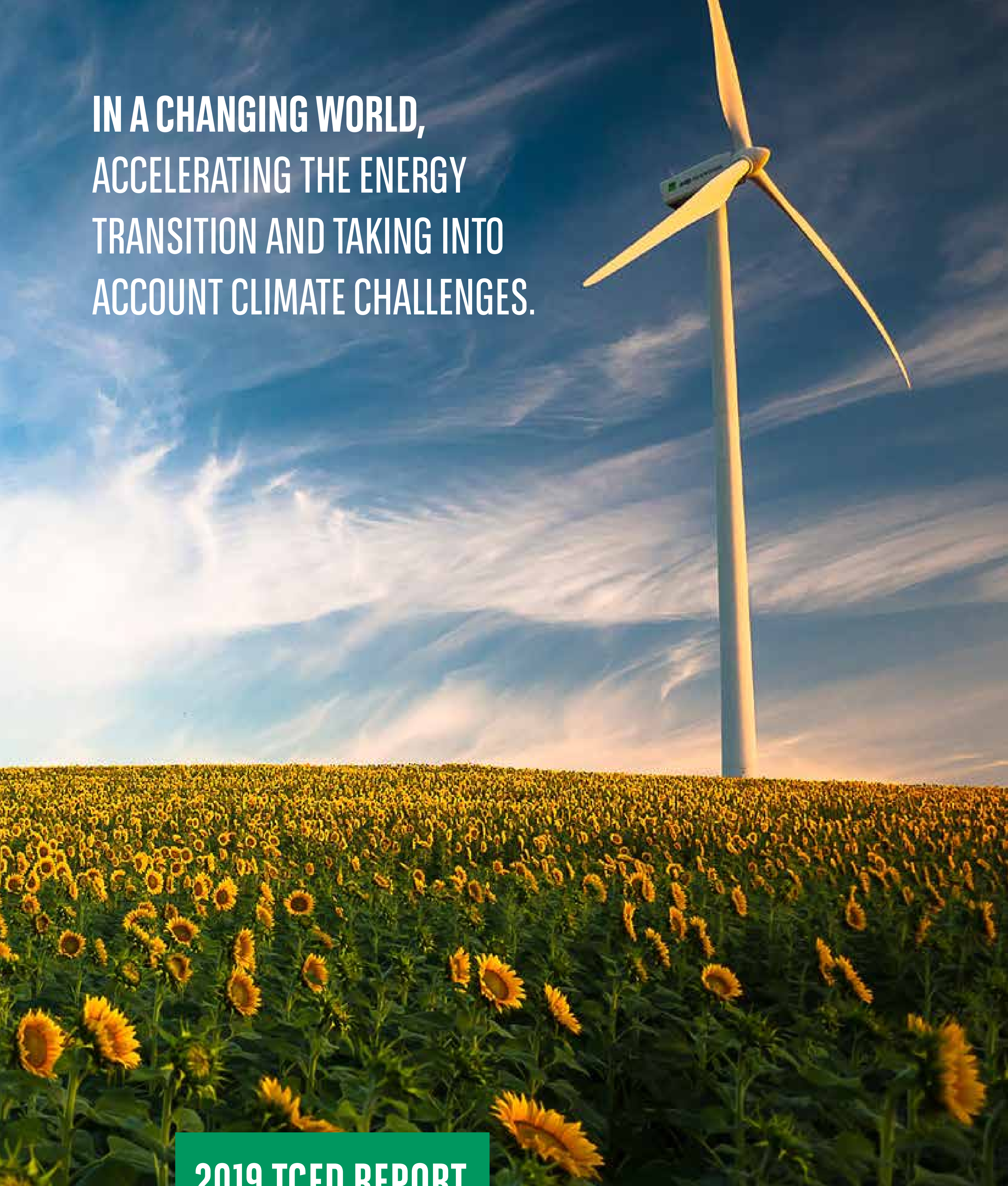

IN A CHANGING WORLD, ACCELERATING THE ENERGY TRANSITION AND TAKING INTO ACCOUNT CLIMATE CHALLENGES.

2019 TCFD REPORT

BNP PARIBAS

The bank
for a changing
world

May 2020

BNP Paribas Report in accordance with the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures Report) for 2019

Redaction : CSR Department

csr.group.bnpparibas

• FOREWORD

JEAN-LAURENT BONNAFÉ
Director and Chief Executive Officer, BNP Paribas

At BNP Paribas, we firmly believe in the importance of climate-related risks and opportunities, and have made the fight against climate change a priority since 2011.

I have personally supported the TCFD recommendations since 2017, and we believe they are an important contributing factor to implementing the energy transition in the financial sector and in the economy as a whole. They provide an excellent framework for taking stock on how much progress we have made thus far and how much further we still need to go.

Our general ambition is to align all of our activities with the climate objectives of the Paris Agreement. It is a long-term endeavour. We are firmly committed to this target but there is still a long way to go, both for us and for society as a whole.

Regarding the management of climate-related risks, we have already made promising progresses. To date BNP Paribas remains the only bank to exclude financing of companies specialising in non-conventional hydrocarbons (shale gas, tar sands, etc.) and is part of the small group of banks having a precise timetable for exiting thermal coal. We keep on working to be able to analyse the environmental footprint of our entire loan portfolio—that of companies today and that of individuals tomorrow—and direct it so it aligns progressively with the objectives of the Paris agreement.

We see the energy transition above all as a tremendous source of opportunities. I am deeply convinced that a bank financing the 21st century must act as an accelerator of the energy transition. That is why BNP has rallied as a group for the last several years to offer all its clients, spanning all the Group's business lines and countries of operation, a range of products and services to help them achieve their own energy transition. We are developing sustainable-banking solutions. This approach, far from addressing only the most 'green' or climate-aware customers, must be at the heart of our business proposition and help the world make a large-scale transition in favour of the climate.

Reducing these risks and seizing these opportunities requires a real transformation in the way we work and, more generally, in society as a whole. This transformation should be the fruit of collective effort. This is why we work constantly with our customers, companies, investors, individuals, with the companies in which we invest, with public authorities, with academics and scientists, with NGOs and all of civil society to succeed together in this transformation towards a model of sustainable society, compatible with the climate objectives of the Paris Agreement.

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• INTRODUCTION

BNP Paribas has been highly engaged in the fight against climate change since 2011, with the ambition of aligning its businesses with the goals of the Paris Agreement (namely keeping the increase in global average temperature to well below 2 °C above pre-industrial levels, and to pursue efforts to limit the increase to 1.5 °C).

With that in mind, BNP Paribas has endeavoured for several years to identify and analyse the climate-related risks and opportunities for the Group and its clients. BNP Paribas has implemented processes for managing these risks and opportunities, calculated metrics and set targets in this field.

The TCFD recommendations are very important for BNP Paribas on two fronts:

- The Group follows TCFD recommendations when assessing its own risks[1] and opportunities, and those of its clients, and when analysing its own resilience.
- As a financial operator, BNP Paribas must also be able to analyse the risks and opportunities incurred by its clients and the companies in which it invests. For that reason, it needs TCFD (or equivalent) reports to become more commonplace so that it can properly analyse all of the risks borne by the Group, its clients and the companies in which it invests.

Last year, BNP Paribas disclosed the information called for by the TCFD recommendations in its Registration Document[2]. This year, for the sake of clarity, the Group elected to disclose the same information in this report. It goes without saying that BNP Paribas is continuously striving to improve its reporting process, and its teams are working to further improve the robustness and relevance of its analyses.

This report follows the order of TCFD recommendations:

I. Chapter 1 addresses governance around climate-related risks and opportunities:

A. it covers the role of the Board of directors and the specialised Committees that assist the Board;

B. it specifies the role played by Management (and particularly the Executive Committee, the Company Engagement Department, the Risk Function and the Corporate Social Responsibility (CSR) Department) and how climate related criteria are incorporated in executive pay.

II. Chapter 2 looks BNP Paribas' strategy for addressing climate-related risks and opportunities:

A. it identifies and details the main climate-related risks (transition and physical risks) and opportunities identified for BNP Paribas;

B. it then examines how these risks and opportunities are incorporated in the Group's strategy; how BNP Paribas deals with these risks and opportunities in its businesses with its clients; and, where applicable, it reports the quantitative impact of these opportunities on BNP Paribas' income;

C. it describes the resilience of the Group's strategy to climate-related challenges; to that end, it details the importance of taking climate scenarios into account for BNP Paribas; it gives a concise description of the research conducted by the Group to assess the resilience of its strategy to transition risks and to physical risks; and, lately, it presents the main measures taken to improve the resilience of the Group's strategy, on its loan book, for its asset management, and for its scope of operations;

III. Chapter 3 focuses on management of climate-related risks and opportunities, and describes how BNP Paribas identifies, assesses and manages these risks and opportunities:

A. it describes the process used to identify climate-related risks, which is primarily based on internal/external stakeholder consultations;

B. it details the process used to manage climate-related risks and opportunities, addressing in particular the complementary roles of the RISK Function, the CSR Department and the business lines in this process, and explains how the process is fully integrated in the Group's general risk identification process.

IV. Chapter 4 covers the metrics and methods developed and used to track and steer the management of these risks and opportunities, along with the associated targets:

A. it describes the key metrics used to measure BNP Paribas' impacts on climate change, as well as the impacts of its clients and of the companies in which the Group invests, steer the initiatives conducted to combat this change, and assess climate-related opportunities;

B. it discloses information on the Group's greenhouse gas (GHG) emissions;

C. it presents the Group's main public targets related to climate-related risks and opportunities.

I. BNP PARIBAS' GOVERNANCE AROUND CLIMATE-RELATED RISKS AND OPPORTUNITIES

A. The Board of directors supervises climate-related risks and opportunities

The Board of directors of BNP Paribas determines the Group's strategy, including for energy and climate-related matters

The Board of directors determines BNP Paribas' strategy and objectives, based on the proposal put forward by the General Management, with the aim of promoting long-term value creation that is mindful of social and environmental considerations. It is regularly informed of the Bank's CSR policy, placed under the aegis of the 17 Sustainable Development Goals (SGDs) of the United Nations (UN) Organisation.

The Board of directors approved Chapter 7, on Corporate Social Responsibility, of the 2019 Universal Registration Document (URD) and Annual Financial Report. This chapter includes the Non-Financial Performance Report (NFPR), and specifically Chapter 7.5 "Our environmental responsibility: accelerating the ecological and energy transition."

Some of the specialised committees that assist the Board of directors play a special role in supervising energy and climate-related matters

The Board of directors is assisted by four specialised committees. Two play specific roles in the supervision of CSR risks and opportunities, particularly climate-related:

- **The Corporate Governance, Ethics, Nominations and CSR Committee** (CGEN) comprises independent directors, some of whom have extensive experience with CSR and climate-related issues due to their professional activity: members include a renowned biodiversity specialist and a CEO deeply involved in the energy transition. The Committee is responsible for overseeing issues relating to social and environmental responsibility, including mitigation of climate change. Each year, it examines the Group's CSR report and has recommended multiple adjustments and modifications, which were then approved by the Board of directors. Over the last two years, the CGEN has encouraged the Group to make strong commitments when it comes to managing climate-related risks and opportunities, in various ways: reducing support for the coal sector, strengthening the Group's climate goals, etc. In 2018, the Committee examined the materiality matrix[3] identifying the 21 most important non-financial risks for the Bank's stakeholders, with climate change and the energy transition sitting near the top of the list.
- **The Internal Control, Risk and Compliance Committee** (CCIRC) advises the Board of directors on the suitability of BNP Paribas' overall strategy and on its risk appetite. It assists the Board when it verifies the implementation of this strategy by the executive officers and by the Head of the Risk Function ("RISK"). In that role, it examines the primary objectives of the Group's risk policy, including those of a social and environmental nature, relying on the measures of transaction risk and profitability reported to the Committee in accordance with regulatory requirements, and any specific matters associated with these topics and methods. The CCIRC reviews the Risk Appetite Statement (RAS), which contains indicators measuring the Group's risk profile for the different types of risks to which it is exposed. Each metric has its own thresholds which have different levels of risk and which, when they are reached, condition a pre-established process for informing General Management and the Board of directors and, if necessary, action plans to be implemented. These indicators are monitored in the risk dashboard presented to CCIRC; one of these indicators is directly linked to climate-related risks: the primary and secondary mixes in terms of energy transition[4]. In 2019, the CCIRC examined the strategic report on the energy transition prepared by the specialised engineers of the Industry Research Department (EIS) of the Risk Function[5].

The Board of directors validates the variable compensation granted to executive corporate officers, based in part on the assessment of the Group's environmental and social performance (including mitigation of climate change)

The compensation paid to corporate officers includes an annual variable component associated with criteria that are representative of the Group's earnings, CSR criteria (10%) and a qualitative assessment performed by the Board of directors (15%).

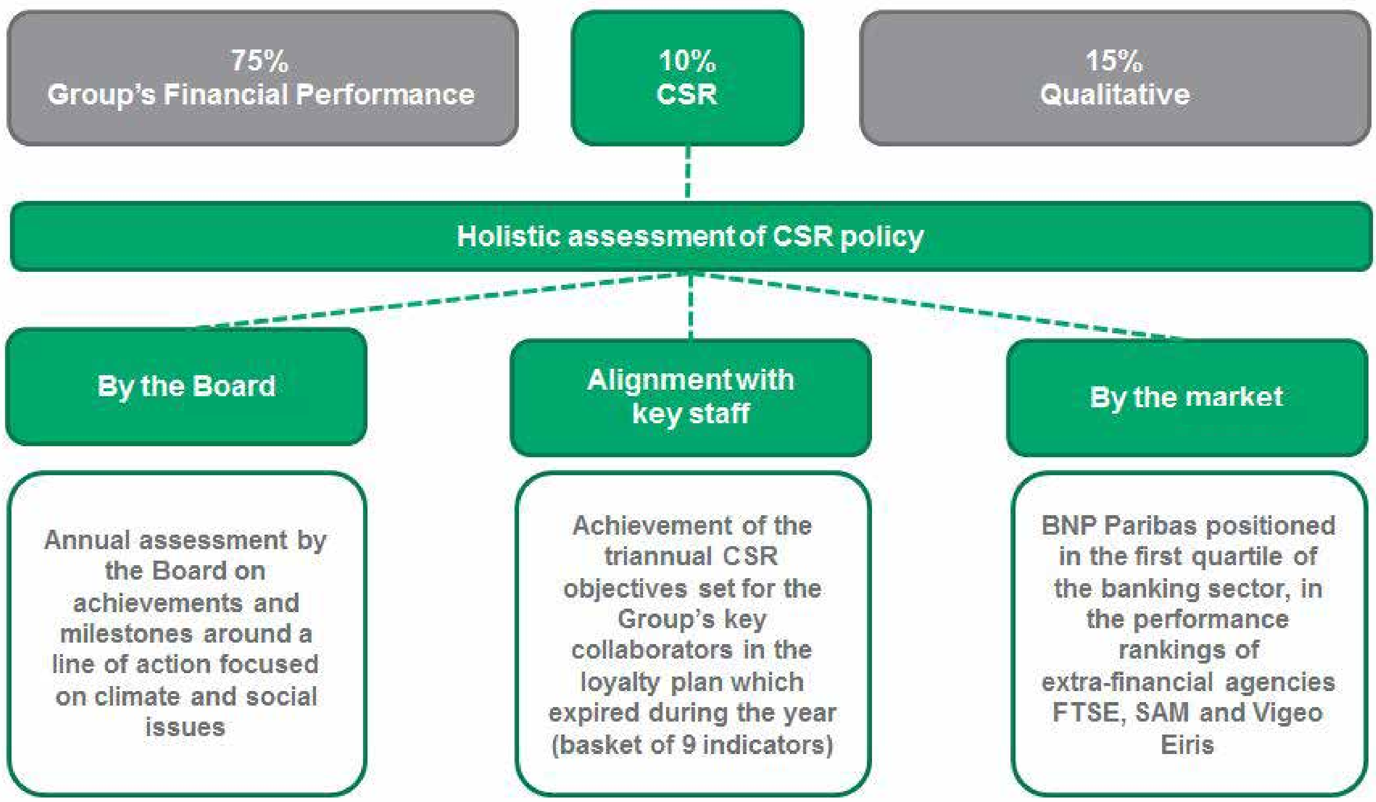
The attribution of the portion of annual variable pay tied to CSR criteria is based on a multi-criteria measurement founded on a holistic approach to the environmental, civic and social external initiatives undertaken by BNP Paribas. This pay structure incorporates three criteria, each weighted 3.33%:

- an assessment by the **Board of directors** of the year's highlights, mainly in terms of **climate and social issues** (see the inset opposite);
- a **market** criterion: non-financial rating agency publications measuring the quality of BNP Paribas' positioning relative to its peers in terms of CSR;
- alignment with CSR goals in the compensation owed in respect of the Key Person loyalty plan.

ASSESSMENT OF QUALITATIVE CRITERION FOR 2019 BY THE BOARD OF DIRECTORS

In performing the qualitative assessment, the Board of directors found that this criterion was met in 2019, based on the key social and climate-related events of the year. In particular, the Board noted the following achievements in the ecological and energy transition category:

- BNP Paribas is the No. 1 European bank for sustainable development in the Global 100 Most Sustainable Corporations ranking;
- The Bank announced that, by 2030, it will no longer finance companies whose main business is associated with the unconventional hydrocarbons sector and will discontinue funding of any projects in the coal industry by 2030 in the European Union (this criterion has been extended to the OECD in 2020) and by 2040 in the rest of the world.
- It also raised its funding target for the renewable energy sector.



Annual variable pay of corporate officers – Criteria for FY 2019

B. Management is responsible for assessing and managing climate-related risks and opportunities

The Executive Committee determines the Group's policy for the management of climate-related risks and opportunities

For climate-related risks and opportunities in all fields, the Chief Executive Officer and the Deputy Chief Executive Officer submit a strategy proposal to the Board of directors, then subsequently manage the company and its performance. Jean-Laurent Bonnafé, Director and Chief Executive Officer of the Group, has the final word on the Group's climate strategy, managed by the Head of Company Engagement (a member of the Group Executive Committee) in his role as CSR supervisor.

The Company Engagement Department, the CSR Department and the RISK Function are responsible for the operational implementation of the Group's climate strategy

Represented on the Group Executive Committee, the Company Engagement Department (created in 2017), is in charge of:

- strengthening CSR and diversity practices, thus converging all corporate drivers to address major social issues;
- identifying and implementing commitments in the fields of economic development, environment and energy transition, social inclusion and regional development, diversity and promotion of human rights.

BNP Paribas' Engagement Manifesto[6] states that "We will support causes where we can have major impacts. We will achieve this by aligning our products and services, partnerships, employer behaviour, procurement policies, community action, philanthropy, staff-volunteering initiatives and intrapreneurial initiatives...". This support is given in four areas, including climate: "… For climate: working with our customers and partners, to accelerate energy transition by encouraging renewable energies, energy efficiency, sustainable mobility and the circular economy."

The Risk Function is responsible for the organization and supervision of the overall risk management system to which the Group is exposed, including environmental and social risks. Among these risks, those linked to climate have taken a significant place in recent years. Métiers are key players in the programme whose initiatives are deeply rooted in the business processes.

JEAN-LAURENT BONNAFÉ IS PERSONALLY INVOLVED IN THE GROUP'S CLIMATE AND ENERGY TRANSITION INITIATIVES

Jean-Laurent Bonnafé, Director and Chief Executive Officer of the Group, has taken multiple positions in a bid to fully engage the Group he runs in the funding of the energy transition and the fight against climate change.

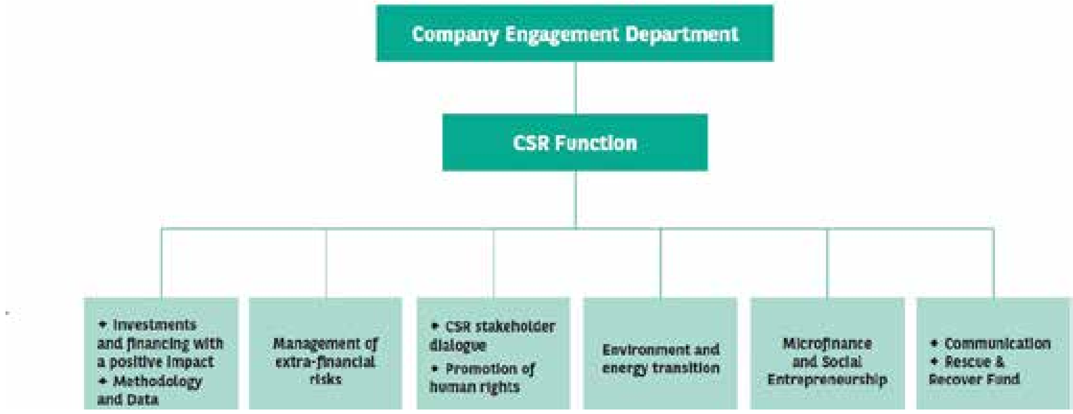
His earnest belief in the importance of climate-related issues can be seen in a variety of press articles and his own LinkedIn publications. For instance, he was quoted in a *La Tribune* article published 7 December 2018 as saying: "At BNP Paribas, we believe that our duty is to assist economies and countries that, while starting from the reality of today, are building a true energy transition trajectory. Since 2015 we have been committed to aligning our activities with the 2ºC scenario set out by the International Energy Agency".

In 2019, he also became Chairman of Entreprises pour l'Environnement (EpE). This think tank is working to integrate environmental concerns into the strategies of the 50 or so corporations in its ranks. As Chairman of EpE, Jean-Laurent Bonnafé was the initiator of a public position, signed by over 90 CEOs and published in the French newspaper *Le Monde*, dated 5 May 2020, calling for "putting the environment at the core of an economic rebound" that will take place after the crisis caused by the pandemic, inter alia by making "Europe's industrial facilities more resilient, while decarbonising them and reducing our carbon footprint".

THE ESG ACTION PLAN, A CROSS-BUSINESS PROGRAMME AIMED AT CONTINUOUSLY IMPROVING THE GROUP'S ESG RISK MANAGEMENT PROCESS

In the interest of continuous improvement in the management of the Group's ESG risks, particularly those related to climate, BNP Paribas has implemented the ESG Action Plan, a multi-year programme that coherently articulates initiatives (some of which are already implemented by the Business lines) and involves the relevant stakeholders under the sponsorship of the Head of Company Engagement, who oversees the CSR Function, and the Head of RISK.

The CSR Function, made up of roughly 30 people and subordinated to the Company Engagement Department, oversees the Bank's CSR commitments and is structured as follows:



THE MEMBERS OF THE CSR DEPARTMENT BOAST A VARIETY OF EXPERTISE SERVING THE ENERGY TRANSITION OF BNP PARIBAS AND ITS CLIENTS

The Environment and Energy Transition team is made up of energy transition specialists from different yet complementary backgrounds:

- Sébastien Soleille, Global Head of Energy Transition and Environment, has 20 years' experience in the energy transition and sustainable development field. He has worked for the French Environment Ministry, for a major-league energy firm (with positions as head of the R&D program on alternative fuels, head of the environment department in an oil & gas refinery, sustainable development leader for new energies and head of low-carbon products and services), and headed up the energy transition activity of an advisory firm;
- Astrid Behaghel has 14 years' experience as an electrical engineer in the energy sector managing international projects;
- Sophie Demartini has 14 years' experience in public-private partnerships and renewable energy project financing.

The CSR Function relies on a network created in 2012, working within the divisions, business lines, networks, Functions and subsidiaries of BNP Paribas to pave the way for the deployment of the CSR policy across the Group. A total of more than 130 employees spend the majority or all of their time addressing CSR issues, including climate-related issues, at BNP Paribas (see the example of BNP Paribas Asset Management below).

The Management of extra-financial risks team is tasked with identifying environmental risks, including climate-related ones, liable to have an impact on the Group's business relations, and defining sectoral policies[7] aimed at limiting the Environmental, Social and Governance (ESG) risks to which BNP Paribas is exposed[8].

The Environment and Energy Transition team, created in 2018, is in charge of helping all the business lines seize the business opportunities associated with the climate and the energy transition. It works continuously with the Functions and the business lines throughout the Group to develop such opportunities.

LAURENCE PESSEZ
Head of CSR,
BNP Paribas

"BNP Paribas has made the fight against climate change its priority in terms of environmental responsibility since 2011. Initially focused mostly on reducing our support to energies that emit the most greenhouse gases, our strategy today includes risks and opportunities and we measure the impacts. It is endorsed and implemented on a daily basis by all the players in the bank and is the subject of great attention from General Management and the Board of directors. All the conditions are met to allow us to play a driving role in the transition to a low carbon economy."

Lastly, a member of each entity's Executive Committee is in charge of ensuring that CSR considerations are incorporated in the entity's strategy.

BNP PARIBAS ASSET MANAGEMENT BOASTS EXPERTISE IN TRANSITION RISKS GENERATED BY CLIMATE CHANGE, AND OFFERS THE BENEFIT OF THIS EXPERTISE BOTH INTERNALLY AND EXTERNALLY

In line with its ambition of becoming a top-tier asset manager in sustainable investment, BNP Paribas Asset Management recently made big additions to resources of its Sustainability Centre, adding 15 new staff (since mid-May 2018) for a total of 25 multi-disciplinary ESG specialists. Jane Ambachtsheer, a renowned expert in responsible investment, joined BNP Paribas Asset Management as Global Head of Sustainability. She has since recruited additional experts, including climate investment specialist Mark Lewis (former Head of Research at Carbon Tracker) who took the helm of Sustainability Research.

Jane Ambachtsheer and Mark Lewis are both TCFD members. As such, they contribute to the collective advancement of the field and offer investors the benefit of their experience.

The experts at BNP Paribas Asset Management conduct research on market trends, focusing in particular on the energy transition and climate change. In 2019, Mark Lewis published a study[9] comparing the oil industry and internal combustion engine vehicles to the renewable energy industry and electric vehicles. The study showed that a long-term breakeven price of $10-20 is necessary for oil to remain competitive in the automotive mobility sector. This research provides a critical analysis of the transition risk potentially facing the oil & gas industry.

JANE AMBACHTSHEER
Global Head of Sustainability, BNP Paribas Asset Management

“ The TCFD recommendations do not stop at defining a clear global framework for climate risk management reporting. They also help institutions adopt an integrated approach to the challenge of climate risk management. This comprehensive perspective – from governance of climate-related risks and opportunities to how these risks and opportunities are tied into the company’s strategy, measures and targets – guides our internal approach and reflects the robust reasoning we expect from the companies in which we invest. “

The compensation granted to key employees of BNP Paribas is indexed in part to the Group’s CSR performance data, in line with energy and climate issues

In 2012, BNP Paribas established a dashboard consisting of 13 CSR key performance indicators (KPI) to steer its corporate social responsibility strategy. The Group Executive Committee and Board of Ddirectors monitor the dashboard on a yearly basis. Nine of the KPIs are used in the calculation of the 3-year loyalty plan for the Group’s 7,330 key employees[10], making up 20% of attribution criteria. Two of the criteria are directly related to energy/climate:

- Amount of renewable energy financing;
- GHG emissions measured as teqCO_2/FTE (energy used in buildings and business travel).

II. STRATEGY: ACTUAL AND POTENTIAL IMPACTS OF CLIMATE-RELATED RISKS AND OPPORTUNITIES ON BNP PARIBAS' BUSINESSES, STRATEGY AND FINANCIAL PLANNING

For the last few years, BNP Paribas has worked to identify, in increasingly greater detail, all of the climate-related risks and opportunities incurred by the Group, to inform its strategic decisions. The Group also seeks to analyse, if not quantify (when permitted by sufficiently robust methods), the impact of these risks and opportunities on its strategy and businesses.

The purpose of this analysis is to adapt the Group's strategy. Efforts are also being made to compare the projected performance of the Group's businesses with forward-looking climate scenarios in order to factor in the impacts of climate-related risks and opportunities on the Group's resilience.

A. BNP Paribas has identified multiple climate-related risks and opportunities over the short, medium and long terms

Climate risk is fully integrated in the Group risk identification and management system

The identification and monitoring of top and emerging risks are central to BNP Paribas' approach to risk management. The work and analyses performed by the RISK Function, the business divisions and business lines, as well as multiple committees, are collectively used to identify, analyse and manage Group risks.

A top risk is defined as having:
(i) the potential to have a material impact, across a business area or geographical area, on the financial results, reputation or sustainability of the Group;
(ii) the potential of occurring in the near future.

As explained in the 2019 Universal Registration Document and Annual Financial Report, climate change-related risks are one of the principal risks incurred by the Group[11]. The URD states that "Climate change is a financial risk for the Group. Climate change-related risks may affect the Group, either directly on its own operations, or indirectly via its financing and investment activities. These risks mainly concern the physical risks related to the consequences of climate change and the "carbon" risks resulting from the transition to a low-carbon economy."

The Group also takes its risk factors into consideration. Accordingly, it factors in seven main risk categories specific to the BNP Paribas Group's businesses. In the "Risks related to the BNP Paribas Group's growth in its current environment", the Group considers that "The BNP Paribas Group could experience business disruption and losses due to climate change risks such as transition risks, physical risks or liability risks."

General classification of climate-related risks

BNP Paribas is exposed to climate-related risks in its own operations and, above all, to the climate-related risks of its clients and the companies in which it invests. There are two main types of climate-related risks:
(i) **Transition risks**: the impacts of transition risk are related to the process of adjusting to a low-GHG emissions economy. Emissions must achieve carbon neutrality to prevent climate change from getting worse. The emissions reduction process is liable to have a material impact on all sectors of the economy by affecting the value of certain financial assets and the profit margins of certain companies.
(ii) **Physical risks**: they include the economic costs and financial losses resulting from the increased severity and frequency of extreme weather phenomena triggered by climate change (heat waves, landslides, floods, fires, storms, etc.) and from graduate long-term climate changes (changes in rainfall, extreme weather variability, ocean acidification, rising sea levels and average temperatures, etc.).

Furthermore, **liability risks** can also arise from both of these risk categories. They include the damages and interest a legal entity would have to pay if found liable for global working or for failing to anticipate its effects as it could and should have done. In keeping with international efforts, and especially those of the NGFS[12], BNP Paribas considers the risks associated with the advent of climate-related court proceedings for corporates and investors, for example liability risks, as a subset of physical and transition risks.

Identification of climate-related transition risks

Transition risks can include credit risks, risks of market share losses, risks in the company's own scope of operations, reputational risks and legal risks.

Credit risk makes up a significant portion of BNP Paribas' risk profile. Through its financing activities, the Group's loan book is exposed to risks related with energy sector issues, carbon prices, associated technological developments, etc. Depending on the sector and region, BNP Paribas clients are exposed to different energy and carbon regulations, particularly in Europe where an emissions trading scheme (EU ETS) has been in place since 2005. Clients in the Asia-Pacific region, certain US and Canadian states are also subject to recent carbon market-type mechanisms. In addition, new regulations governing industries generating the most pollution are enacted each year, as a result of the commitments taken by various countries to reduce the use of fossil fuels and bring down carbon emissions. The variety and complexity of such regulations can make it difficult to anticipate and properly manage the resulting financial risk. The main risk incurred by the Group as a financial institution has to do with how well its clients are able to maintain their profit margins in more restrictive regulatory environments, which can affect their ability to repay their debt. BNP Paribas is predominantly exposed to this risk through its lending activities in the energy sectors, in addition to high GHG emissions sectors. The assessment of financial risks is based on its portfolios of loans to corporations operating in the energy sector and in other high GHG emissions sectors. An increase in CO2 emissions prices on the market (via a tax or obligation to participate on a quotas market) could, for example, significantly affect the Group's loan book by lowering profit margins for clients with the greatest exposure to these risks.

Risks of market share losses must also be taken into consideration. On the markets of some Group business lines, client demand may veer significantly towards more energy efficient and less GHG-emitting products and services. In such case, Real Estate, Arval and Leasing Solutions subsidiaries, among others, run the risk of losing market share. Client demand is also shifting towards more energy-efficient, less GHG-emitting buildings, cars and various other goods. If the Group's business lines do not adjust their supply accordingly, they can lose market share to potential rivals that would be more in sync with the stakes and challenges of the ecological transition. That said, these risks also represent opportunities for the Group's business lines, as they can rely on climate-related challenges to develop new products and services (see "Identification of short, medium and long-term opportunities related to the energy transition and carbon requirements" opposite)[13].

EXAMPLE OF QUANTIFICATION OF THE IMPACT OF A CARBON TAX ON THE GROUP'S GHG EMISSIONS

The financial impact of a uniform carbon tax that would apply to the Group's emissions for its operational scope (direct emissions and indirect emissions related to energy purchases and business trips) can be calculated as an example. Considering the following assumptions:
• if a carbon tax of € 10 / teqCO_2 had to be paid by the Group worldwide;
• if the Group's GHG emissions remained at their 2019 level (whereas they actually drop continuously), i.e. 461 kteqCO_2;
then the Group would have to pay carbon taxes for an amount of € 4.6 million per year.

Such a calculation has no predictive value (it is very difficult to predict whether a carbon tax will be applied everywhere in the world, and at what level; and the Group's emissions decrease regularly) but it can be used to get a rough idea of the order of magnitude of such a measure.

The following **risks** have been identified in the Group's **own scope of operations**:
- A carbon price for the Group's direct emissions;
- An increase in the mandatory carbon reporting scope;
- The cost of building renovations, which may become mandatory in some regions, to improve energy efficiency.

The Group is also exposed to **reputational risk**, for example should it fail to comply with climate-related regulations or if its stakeholders are of the opinion that the Group is not meeting their expectations in terms of climate risk management. Reputational risk is the risk of adversely affecting confidence in the company held by its clients, counterparties, suppliers, employees, shareholders, supervisors or any other third party whose confidence in any capacity whatsoever is a prerequisite to the normal conduct of business. Reputational risks have different impacts on the Group depending on the type and severity of the risk in question.

Legal risks, stemming from formal complaints, may directly impact the Group's revenues in the event it is forced to pay fines or compensation for damages and interest.

Identification of climate-related physical risks

It is important to assess the admittedly complex physical risks lying at the crossroads of certain sectors, regions and climate impacts as accurately as possible.

In terms of **credit risk**, some sectors exposed to climate-related phenomena are at greater risk than others. The power generation sector, for example, often depends on water resources. Climate change can impact the quantity of water available (which can in turn have a negative impact on hydropower generation) and on water temperature (which can in turn have a negative impact on electronuclear power generation), potentially reducing the revenues of certain Group clients.

Other identified risks include the consequences of climate change, which can jeopardise the capacity of Group infrastructures and operational systems (**operational risks**). Extreme events, heat waves, osmotic stress, floods, etc., can weaken the resilience of certain Group buildings, including data processing centres, which are critical to the continuity of client services.

Identification of short, medium and long-term opportunities related to the energy transition and carbon requirements

It is **BNP Paribas' ambition to be able to offer all its clients, spanning all the Bank's business lines and countries of operation, a range of products and services to help them achieve their own energy transition.** For Jean-Laurent Bonnafé, **"the energy transition is today practically synonymous with economic development."**[14].

This ambition automatically generates multiple opportunities for each client segment:

- energy transition financing for **corporate** clients: renewable energies, energy efficiency, decarbonisation of value chains, development of low-carbon products and services, carbon offsetting, etc.
- demand from **institutional and retail investors** interested in focusing their investments on the low-carbon economy and sectors in transition;
- support for **individual clients** in adopting more efficient technologies and consumer practices: renewable energies, low-carbon mobility, energy-efficient homes, etc.

A CROSS-BUSINESS PROGRAMME TARGETING ENERGY TRANSITION OPPORTUNITIES

Mindful of the importance of seizing climate change-related opportunities in all its businesses, the Group organised a programme to support its corporate clients with their energy transition, which lasted throughout 2019. A group of 80 employees, from all Group business lines and regions (many working directly with major BNP Paribas clients), was created to share best practices Groupwide with the aim of seizing on as many energy transition opportunities as possible together.

Six working groups were created to delve into specific opportunities such as financing small-scale renewable energy assets, energy efficiency and new energy sector technologies. These groups developed a number of deliverables that were presented to a panel of key Group managers, including the Head of Company Engagement and the Head of CSR.

The Group was also able to identify opportunities in its own **scope of operations**: reducing energy use in its buildings (responsible for 3/4 of total direct emissions) leads to gains in operating costs, while also increasing the value of the Group's real estate assets and expanding its knowledge of the renovation and responsible real estate market.

B. These climate-related risks and opportunities have impacts on BNP Paribas' businesses, strategy and financial planning

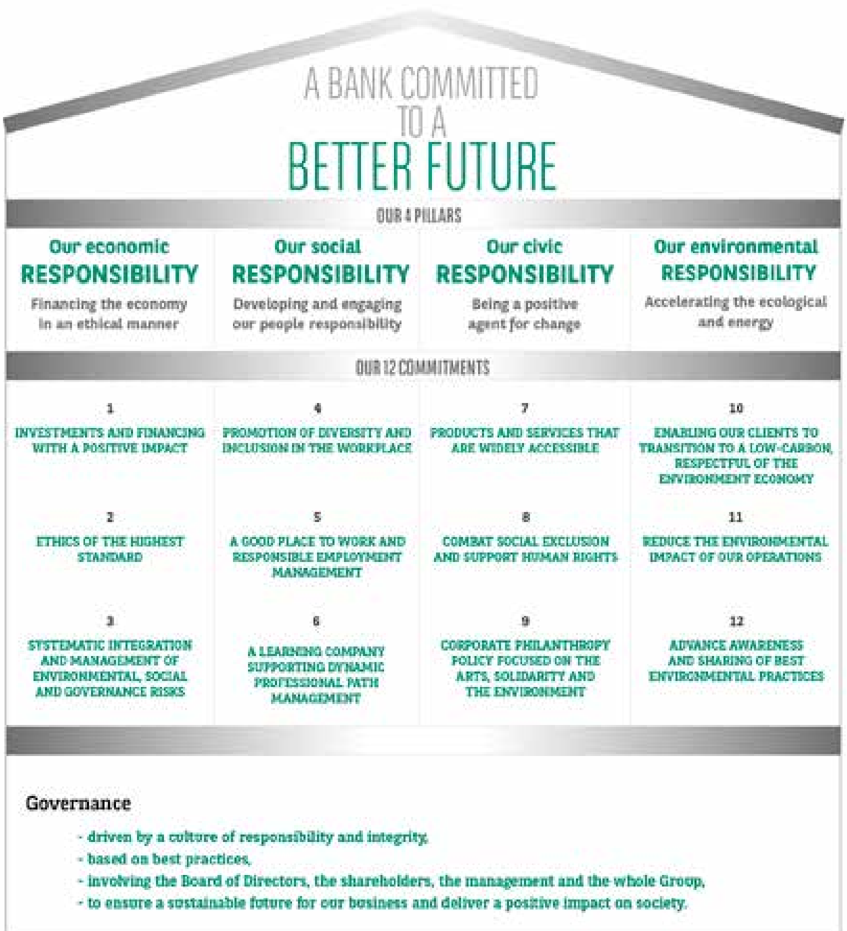
Incorporation of climate-related risks and opportunities in Group strategy

BNP Paribas incorporates climate-related risks and opportunities in its CSR strategy, underscored by its corporate purpose

BNP Paribas has fully integrated energy and climate-related considerations in its strategy, especially when it comes to managing its loan book and its business approach with its clients. This commitment is an integral part of its corporate purpose and is spelled out in the Group's Engagement Manifesto and CSR policy.

In line with the UN Sustainable Development Goals (SDGs), including the climate and energy goals, the Group's CSR policy is divided into four pillars and 12 commitments reflecting its CSR objectives, as well as the Bank's concrete achievements (see the figure below). The purpose of this strategy, part of a continuous improvement process, is to help build a more sustainable world while ensuring the stability and performance of BNP Paribas. All business lines, networks, subsidiaries and countries roll out this policy, adapting it to their specific characteristics. This strategy includes the Group's response to how climate-related risks and opportunities can impact its business model.

One of the four pillars deals with environmental responsibility, with the goal of ramping up the energy and energy transition of BNP Paribas and its clients. On the environmental responsibility front, BNP Paribas has prioritised the fight against climate change since 2011, given its influential position in the funding of the global economy, and particularly the energy sector.



BNP Paribas's CSR strategy

BNP Paribas draws on a general strategic framework for all its climate initiatives, both to reduce its direct impacts and to take action alongside its clients

The Paris Agreement states that, in order to limit the increase in global average temperature to well under 2°C, the world as a whole must achieve carbon neutrality by the second half of the 21st century (i.e. drastically reduced greenhouse gas emissions and residual emissions less than or equal to anthropogenic carbon sequestration, either through agricultural or forestry practices capturing more carbon or through CO_2 capture and storage). In France and the European Union, the goal is to achieve carbon neutrality by 2050. To that end, at the global level and for BNP Paribas' direct impacts, or in its actions with respect to its clients, it is necessary to focus on four pillars: energy sobriety, energy efficiency, low-carbon power, and carbon offsetting.

BNP Paribas has implemented initiatives, and offers products and services in all four pillars, in-house and with its clients, as shown in the figure below.

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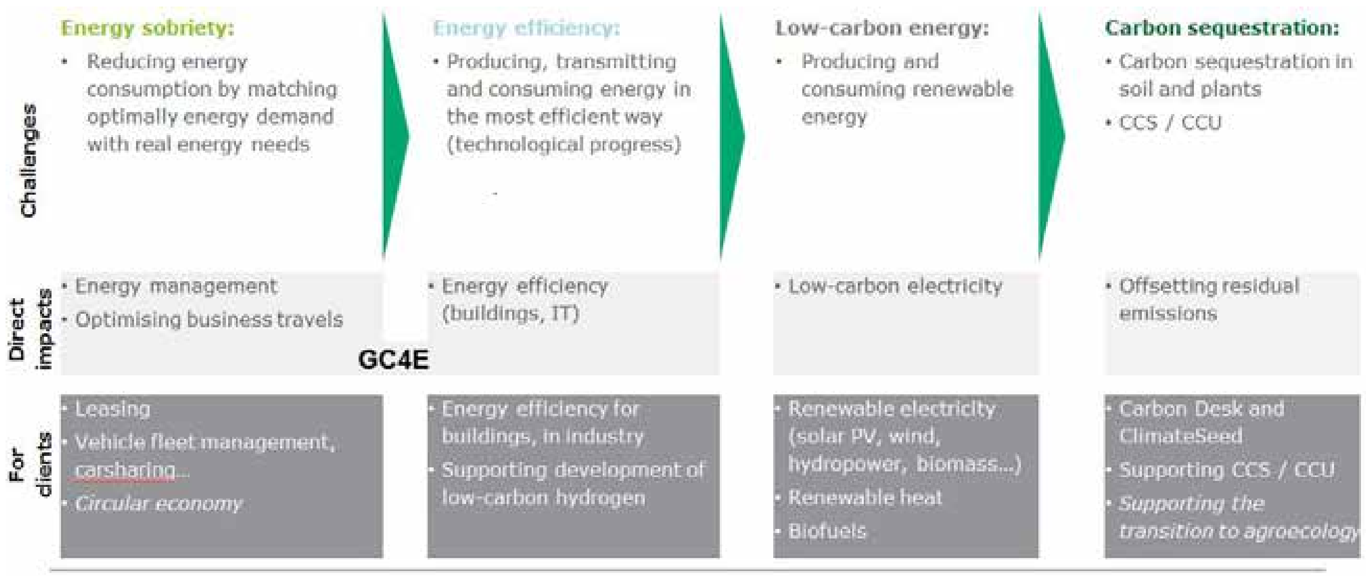


Four pillars of the energy transition necessary to achieve carbon neutrality

PUBLIC POSITIONS AND PARTNERSHIPS ON ENERGY AND CLIMATE-RELATED ISSUES

BNP Paribas firmly believes it is more effective to address the complex and global challenges of climate change by working together. With that in mind, the Group is a member of several coalitions on the front line of the fight against climate change, such as:

- The Group belongs to the **Breakthrough Energy Coalition**, which supports innovation in the interest of developing clean energy. Launched by Bill Gates during the COP 21 conference, the coalition combines innovative research funded by public-private partnerships;
- BNP Paribas helped draft the Charter for Engagement "Women leading climate action", of the **Women's Forum**, a charter that has now been signed by nearly 400 corporations, opinion leaders and other organisations.

BNP Paribas is also a member of multiple CSR think tanks, several of which focus specifically on climate-related issues:

- the **Institute for Sustainable Development and International Relations** (IDDRI), counting BNP Paribas' Head of CSR as a member of its Board of directors.
- the **World Business Council for Sustainable Development** (WBCSD).
- **Entreprises pour l'Environnement** (EpE), a non-profit that appointed BNP Paribas Director and CEO Jean-Laurent Bonnafé as its Chairman in 2019 for a three-year term. In this role, he has successfully highlighted and promoted EpE's initiatives and reports in public position statements. In 2019, the association focused its efforts on publishing "ZEN 2050: Imagining and Building a Carbon-Neutral France"[15], a study that recommended 14 initiatives to be undertaken as soon as possible to achieve carbon neutrality by 2050.
- the **Hydrogen Council** brings together major global corporations in energy, transport and industry. These companies share the same long-germ vision: hydrogen can promote the ecological and energy transition. Convinced that hydrogen generated from low-carbon energy has a key role to play, BNP Paribas officially joined this organisation in early 2020 and is represented in this Council by a member of its Executive Committee.
- BNP Paribas actively participates in the European Commission's work on sustainable finance, primarily through the Technical Expert Group (TEG) on Sustainable Finance, where it has been represented by Helena Viñes Fiestas, Global Head of Stewardship and Policy of BNP Paribas Asset Management since 2018.
- BNP Paribas also plays an active role in the Climate Commission set up by the French Banking Federation (FBF) to support and accelerate the climate strategies of French banks (Patrick Bader, former head of CSR for BNP Paribas Corporate and Institutional Banking, who heads the Commission, was seconded by the Group).

Furthermore, as part of the **Climate Action 100+ Initiative** (CA100+), BNP Paribas Asset Management has conducted a dialogue since 2017 with corporations in Europe, Asia and the United States ranked among the top 100 GHG emissions emitters, encouraging them to publicly commit to take greater action on climate change and implement business strategies to achieve net zero emissions by 2050 at the latest. BNP Paribas Asset Management worked with the Church of England and AP7 to publish a set of European Investor Expectations on Corporate Climate Lobbying, which formed the basis for a series of engagements conducted in 2019 with the 57 European companies that are part of CA100+.

Impact of climate-related risks on businesses: strong commitments in favour of decarbonising the economy

As stressed above, BNP Paribas' ambition is to align its businesses with the climate-specific goals of the Paris Agreement. In an effort to steadily adjust its portfolio of third-party loans and investments, BNP Paribas and its asset management subsidiaries have engaged an intensive dialogue with its clients and the companies in which it invests, addressing ways to gradually converge towards a low-carbon economy.

Loan book

BNP Paribas has made strong commitments in favour of decarbonising the energy sector

The Group has made major commitments to reduce carbon emissions in the energy sector, a key step in combating climate change.

In terms of thermal coal, the Group has set an exit deadline, in line with the SDS (Sustainable Development Scenario) scenario of the International Energy Agency (IEA), compatible with the climate goals of the Paris Agreement: In 2019 and in 2020, the Group strengthened its position on coal, announcing its plan to reduce its thermal coal exposure to zero by 2030 in OECD countries, and by 2040 in the rest of the world. The Group had already elected in 2017 not to finance any projects in the thermal coal sector. To work towards its gradual exit goal, BNP Paribas plans to step up its dialogue with corporate clients using coal to generate part of their electricity, in order to determine to what extent their projections are aligned with the Group's exit goals by geographic area. BNP Paribas will no longer accept any new customers with a coal related revenue share of more than 25% and will end up terminating its relations with any companies developing new coal-based electricity generation capacities.

As a result of making this commitment, BNP Paribas has excluded 124 corporations in the coal mining and coal-based power generation sectors. In 2019, the Group elected to discontinue financing power generation companies in Poland, given that their power mix is highly dependent on coal and the Bank found, after a two-year commitment, that they had no intention of changing their strategy. It then terminated its relations with nearly 10 different Polish companies involved in coal. Starting in 2020, the implementation of this policy will quickly lead to a reduction of around half of the number of BNP Paribas corporate customers using coal for a share of their electricity generation.

In late 2017, the Group also adopted a global finance policy applicable to the exploration, manufacture and transport of unconventional hydrocarbons:
• the Group has consequently severed its ties with companies whose main business is the exploration, distribution, marketing or trade of shale gas and oil and/or oil from tar sands;
• the Group has also stopped funding projects predominantly involving the transport and exploration of shale gas and oil or oil from tar sands.

Furthermore, the Group has undertaken not to finance oil and gas exploration or production projects in the Arctic.

These undertakings have been applied to the Group's existing clients, in some cases meaning it could no longer do business with them. For example, after implementing this sectoral policy, the Group discontinued the funding of a number of energy corporations in the United States, generating income losses of around €100 million. In addition, the GHG emissions criteria have been tightened in its sectoral policies as well as specific credit policies. A total of 418 companies were placed on blacklist or watchlist in 2019, in accordance with Group sectoral policies.

Asset management

BNP Paribas Asset Management uses coal, GHG emissions and physical risk metrics to help manage its investments

BNP Paribas Asset Management has committed to align its portfolios with the goals set out in the Paris Agreement. To that end, in 2019 BNP Paribas Asset Management announced that it would be implementing a new, more restrictive coal policy, which took effect on 1 January 2020. The policy applies to all open-ended funds actively managed by BNP Paribas Asset Management, and is set to become the standard for mandates as well. As of 2020, BNP Paribas Asset Management no longer invests in companies generating more than 10% of their revenue from thermal coal operations and/or for which thermal coal represents 1% or more of their total global production. Electricity producers with a carbon intensity exceeding the global average of 491 gCO_2e/kWh in 2017 will also be ruled out, as BNP Paribas Asset Management aligns itself with the path set to reach the Paris Agreement goals, as determined by the IEA in its Sustainable Development Scenario (SDS). This scenario calls for electricity producers to reduce their carbon intensity to 327 gCO_2e/kWh by 2025. Accordingly, BNP Paribas Asset Management will require the companies it invests in to reduce their carbon intensity to an SDS-compatible rate between 2020 and 2025, excluding those who fail to do so.

For a small number of companies that were very close to the threshold, BNP Paribas Asset Management conducted analysis and engagement to encourage these companies to improve their decarbonisation targets – and these companies will be subject to annual monitoring.

The ESG incorporation directives introduced by BNP Paribas Asset Management in 2019 also call for the carbon footprints of the firm's investment portfolios to be lower than the carbon footprint of the associated benchmark index (where applicable).

BNP Paribas Asset Management uses its voting rights to influence the energy transition of portfolio companies

In line with its climate change strategy, BNP Paribas Asset Management also adapted its voting policy, and reserves the right to abstain from voting to approve financial statements, or the discharge or re-election of directors, in any company that does not adequately report on its CO_2 emissions and climate strategy. In 2019, BNP Paribas Asset Management opposed 61 resolutions at 16 General Shareholders' Meetings (vs. 16 times at 12 AGMs in 2018), primarily for climate change reasons.

In 2019, climate change was a top priority in BNP Paribas Asset Management's voting and engagement policy. It should also be noted that, in accordance with its fiduciary duties, BNP Paribas Asset Management serves as the long-term steward of client assets. In its view, achieving the Paris Agreement goal is an imperative. Failing to do so would adversely affect the capital markets, portfolio values and the lives of final beneficiaries, particularly over the long term. In 2019, BNP Paribas Asset Management made it a priority to engage with portfolio companies about transitioning to low-carbon electricity generation, implementing BNP Paribas Asset Management's stricter coal policy (which took effect in 2020) and bringing their lobbying practices into compliance with Paris Agreement goals.

It should also be noted that BNP Paribas Asset Management uses its voting rights in multiple corporations to encourage the adoption of pro-energy transition resolutions.

BNP Paribas Cardif applies a low-carbon filter to directly owned corporate stocks and bonds

BNP Paribas Cardif launched a **carbon rating** that scores companies for their carbon emissions in absolute value terms (as reported in the CDP[16]), with scores ranging from "A" (emissions < 100 ktCO_2e) to "D" (emissions > 10 MtCO_2e). The energy transition strategies of companies with a score of "C" or "D" are also rated (from 0 to 100) according to three criteria: relevance of energy transition policies, consistency of policy deployment, and effectiveness of policy results. Companies (or issuers) with an "energy transition rating" of less than 30 are excluded from the investment universe.

BNP PARIBAS ASSET MANAGEMENT VOTING EXAMPLE

BNP Paribas Asset Management took part in the submission of resolutions at Exxon AGMs several times in recent years: (i) In 2016 and 2017, support of a resolution calling for Exxon to draft a report on the consequences of climate change for the company. The resolution was postponed in 2016, but the vote was held in 2017. (ii) In 2019 and 2020 co-filing of a shareholder proposal with other investors calling for Exxon to disclose short, medium and long-term GHG emissions targets aligned with the Paris Agreement goals.

While relations with Exxon clearly highlight a number of challenges, the dialogue engaged with many other companies has been more productive. For example, having conducted a meaningful dialogue with Repsol's upper management team for the last several years, in December 2019 Repsol announced an ambition to achieve net zero emissions by 2050, making it the first oil and gas company in the world to do so.

NGOS ACKNOWLEDGE BNP PARIBAS'S EFFORTS TO REDUCE CARBON EMISSIONS IN THE ENERGY SECTOR

In 2020, BNP Paribas took first place in ShareAction's "Banking on a Low-Carbon Future"[17] ranking. In its report the NGO examined how the 20 largest European banks manage climate change-related risks and opportunities. BNP Paribas was ranked first among the only three banks in the "Leaders" category, with an overall score of 63.2% versus an average of 39.9% for other banks. BNP Paribas particularly stood out in terms of dialogue and collaboration with stakeholders on climate-related issues, as well as including climate-related criteria in its governance and strategy. This is the second time in in a row BNP Paribas took the crown as the No. 1 European bank for its management of climate-related risks and opportunities in the ShareAction "Banking on Climate Change" ranking (report first published in 2017).

According to the "Banking on Climate Change" report[18] published by an NGO consortium[19], "BNP Paribas has some of the best policies on unconventional oil and gas." The report ranks BNP Paribas No. 1 for its policies on oil and gas in the Arctic, on oil and gas recovered with fracking techniques, and on Liquefied Natural Gas (LNG), and No. 4 for its policy on electricity produced using coal.

In the asset management industry, several NGOs consider BNP Paribas Asset Management to be one of the most engaged asset managers, based on its incorporation of climate-related risks:

- In its March 2020 report entitled "Point of No Returns"[20], ShareAction ranked BNP Paribas Asset Management No. 2 for its responsible investment strategy. The report analysed and ranked 75 asset managers in 17 countries according to their investment approach to four categories, including climate change. BNP Paribas Asset Management was named as one of the Top 5 asset managers with the highest score in the ranking as a whole.
- Majority Action published a report entitled "Climate in the Boardroom: How Asset Manager Voting Shaped Corporate Climate Action in 2019"[21], reviewing the initiatives taken by the 25 biggest asset managers in Europe in a bid to hold the largest US publicly-traded energy firms accountable for their role in the fight against climate change. The report showed in particular that BNP Paribas Asset Management has aligned its commitments to combating climate change with its voting policy. The BNP Paribas' subsidiary is one of the asset managers that supported more than 95% of shareholder proposals analysed in the study, voting to improve disclosures on GHG emissions and emissions reduction plans, for transparency on corporate lobbying practices and for governance reforms to improve accountability to long-term shareholders on the fight against global warming.

SONIA HIERZIG
Joint Head Financial Sector - Research & Standards, ShareAction

" BNP Paribas has come first for the second time running in ShareAction's 'Banking on a Low-Carbon Future' survey and is a clear leader in the banking sector in terms of its approach to climate change. While BNP Paribas performed well compared to its peers across all topics we analysed, the bank stands out in particular due to its more advanced policy on unconventional oil and gas, its approach to adaptation finance and the way it conducts stakeholder engagement. However, the journey is not yet complete, and further progress is still needed – for instance in terms of ensuring a timely phase-out of support for all types of fossil fuels. We look forward to continuing to work with BNP Paribas and to help the bank achieve full alignment with the goals of the Paris Agreement. "

Impact of climate-related opportunities on Group businesses and financial projections

In implementing its business strategy, the Group seizes opportunities related to energy issues and carbon requirements, which has a positive impact on its revenues. The energy transition generates multiple opportunities as new players, models and partnerships arise, needing the backing of financial institutions for their development. BNP Paribas is vigilant in identifying and capturing such opportunities for the benefit of all clients (corporate, investors and individuals).

BNP Paribas seizes climate-related opportunities with corporate clients

The Group acted on the following climate-related opportunities in the corporate clients segment in 2019:

- Renewable energy financing reached €15.9 billion. The Bank served as financial advisor and underwriter to consortium Éolien Maritime France for its inaugural French offshore wind farm project, which will involve 80 wind turbines boasting power generation capacity of 480 MW (enough to cover 20% of energy requirements in the department) for a total investment of €2 billion. BNP Paribas ranked No. 2 in terms of renewable energy financing in the EMEA region and No. 4 worldwide (Dealogic ranking as at end- 2019).
- BNP Paribas structured and placed €9.8 billion in green bonds at end-2019. This includes participating in i) the first sovereign green bond issued in Latin America (specifically Chile) for €1.3 billion, which will serve among other things to finance renewable energy and environmental protection projects, and ii) Apple's inaugural green bond for €2 billion, which will be used to reduce its global carbon footprint and develop the use of more sustainable materials in its products and processes.
- BNP Paribas has also been very busy on the recent, fast-growing market for Sustainability Linked Loans (SLLs), increasingly associated with the energy transition and the fight against climate change. With an SLL, the interest rates paid by the borrowing company are linked to the achievement of sustainable development targets, and particularly those related to the environment and climate: rates are lowered if the company reaches its targets and increased otherwise. At end-2019, BNP Paribas had issued €6.2 billion in SLLs, nearly one-third of which are exclusively linked to environmental metrics (i.e. just over €2 billion). For example:
  - o a €2 billion green credit line was syndicated for Belgian chemicals firm Solvay. The cost of the loan is associated with a GHG emissions reduction target of 1 million metric tons by 2025;
  - o another €750 million SLL was syndicated for Finnish forest industry company UMP. The interest rate on the loan is tied to two key performance indicators: (i) achieving a net positive impact on biodiversity in UPM's Finnish forests; (ii) reducing CO_2 emissions generated from purchased fuel and electricity 65% by 2030 (compared to 2015 levels), in accordance with UPM's commitment to aligning its business with the 1.5°C climate scenario.
- According to the Dealogic ranking, BNP Paribas was No. 2 worldwide in terms of green loans in 2019.
- As explained below in the section entitled "Creation of dedicated teams", in 2018 BNP Paribas founded a social business called ClimateSeed, a voluntary carbon offsetting platform that connects organisations seeking to offset some or all of their residual GHG emissions through carbon sequestration projects. In addition to BNP Paribas, ClimateSeed already works with International union of railways (UIC), Mediaperformances, Julhiet Sterwen, Willis Re, Utopies, etc.

TAPIO KORPEINEN
CFO
UPM

"Connecting UPM's sustainability performance to our financing demonstrates the importance of responsible business practices to our long-term value creation. Sustainable forest management plays an important role in mitigating climate change, as it ensures material long-term CO2 sequestration and improves adaptation to global warming."

The platform also entered into a partnership with Paris Aéroport: terminals were installed at the Orly and Roissy Charles de Gaulle airports, where passengers can offset their carbon emissions if they so choose by making a financial contribution to environmental and solidarity projects.

• In 2019, **BNP Paribas Real Estate** (whose corporate real estate business is 100% certified, having received two of the highest certification levels) was ranked 4th out of the Top 10 French low-carbon real estate developers, with five projects in the process of receiving or having already obtained BBCA certification attesting to the building's exemplary low-carbon performance.

• For **Arval**, a subsidiary specialising in the management of car fleets, 2018 saw the firm define its pro-ecological and energy transition line, which was then rolled out in 2019. At end-2019, Arval's inventory of hybrid and electric cars totalled around €1.3 billion, up by more than 60% from end-2018. In Belgium, Arval teamed up with energy provider Engie to launch Numobi, an integrated electric car leasing range.

• Subsidiary **BNP Paribas Leasing Solutions** has also developed a special offer for sustainable mobility, financing charging stations for electric cars. In offering this service to companies, the subsidiary aims to facilitate the adoption of low-carbon vehicles by expanding the network of charging stations and ramping up the energy transition.

• Blended Finance to promote the energy transition: rural areas in emerging countries are particularly affected by climate change, deforestation and biodiversity losses. BNP Paribas is working to create innovative financing systems to facilitate the implementation of projects aimed at combating these complex problems involving a wide variety of parties. Blended finance is one of the most promising approaches to managing the associated risks, in that it combines public-sector and private-sector finance. BNP Paribas has set up a key agreement with the United Nations Environment Programme (UNEP) with the goal of funnelling $10 billion into sustainable development projects in emerging countries: by 2025 . The goal of one such project is to finance a sustainable rubber plantation in Indonesia.

• For BNP Paribas, making the energy transition happen also means supporting the development of innovative technologies. To that end, the Group made a commitment in late 2015 to invest €100 million by 2020 in young innovative companies in the ecological and energy transition sector and to help them grow. At end-2019, the Group had invested in three investment funds and 10 start-ups specialising in the ecological and energy transition, including Sierra Energy, which transforms any type of waste into energy without combustion, and EkWateur, a French green renewable energy provider (electricity and biomethane) serving individuals and local authorities. The Group also assists ecological and energy transition start-ups with their IPOs. In 2019, specialised subsidiary Portzamparc BNP Paribas helped multiple companies in the sector launch their IPOs, such as Hoffmann Green Cement Technologies (founded in 2014, produces very low-carbon cement) and BoostHeat (specialising in efficient and sustainable heating solutions).

BNP Paribas seizes climate-related opportunities with investment clients

The Group carried out a variety of initiatives with investment clients throughout 2019:

• The Group launched **10 Climate indices** which raised over €750 million in 2019, and the green funds managed by **BNP Paribas Asset Management** (primarily invested in alternative energies and energy efficiency) totalled €11.6 billion in AuM at 31 December 2019.

• **BNP Paribas Cardif, the insurance subsidiary of BNP Paribas**, more than doubled its green investments in the general funds of its domestic countries (France, Italy, Luxembourg).

HIGH-LEVEL CLIENT AWARENESS EVENTS

BNP Paribas is organising more frequent targeted client events centred on the ecological and energy transition. In 2019, this type of event was organised in 11 countries, attended by 380 clients (corporates and investors), Group employees, client representatives and other VIPs.

The Group also invited more than 500 clients to attend the fourth annual Sustainable Finance Forum (SFF) in Asia. BNP Paribas Fortis invited 80 clients to take part in a conference in Oslo, a city blazing the trail for decarbonisation. The goal of the trip was to encourage clients to accelerate their company's own ecological and energy transition by introducing them to new technologies, carbon capture and storage (CCS) and the massive roll-out of electric cars.

BNP Paribas seizes climate-related opportunities with individual clients

The Group has also stepped up its **support for individual clients** making the energy transition:

• In 2019, French Retail Banking (BDDF) launched "Auto Écologiques" green car loans used by clients to buy cars eligible for the 2019 conversion bonus. A total of 1,057 Auto Écologiques loan were issued in 2019 amounting to €27 million.

• BDDF also launched ÉnergiBio, a lower-rate consumer loan used to fund energy renovation projects.

• In Belgium, BNP Paribas Fortis offers green mortgage loans to make homes more energy efficient (construction of new homes or renovations of existing homes), which amounted to €3.6 billion at end-2019.

• In the United States, Bank of the West offers lower rates on certain home loans to promote energy efficiency renovations.

BNP Paribas seizes climate-related opportunities in its scope of operations

Lastly, the Group also seizes energy-saving opportunities in its scope of operations: energy consumption in Group buildings represents more than 70% of total emissions on its operational scope. Energy efficiency measures have great potential for reducing emissions and energy costs, thus improving the Group's resilience to rising energy prices and preventing the value of real estate assets from declining.

Impacts of climate-related risks and opportunities over on structure and training

Addressing climate-related risks and opportunities has an impact on Group structure in that it has to put together specialised teams and train all its employees, while also ensuring that any future staff also have a sufficient knowledge base in this area.

Creation of dedicated teams

For more than 10 years, BNP Paribas has created multiple dedicated teams in different countries and business lines, focused on seizing certain opportunities related to the energy transition and climate change, by providing their clients with expertise and by guiding and coordinating anti-climate change initiatives. Examples include:

• As of 2009, in Belgium, the **BNP Paribas Fortis Sustainable Business Competence Center** (SBCC) offers expertise and support to help businesses design and fund renewable energy production infrastructures or improve the energy efficiency of their facilities. Its goals is to steer companies towards a sustainable business model that meets today's climate challenges. In 2019, the SBCC worked on 160 credit applications for a total of €848 million in sustainable financing.

• In 2019, BDDF created "Green Desk Ile de France Entreprise" for corporate clients in the Greater Paris area. The purpose of this centre of expertise, oriented towards energy efficiency/renewable energy businesses and their value chain, is to bring together all types of renewable energy players, to finance their needs and to become a household name in the field.

• In addition to reducing global GHG emissions, carbon neutrality must be achieved worldwide in order to meet the goals of the Paris Agreement. For that to happen, residual carbon emissions have to be offset (notably through carbon sequestration in soil and plants). To that end, taking a cue from the carbon neutrality approach applied to its scope of operations (direct emissions, indirect emissions associated with energy consumption and business travel), **in late 2018 BNP Paribas created ClimateSeed, a voluntary carbon offsetting platform** that connects organisations seeking to offset some or all of their residual GHG emissions through carbon sequestration projects with developers of such projects. Just one year after launch, the platform has welcomed 31 project owners promoting and selling carbon credits, representing 5.5 million metric tons of carbon dioxide equivalent. ClimateSeed is a social business, recognised as such by Professor Muhammed Yunus, which was certified by Bertrand Piccard's Solar Impulse Foundation and is one of the six carbon offset programmes accepted by the IFC, a financial institution member of the World Bank Group, for the carbon offset achievements of its green building programme. ClimateSeed has also received multiple awards, including the Social, Sustainable and Responsible Banking award at the 2019 Customer Insight and Growth Banking Innovation Awards and the RB Innovation 2019 award.

Employee training

While it is always necessary to have employees specialised in climate-related issues in charge of coordinating efforts, it is also important for all employees to incorporate climate-related risks and opportunities in the work they do each and every day. It is vital to raise awareness and train employees, in both their personal and professional lives, to ensure that climate-related risks and opportunities are well-integrated in all Group business lines. Accordingly, BNP Paribas has in recent years increased the number of training and awareness-raising sessions on climate-related issues, tailored to different audiences, for all its employees:

• Together with the CISL (**Cambridge Institute for Sustainability Leadership**), the Group launched a "Sustainability Leaders' training programme", which centres much of its curriculum on climate-related issues and employs various teaching formats. 160 employees, split in four cohorts, including a number of major account managers, have already completed the programme.

• Three webinars led by climate change specialist Dimitri Zenghelis (former Head of Climate Policy at the London School of Economics, advisor to the UK Committee on Climate Change) were taken by

1,200 Corporate and Institutional Banking (CIB) employees around the world.
• The Group has begun rolling out the **Climate Collage**, a serious game about climate change organised as a series of collective intelligence workshops, at different entities. The object of the game is to systematically consider various climate-related issues and their consequences. Some entities, such as BNP Paribas Fortis, have also decided to use the game as a climate talking point with their clients, while others are using it in-house to raise employee awareness.

Lastly, over the course of 2019, BNP Paribas ramped up its ESG risk management training initiatives targeting its finance business lines and control functions (RISK, Compliance). In addition to e-learning modules on sectoral policies, available in eight languages, 12 interactive sessions (including methodology reviews and case studies) were organised to help employees improve their understanding and grasp of existing tools. 657 members of the sales and RISK teams (including Senior Credit Officers) completed training sessions led or co-led by the Group CSR Function. Since 2012, over 46,600 employees have taken e-learning classes on CSR finance and investment policies for different sectors.

Recruitment of new employees already trained in these subjects

In the interest of ensuring that climate-related issues are handled with the necessary care and skill, BNP Paribas is making it more of a point to hire new employees who already have a strong knowledge foundation in this area. With that goal in mind, the Group has begun working with about a dozen leading French universities to develop climate studies early on in the student curriculum.

STUDENT MANIFESTO FOR ECOLOGICAL AWARENESS AND EXCHANGES BETWEEN BNP PARIBAS AND UNIVERSITIES ON THE IMPORTANCE OF EDUCATION ON SUSTAINABLE DEVELOPMENT AND CLIMATE

For BNP Paribas, it is vitally important for its future employees, currently completing their education, to be taught about sustainable development and climate change over the course of their studies. The members of the Student Manifesto called on the Group, at the annual EpE dinner held on 18 March 2019, to lead an ecological awakening, asking the EpE business leaders attending the event to “communicate that [they] need students who have taken classes addressing ecological issues included in their general course requirements before they choose their specialisation.”

Jean-Laurent Bonnafé met this call by sending a letter to the headmasters of ten leading French universities from which BNP Paribas recruits many of its employees. In his letter he stated that “When BNP Paribas elected to become an accelerator of the energy transition, it was required to take in-depth action: recruiting engineers capable of understanding the real environmental challenges, training all its employees – from sales staff to risk management specialists to HR [...]. This is why I whole-heartedly support this request that students take classes addressing ecological issues as part of their general course requirements, before choosing their specialisation. […] This change needs to gather pace immediately, otherwise our organisations will never be ready in time to win the climate battle.” These letters sparked productive talks with several universities on providing students with an education in climate-related issues.

Summary of impacts of the main climate-related risks and opportunities for BNP Paribas

The main climate-related risks and opportunities for BNP Paribas are listed in the following two tables. An indication of when each risk or opportunity is liable to fully materialise is given: short-term (ST, i.e. within the year), medium term (MT, i.e. between two and five years) or long term (LT, i.e. after five years). The potential significance of each risk and opportunity is also estimated, ranging from "+" (moderately significant) to "++++" (very significant).

Risk category	Scope	Risk factor	Time frame	Potential significance of impact (for the Group)
Transition risks	Within BNP Paribas' scope of operations	Rise in carbon price (tax or quotas) applied to BNP Paribas' GHG emissions on its operational scope	MT	+
		Tighter regulations on climate reporting, which would require more time-consuming reporting tools/processes and more resources	ST	+
		Tougher environmental standards (e.g. on the energy efficiency of Group buildings, on our company car fleet, etc.) liable to call for additional investments	MT	+
	Risks for clients	Credit risk: Rise in carbon price (tax or quotas) applied to client GHG emissions, especially for clients with high GHG emissions (e.g. coal-fired power plants, heavy industry, etc.)	MT	+++
	Risks FOR BNP Paribas	Risks of loss of market share for the Group, and in particular for its subsidiaries Arval and Leasing Solutions if these do not adapt sufficiently to the demand of their customers for more environmental products and services (electric vehicles, leasing of low-carbon equipment, etc.)	MT	++
		Reputational risk: Risk of an adverse impact on BNP Paribas' brand image if external counterparties feel the Group is not contributing actively enough to the fight against climate change (e.g. being criticised by advocacy NGOs regarding energy sector finance policies)	ST	++/+++
Physical risks	Risks for clients	Weather changes, including in the water cycle, disrupting the production processes of some clients, and thus jeopardising their income (e.g. decreased river flows adversely affecting the production of hydropower plants, increase water temperatures adversely affecting the production of nuclear power plants)	MT	+/++

Some of the main climate-related risks for BNP Paribas

Scope	Opportunity factor	Time frame	Potential significance of impact (for the Group)
Within scope of operations	Energy renovation of Group buildings (offices, branches, etc.) leading to reduced energy consumption and thus lower power bills	ST	+
Via clients	Revenues generated by supporting corporations that contribute directly to SDGs (sustainable development goals)	ST	++++
	New businesses: green bonds, sustainable bonds, blended finance, green loans, Sustainability Linked Loans, etc.	ST	+++
	Development of low-carbon offers: low-carbon real estate promotion at BNP Paribas Real Estate, climate indices and green funds from BNP Paribas Asset Management, green investments within the general funds of BNP Paribas Cardif, etc.	ST	+ / ++
	Development of low-carbon offers: low-carbon real estate promotion at BNP Paribas Real Estate, climate indices and green funds from BNP Paribas Asset Management, green investments within the general funds of BNP Paribas Cardif, etc.	ST	+ / ++
	Arval's expanded range of electric cars to meet growing demand	MT	+
	Loans (home and consumer) to help households pay for energy renovations on their homes (e.g. green mortgage loans offered by Fortis, special consumer loans offered by Domofinance, BNP Paribas Personal Finance/EDF joint venture specialising in home energy renovations)	ST	++
	Development of the BNP Paribas Leasing Solutions range of more energy efficient and/or less GHG-emitting leasing products	MT	++
	Revenues generated from renewable energy financing	ST	+++
	Revenues generated from carbon credits (Carbon Desks at Global Markets, ClimateSeed)	ST	+
	Loans to start-ups specialising in the energy transition	ST	+

Some of the main climate-related opportunities for BNP Paribas

C. Resilience of BNP Paribas' strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

BNP Paribas uses climate scenarios

In order to analyse the resilience of its strategy and measure the alignment of its portfolio with the Paris Agreement goals, the Group relies on appropriate climate scenarios. Climate scenarios are thus very important for BNP Paribas. They can be used to assess the impacts of climate change on client businesses as well as its own businesses, to identify climate-related opportunities and to determine to what extent its current actions are compatible with the Paris Agreement goal.

From a practical standpoint, there are several steps to the scenario analysis:

1. Assessing the most material climate-related risks and opportunities for BNP Paribas;
2. Identifying and defining a range of scenarios, including at least one scenario compatible with the Paris Agreement goal, which are relevant for BNP Paribas (in terms of granularity, geographic and sector coverage, etc.);
3. Assessing the potential impacts of the situations described in these scenarios on BNP Paribas' businesses;
4. Identifying potential responses (i.e. how the Group can align its actovoties with a path that is compatible with the Paris Agreement goal).

The process of selecting appropriate scenarios for BNP Paribas, as described in step 2 above, is complex. A scenario must be intrinsically relevant (based on up-to-date methodology and data, published by a trustworthy organisation, transparent, etc.), relatively easy to apply to BNP Paribas' businesses (geographic scope, sector scope, sufficient granularity, etc.), and use assumptions agreed upon by Group experts (in terms of GDP growth, tech advancement, etc.).

BNP Paribas has analysed climate scenarios developed by several external organisations and selected a few. The Group predominantly uses the scenarios developed by the IEA and the IPCC[22] and, for France, the EpE's ZEN2050 analysis, which modelled a possible pathway enabling France to become carbone neutral by 2050. For several years, BNP Paribas has published, in its Registration Document, a yearly comparison of the energy mix that the Group finances with the energy mix in the IEA scenario compatible with the Paris Agreement goal. This scenario includes only energy-related emissions, but is one of the most widely recognised scenarios used around the world. For 2018 and 2019, BNP Paribas compared the change in its portfolio of loans serving to finance the electricity mix and the primary energy mix with the changes in the same mixes in the IEA's Sustainable Development Scenario (SDS), which is the agency's most ambitious scenario from a climate standpoint, and compatible with the goal of keeping global warming below 2°C. For past years and on a forward-looking basis, BNP Paribas compares the change in its electricity mix loan book with the change in the same mix in the SDS, and particularly the percentage of coal in the electricity mix[23].

The Group assesses the resilience of its loan books to transition and physical risks

Assessment of loan book resilience to transition and physical risks

BNP Paribas conducted two studies in 2019 to assess the resilience of its loan books to transition risks and physical risks.

- The Industry Research Department (EIS) of the Group Risk Department performed an internal analysis on five-year energy and climate-related risks, physical risks and transition risks. This report is part of the Group's standard analysis of systemic risks, inter alia in the context of the analyses conducted by EIS on the impact of different risk factors on economic sectors. The purpose of the analysis was to identify and assess the main energy transition and climate change risks incurred by BNP Paribas. It notably examined the impact of climate change on sovereign risk and the more or less significant exposure of various economic sectors to energy transition risks and opportunities. This broad, detailed study found BNP Paribas' business model to be resilient to these risks, with respect to:
  - o its businesses, and the sector and geographic classifications of its portfolios;
  - o the measures taken to mitigate these risks.
- For the first time, in 2019 and with the help of external specialists, BNP Paribas performed an assessment, on a sample of clients in its portfolio, of physical risks covering the consequences of climate change (extreme weather events) on the assets of Group clients. They generate financial risks for companies not only through direct impacts on their assets, but also in terms of indirect impacts through their supply chains and markets. For each counterparty analysed, the final score of exposure to physical risks is based on three risk factors: operational risks, supply chain risks (upstream) and risks of market share losses (downstream).

This pilot study was conducted on the nine sectors most exposed to physical risks, by taking the top 10 clients in terms of credit exposure in each sector. On a scale from 1 to 100, the final score was 42, i.e. below average and thus presenting a low risk profile.

Not surprisingly, the analysis (summarised in the table below) uncovered disparities between the nine sectors reviewed. The semi-conductor, tech and digital equipment, and pharmaceutical sectors had the highest exposure: the first two due to the dependence of their value chains on components made in countries (predominantly in Asia) with high exposure to physical risks. In the third sector (pharma), operational chains are dependent on satisfactory water and energy availability, which may be locally jeopardised by climate change (sometimes significantly). Differences can also be observed between different regions of the world, with greater vulnerability seen in Southeast Asia than in North America. Lastly, the degree of exposure to physical risks varies depending on the type of operational risk reviewed. According to the analysis, the sample is more exposed to water and heat stress and to floods.

BNP Risk Sectoral division	Operations Risk Score	Heat Stress	Water Stress	Floods	Sea Level Rise	Hurricanes & Typhoons	Market Risk Score	Supply Chain Risk Score	Total Score
Utilities	41	51	52	26	9	13	29	67	46.4
Technology Hardware & Equipment	41	39	52	25	10	22	63	60	51.8
Transportation	40	39	46	26	17	18	38	57	44.8
Semiconductors	39	39	52	24	9	18	72	66	52.5
Pharma Biotch & Life Science	37	41	45	24	9	20	62	60	47.8
Materials	36	46	45	23	8	11	55	49	43.1
Automobiles & Components	35	33	37	26	8	28	59	23	37.6
Capital Goods	33	40	44	22	6	15	59	37	38.7
Food & Staples Retailing	25	29	37	20	8	11	26	17	20.7
Total	**36**	**40**	**44**	**24**	**9**	**18**	**51**	**45**	**41.5**

Physical risk-weighted scores by economic sector

Assessment of resilience to physical risks for the asset management business

BNP Paribas Asset Management

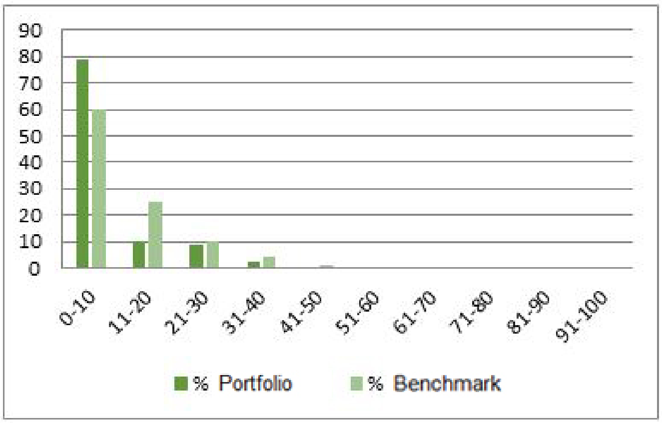
BNP Paribas Asset Management works with a specialist research firm that provides it with physical risk scores, which are used to improve its investment analysis.

Physical risk scores include three key components: operational risk, supply chain risk ad market risk. The scores are standardised to compare the climate risk of companies between different portfolios. Two measures are used to assess market risk: where the company generates its sales and how its industry has reacted in the past to climate variability.
In terms of data access, the assessment of physical risks is covered as follows:

- operational risk scores (based on facility-level mapping) are provided for 2,000 entities on the MSCI ACWI (which includes the MSCI World and MSCI EM indices), covering more than 90% of the MSCI ACWI in terms of weight;
- scores for supply chain risk and market risk are available for 12,800 companies, covering 100% of the components of the following indices: MSCI World, MSCI EM, S&P Global Large-Mid and Barclays EUR Corporates.

BNP Paribas Cardif

BNP Paribas Cardif called on a specialist external firm to analyse the physical risk exposure of its directly-owned corporate assets. The analysis looked at seven climate events liable to impact the businesses of portfolio companies: fires, cold waves, heat waves, water stress, coastal and inland floods, and hurricanes. Trends in these seven climate events were analysed over the long term, in accordance with a high climate change scenario[24]. The results can be used to geographically map out the different random events liable to affect physical assets, and thus to determine a physical risk score for portfolio companies. The score ranges from 1 (minimum risk) to 100 (maximum risk). The findings are summarised in the figure below.



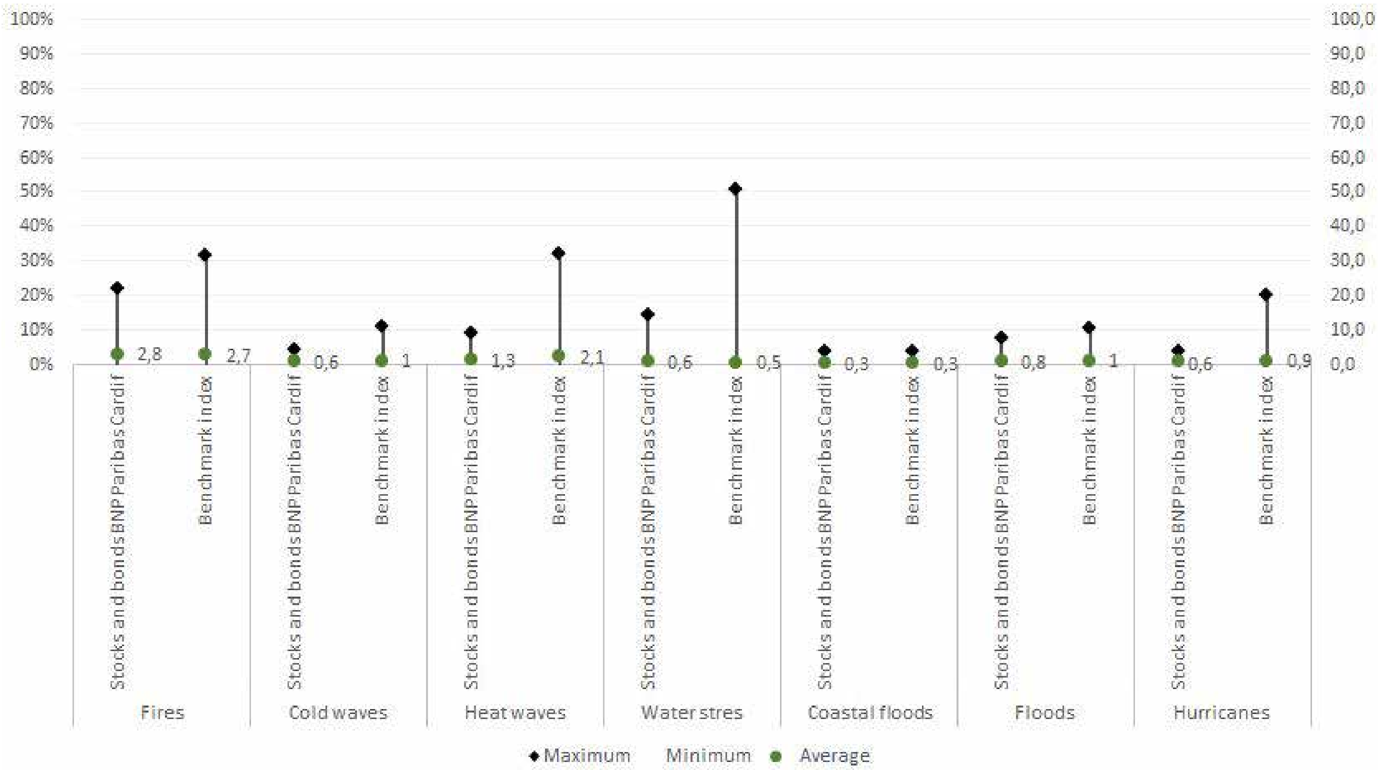
Distribution by decile of the physical risk scores assigned to corporate assets held by BNP Paribas Cardif (as a % of MtM)

According to the physical risk analysis, 79% of portfolio companies have a risk score in the lowest decile. The portfolio's exposure to physical risks is also lower than the benchmark index.

The analysis can be used to identify companies that need to be placed on the watchlist, in which case their climate strategies are carefully observed during the next several non-financial performance assessment campaigns.

The analysis can also serve to identify the random climate events that generate the greatest risk for BNP Paribas Cardif portfolios.

The chart below presents the average score of companies in the portfolio of stocks and bonds directly held by BNP Paribas Cardif for each risk metric, along with their maximum and minimum scores. The scores are adjusted for each company's relative vulnerability. According to the chart, the portfolio of directly-owned corporate assets is more exposed to fires, heat waves and water stress than to the other four random climate events (and remains very limited anyhow).



Risk-adjusted score (strong scenario, 2050 horizon)

BNP Paribas contributes to the collective development of climate risk methodologies

BNP Paribas takes part in pilot programmes on resilience to climate risks organised by central banks

Regulatory authorities and central banks in different countries organise pilot programmes aimed at assessing bank resilience to climate change risks:

- The Bank of England developed a 2021 Biennial Exploratory Scenario (BES), first to test the vulnerability of current balance sheets to climate change, and second to ask corporates how they would adjust their business models in this scenario;
- In France, the ACPR[25] announced the implementation of a pilot programme, without capital requirement, for major French banks and insurance companies starting in 2020, based on two or three climate change scenarios.

BNP Paribas is participating in both initiatives in the interest of learning as much as possible. These exercises highlight that not enough data are available for a bottom-up approach, assessing the vulnerabilities specific to Group clients and incorporating their response and remediation functions on a forward-looking basis. Consequently, the pilot phase should initially focus on data aggregated by sector/sub-sector.

BNP Paribas is helping develop methods that can be used to manage the exposure of loan books and investment portfolios to climate risks, in partnership with external organisations

Several tools and methodologies aimed at assessing the exposure of loan books and investment portfolios to climate risks (transition risks and physical risks) are currently being examined across the Group.

- BNP Paribas has made a commitment to the Science-Based Target initiative (SBTi). This coalition comprises the Carbon Disclosure Project (CDP), the UN Global Compact, the World Resources Institute (WRI) and the WWF, with the aim of supporting companies interested in setting environmental targets in line with the Paris Agreement goals. As SBTi has not yet determined a methodology for setting such targets for companies in the financial sector, BNP Paribas is participating in SBTi working groups to help develop one;
- The Group signed the Katowice Commitment in 2018, and the Collective Commitment to Climate Action signed, in September 2019, by 33 banks that are also signatories of the Principles for Responsible Banking (PRB) under the aegis of UNEP FI (United Nations Environment Programme Finance Initiative). The Group has thus undertaken to develop tools that can be used to align its loan book with the goals of the Paris Agreement. In 2019, BNP Paribas tested the methodology developed by the think tank “2 Degrees Investing Initiative”[26].
- Lastly, in December 2019, BNP Paribas signed the Poseidon Principles promoting decarbonisation of the maritime transport industry by encouraging banks to incorporate climate considerations in their portfolios and credit decisions. Their objective is to meet the goal set by the International Maritime Organization (IMO) to reduce GHG emission in maritime transport by at least 50% by 2050 (compared to 2008 levels). They will serve to measure and oversee the CO_2 intensities of shipping finance portfolios, with a methodology used by all signatory banks.

ERIC USHER,
Head of UNEP Finance Initiative

“Climate leadership by financial institutions starts by understanding climate-related risks and opportunities in a forward-looking, scenario-based manner. This is a foundational step in order to assess resilience and to ultimately align portfolios with climate-compatible, low-carbon pathways. As a Signatory to the Principles for Responsible Banking, BNP has not only committed to aligning its business with global climate objectives, but beyond that – by joining the ambitious Collective Commitment to Climate Action - committed to publish scenario-based targets for doing so within the next two years.”

The Group is also working to reduce impacts in its scope of operations and to improve its resilience to climate change

BNP Paribas is carbon-neutral in its scope of operations

In addition to working on the resilience of its loan books and investment portfolios, the Group is reducing its dependence on fossil fuels and the operational robustness of its infrastructures and daily activities.

In its scope of operations (direct emissions and indirect emissions generated by energy purchases and business travel), BNP Paribas has implemented a series of initiatives aimed at reducing GHG emissions, minimising transition risks and optimising climate-related opportunities:

- The Group is reducing its energy consumption, and as of 2019 exceeded its goal of cutting GHG emissions by 25% between 2012 and 2020. The Group's total emissions stood at 461 kteqCO_2 in 2019. 74% of these emissions were generated by energy used in its buildings, including information technologies, and 26% by business travel. Three actions have been launched to reduce these emissions: energy efficiency of buildings, energy efficiency of IT equipment, and optimisation of business travel.
- At the same time, the Group is gradually turning to low-carbon electricity in all countries where it is possible. Renewable electricity represented 35% of the Group's total electricity purchases in 2019. It can be attributed either to purchases of renewable electricity certificates or to direct use of renewable energy produced by Group buildings. From a more general standpoint, low-carbon energy stood at 72% in 2019. These actions are helping to lower the Group's environmental impact as well as its dependence on fossil fuels.
- In addition to these initiatives, each year BNP Paribas offsets residual GHG emissions from the previous year for the entire Group. After taking into account the additional purchases of low-carbon electricity, these emissions amounted to 390,215 teqCO_2 in 2018. In 2019, these emissions were offset via three projects:
  - o the Kasigau project, which the Group has supported since 2017. This conservation and restoration programme, which covers 200,000 hectares of forest in Kenya and is managed by the NGO Wildlife Works, also funds access to healthcare, water and education for local inhabitants;
  - o a project aimed at drilling drinking water wells in Malawi, thereby reducing the logging of trees previously used as fuel for water sterilisation. Overseen by the NGO United Purpose Malawi WASH, the project tackles deforestation and thus dramatically improves people's lives;
  - o an initiative to restore and protect tropical peat bogs covering more than 150,000 hectares of swamp forest in central Kalimantan (Indonesia). In addition to protecting more than 40 endangered species of fauna and flora, the project helps indigenous peoples fight the devastating forest fires that occur during the dry season.

Altogether, by taking these actions to reduce the Group's energy consumption, lower the carbon emissions of energy used, and offset residual emissions, **BNP Paribas has been carbon-neutral in its scope of operations since 2017** (covering its direct emissions, indirect emissions generated by energy purchases, and indirect emissions generated by business travel).

BNP Paribas has developed business continuity plans incorporating climate risk

Moreover, the Group's business continuity plans are based on the identification of risks, including those associated with climate change, which are liable to weaken or threaten the capacity of the Group's infrastructures and operational chains. The potential consequences in terms of extreme events, heat waves, water stress, can reduce the resilience of IT processing centres, which are critical infrastructures for the continuous provision of services to clients.

BROAD EXTERNAL RECOGNITION OF BNP PARIBAS' PRO-ENERGY TRANSITION INITIATIVES

The commitments and actions taken by BNP Paribas to combat climate change have been recognised by multiple external organisations.

Together, these initiatives earned the Group a score of "A-" in 2019 from the Carbon Disclosure Project (CDP) and a score of 100/100 for its environmental reporting according to the 2019 RobecoSAM non-financial rating, applauding the transparency of its reporting and the quality of its energy/climate strategy.
In the new version of the "Sustainability Reporting Performance of the CAC 40", EcoAct ranked BNP Paribas No. 2 in 2019.

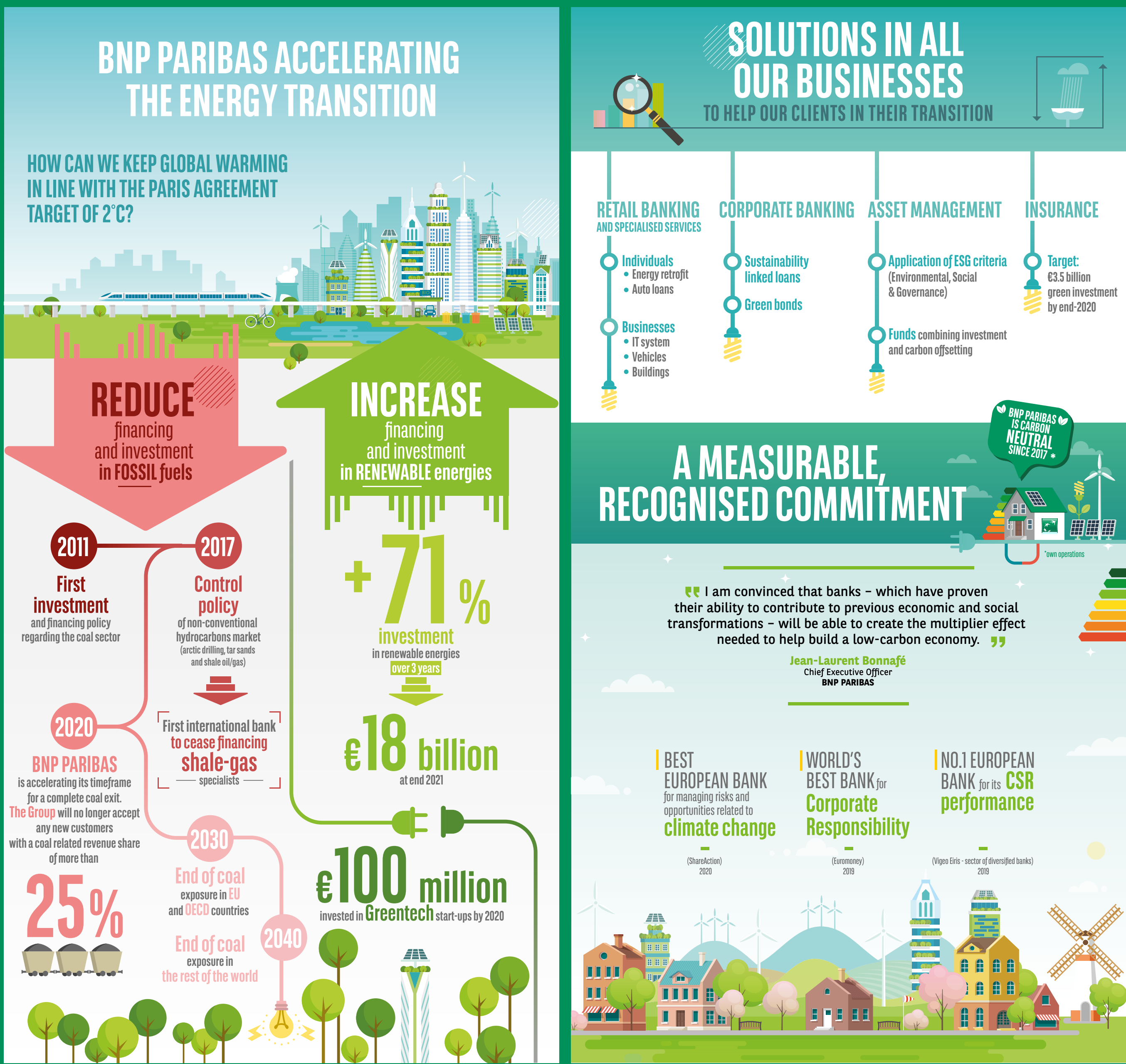
BNP Paribas was also named "Most ESG Responsible International Bank" in 2019 by Capital Finance International, in recognition of its commitment to the energy transition and the UN SDGs.

BNP Paribas' strategy is adequately resilient to the energy and climate-related risks incurred by the Group

As explained in previous sections, the Group has analysed its physical and transition risks, using recognised scenarios to assess the risks related to different pathways. BNP Paribas takes appropriate measure to mitigate these risks. On this basis, no elements have been identified that would cast significant doubt on the resilience of the Group's business model and strategy to energy and climate-related risks.

By undertaking to align its loan book with the goals of the Paris Agreement, the Group is minimising the transition risks liable to have material impacts on financed companies.

These measures are conducted, of course, with continuous improvement in mind in order to expand and update these analyses.



KEY FIGURES ON BNP PARIBAS' INITIATIVES TO ACCELERATE THE ENERGY TRANSITION

III. RISK MANAGEMENT: HOW BNP PARIBAS IDENTIFIES, ASSESSES AND MANAGES CLIMATE-RELATED RISKS

The Group has gradually incorporated climate-related risks in its risk management system, to ensure that they are handled in the same way as other risks, taking their specific characteristics into account.

A. BNP Paribas has established a multi-stakeholder process to identify and assess its risks, including in particular climate-related risks

Stakeholder dialogue serves as the basis for the analysis of climate-related risks and opportunities

Dialogue with internal and external stakeholders is the central source for identifying and assessing climate-related risks for BNP Paribas and its clients. The objectives of stakeholder dialogue are threefold: to anticipate trends in business lines and improve products and services, to optimise risk management, and to find innovative solutions. Climate and energy are addressed in different forums and channels of stakeholder dialogue.

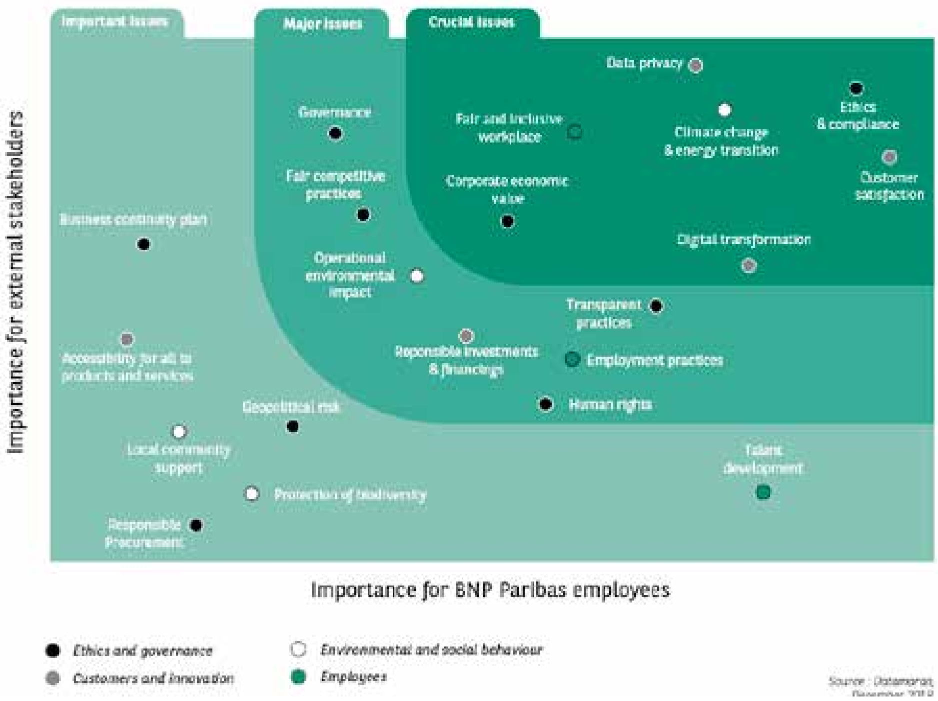
- BNP Paribas presents its CSR strategy to SRI (Socially Responsible Investment) investors several times a year, while also regularly notifies non-financial analysts. In 2019, the Bank met with 37 different SRI investors at least once in France, the UK, Sweden and Norway.
- The Group has defined a policy and a procedure governing its relations with advocacy NGOs in order to ensure a constructive, coordinated and productive dialogue with these stakeholders. In 2019, 83 different discussions were held with advocacy NGOs around the world. 63% of the topics addressed involved climate-related related risks and opportunities (climate, coal, fossil infrastructures, deforestation, etc.).
- BNP Paribas uses a decision-making tool to guide its actions and anticipate the stakes and challenges of tomorrow: namely the Corporate Engagement Survey, conducted on the general public and a panel of respondents well-versed in engagement issues, in France, Belgium, Italy and Germany. Global warming was ranked in the Top 3 concerns of survey participants in each of these countries, sending a strong signal of what civil society expects from the Group in terms of its contribution to the energy transition and decarbonisation of the economy.

Stakeholder mapping and dialogue between BNP Paribas and each individual stakeholder are covered in “How BNP Paribas listens to and takes into account the expectations of its shareholders”, updated in 2019 and transmitted to the Corporate Governance Ethics, Nominations and CSR Committee (CGEN), a specialised Board of directors committee. This document is available in the CSR section of the Group’s corporate website.

This dialogue serves as the basis for the materiality matrix, which prioritises climate change as a critical concern for the Group

In order to create its materiality matrix, which presents the top priorities for the Group’s internal and external stakeholders, BNP Paribas assessed a series of materiality criteria to classify roughly 100 different non-financial issues according to their level of priority for its stakeholders and their impact on Group performance. A variety of sources were used to that end: a comparative study of publications by 59 banks, 2,070 regulations, nearly 15,000 industry press articles, 128 million tweets, and finally feedback from 28% of top management staff contributed to determining the importance of these issues for BNP Paribas. The results of this exercise, presented below, are broken down into three categories: important, major and critical.

Climate change and energy transition are classified together as one of the three most critical issues, based on the cross-comparison of staff and stakeholder assessments. This position has been taken on board by incorporating climate change and the energy transition in the Group’s strategy and risk management system.



B. BNP Paribas has developed a procedure governing the management of climate-related risks, both specific to this type of risk and fully integrated in its overall risk management system

The business lines, CSR Function and Risk Function incorporate climate and energy transition-related risks in the risk management process on a daily basis

The CSR Function and the Risk Function work together to identify and manage climate-related risks. The CSR Function identifies climate-related risks and opportunities by maintaining a dialogue with external stakeholders, and particularly the scientific community, and with Group clients. The Risk Function, in its role as the Group's contact with banking industry regulators and supervisors, takes note of the climate-related risks reported by these authorities.

The business lines, working directly with clients, serve as the first line of defence and, as such, are directly involved in the identification and analysis of climate-related risks and opportunities.

As the second line of defence against environmental, social and governance (ESG) risks, the Risk Function continued its efforts in 2019 to adapt the framework, processes and governance of Credit Committees to include systemically an ESG risk analysis (including climate and energy-related risks) incurred by the Group's non-financial corporate clients. Implementation of this new organisational structure has been launched in the Group's main corporate business lines.

In 2019, the Group CSR function was solicited for an expert opinion on the risk analysis of the ESG risks associated with 2,340 complex or high-risk transactions (finance, onboarding, export services, etc.) versus 1,627 transactions last year in 2018.

INCORPORATING ESG CRITERIA IN THE SUPPLY CHAIN IS ONE WAY TO KEEP TRACK OF THE CLIMATE/ENERGY PERFORMANCE OF GROUP PROVIDERS AND ADDRESS THE ASSOCIATED RISKS

Within its remit, the Global Strategic Sourcing (GSS) Function, responsible for overseeing Group purchases, also incorporates ESG criteria in its supplier relations at multiple levels:

- through the 2019 deployment by the GSS team of ESG risk mapping, used to identify high-risk sourcing categories based on 13 ethical, social and environmental criteria (including GHG emissions);
- through provider ESG assessments, conducted during the RFP process. These assessments, based on ESG questionnaires (which, in accordance with sourcing standards, account for 5% of the score), include the provider's confirmation that it adheres to the principles of the BNP Paribas Sustainable Sourcing Charter (or its local equivalent). This document requires the signatory provider to observe environmental laws, check and reduce its impacts (including GHG emissions), and develop alternative technologies contributing to the ecological transition over the entire life cycle of its products and services. In 2019, BNP Paribas conducted 2,500 ESG assessments on suppliers, and nearly 1,200 suppliers signed the Sustainable Sourcing Charter.

ESG risks, including in particular climate-related risks, have been effectively incorporated in all BNP Paribas risk management systems

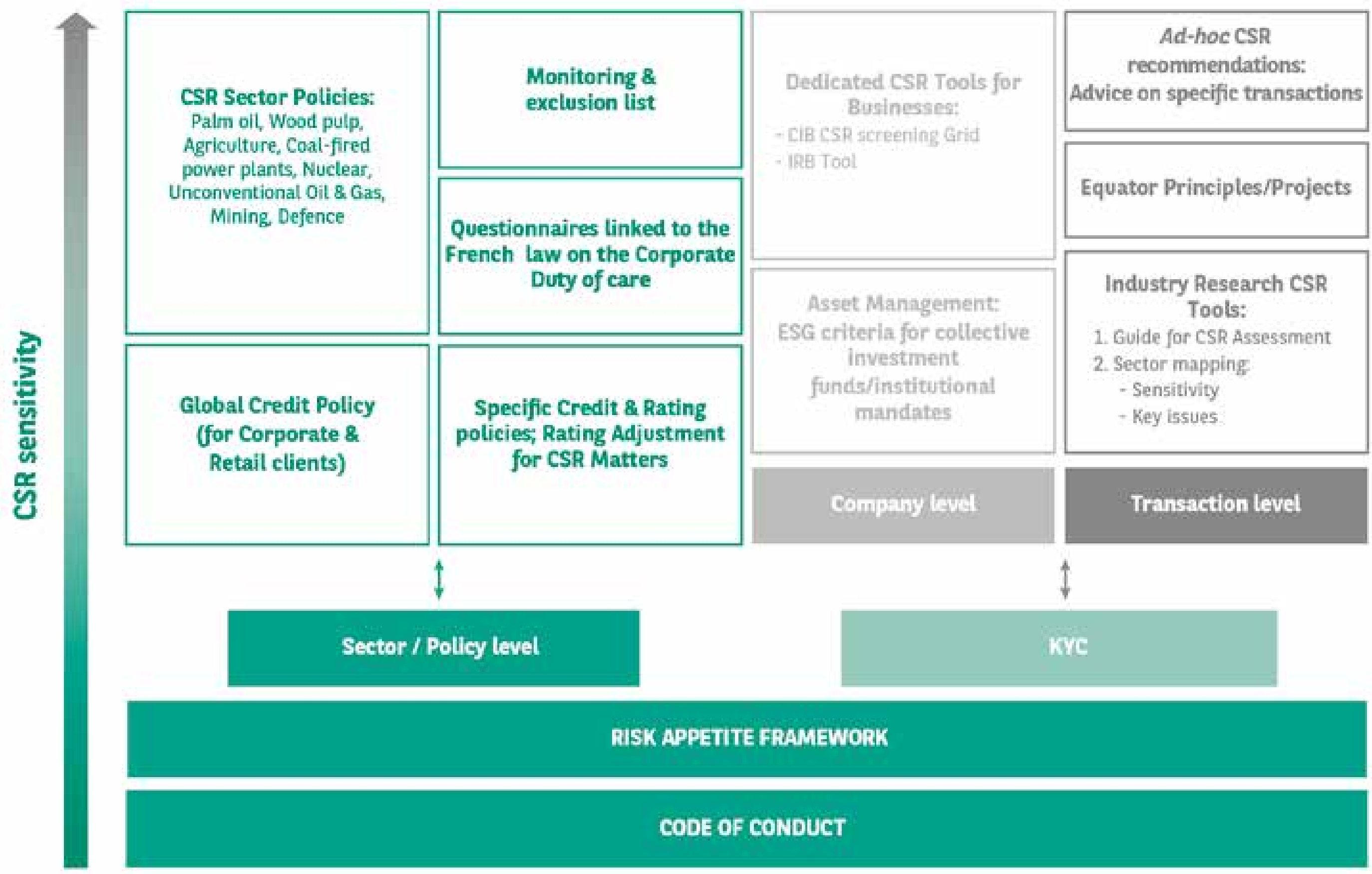
Since the Paris Agreement of November 2015, the BNP Paribas Group has launched multiple initiatives to integrate climate-risks in its risk management systems and promote the energy transition in line with the Paris Agreement. The Group's climate-related risk management system is part of its overall risk supervision approach and is centred on:

- the General Credit Policy, expanded in 2014 to include CSR clauses;
- 22 specific credit and rating policies now containing ESG criteria, including some climate-related criteria;
- establishment of finance and investment policies ("sectoral policies")governing its businesses in sectors involving major energy and climate-related issues such as:
  - o coal-based electricity generation;
  - o mining industry;
  - o palm oil production;
  - o paper pulp production;
  - o agriculture
  - o unconventional hydrocarbons.

These sectoral policies define a set of rules and procedures relating to financial products or services supplied by BNP Paribas entities for a given economic sector. These rules and procedures aim to respond to social and environmental problems in this sector and to establish guidelines for responsible conduct of the Bank's activities with this sector. All these policies are published on the Group website[27].

- observation of the Equator Principles in the conduct of major manufacturing and infrastructure projects;
- development and use of risk management and oversight tools (including questionnaires for business operations subject to prominent risks, including a general control plan;
- CSR metrics included in the BNP Paribas "Risk Appetite Statement" (RAS), established in line with the values informing its behaviour and risk culture.

The figure below gives an overview of the tools and policies currently used to manage climate-related risks in the various business lines.



A comprehensive ESG risk management system for products and services provided by the Group

IV. METRICS AND TARGETS USED TO ASSESS AND MANAGE RELEVANT CLIMATE-RELATED RISKS AND OPPORTUNITIES

The Group has established, and is continuously developing, metrics and targets in order to optimally manage climate-related risks and opportunities. As is true for all of the Group's activities, BNP Paribas makes a point to establish reliable metrics that are useful in overseeing its operations. In addition to their informative role, these metrics should serve to demonstrate that all of the Group's actions contribute to the achievement of the Paris Agreement goals.

Based on these metrics, BNP Paribas set intermediate targets for itself. The long-term ambition is clear (to align its businesses with the Paris Agreement goals), but to achieve that ambition calls for short and medium-term targets in more specific business lines, allowing the Group to steer its various business operations with greater precision.

A. BNP Paribas has set up multiple metrics to assess climate-related risks and opportunities

For several years now, BNP Paribas has calculated and published various metrics to assess climate-related risks and opportunities in line with its strategy and risk management process, not only for its own operations but also for the impacts of its clients and the companies in which it invests. This set of metrics is regularly updated as progress is made in identifying and quantifying climate-related risks and opportunities.

For the last few years, the Group has published a CSR dashboard including energy and climate-related metrics

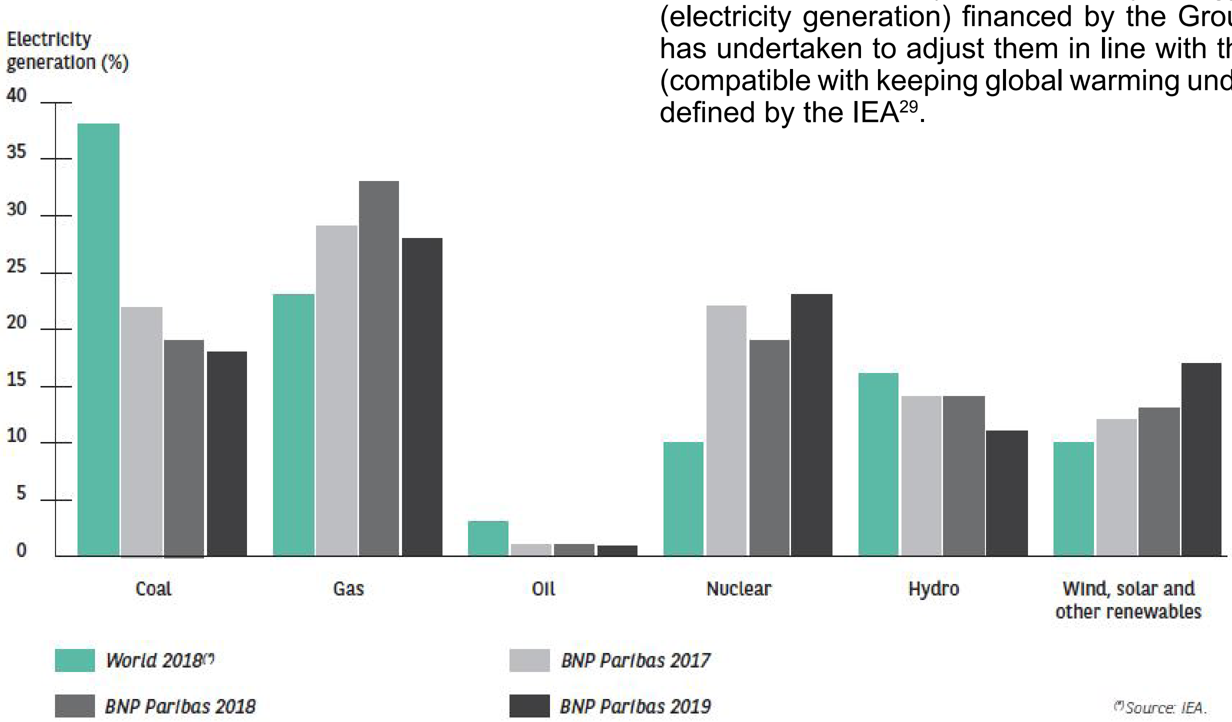
The dashboard comprises CSR metrics which are monitored at the highest level of the Group. It is published yearly in the Group's Universal Registration Document and Annual Financial Report[28] (previously referred to simply as the Registration Document). Two of the dashboard metrics concern energy and climate:

- financing for renewable energies (in €bn); in 2019, this amount was up to € 15.9 billion, up from € 7.2 billion in 2015, i.e. an increase by 120 % in four years;
- greenhouse gas emissions in the Group's operational scope (direct emissions, indirect emissions related to energy consumption and business travel) (in $kgCO_2e$/FTE); in 2019, these emissions amounted to 2.32 $teqCO_2$/FTE, down from 2.89 $teqCO_2$/FTE, i.e. a decrease by 20 % in four years.

Both metrics are improving and their targets are frequently raised to keep them on the right track.

At the same time, BNP Paribas measures and publishes the electricity and energy mixes financed by the Group and their carbon intensity

For the purpose of measuring its indirect emissions (Scope 3), BNP Paribas has since 2014 disclosed the distribution of the primary energy mixes (extraction of fossil fuels) and secondary energy mixes (electricity generation) financed by the Group, and has undertaken to adjust them in line with the SDS (compatible with keeping global warming under 2°C) defined by the IEA[29].



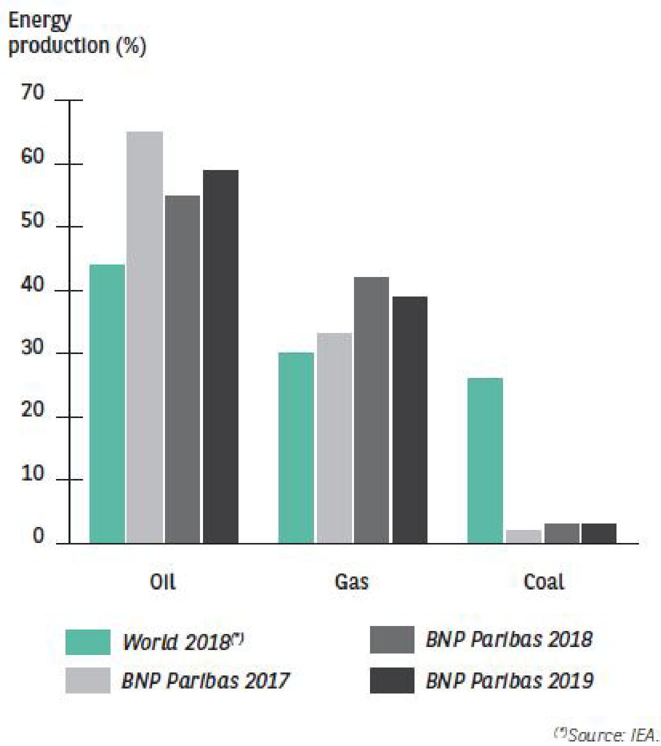
Electricity mix financed by BNP Paribas

With 46.7% fossil sources (gas, coal and oil) and 31% renewable sources (hydro, wind, solar and other renewables), the electricity mix financed by BNP Paribas in 2019 has a lower average carbon footprint than that of the world mix, which consisted of 64% fossil sources and 26% renewable sources in 2018. The kWh carbon content financed by the Group is 299 gCO_2e, compared with the world average of 476 gCO_2e in 2018 (source: IEA).

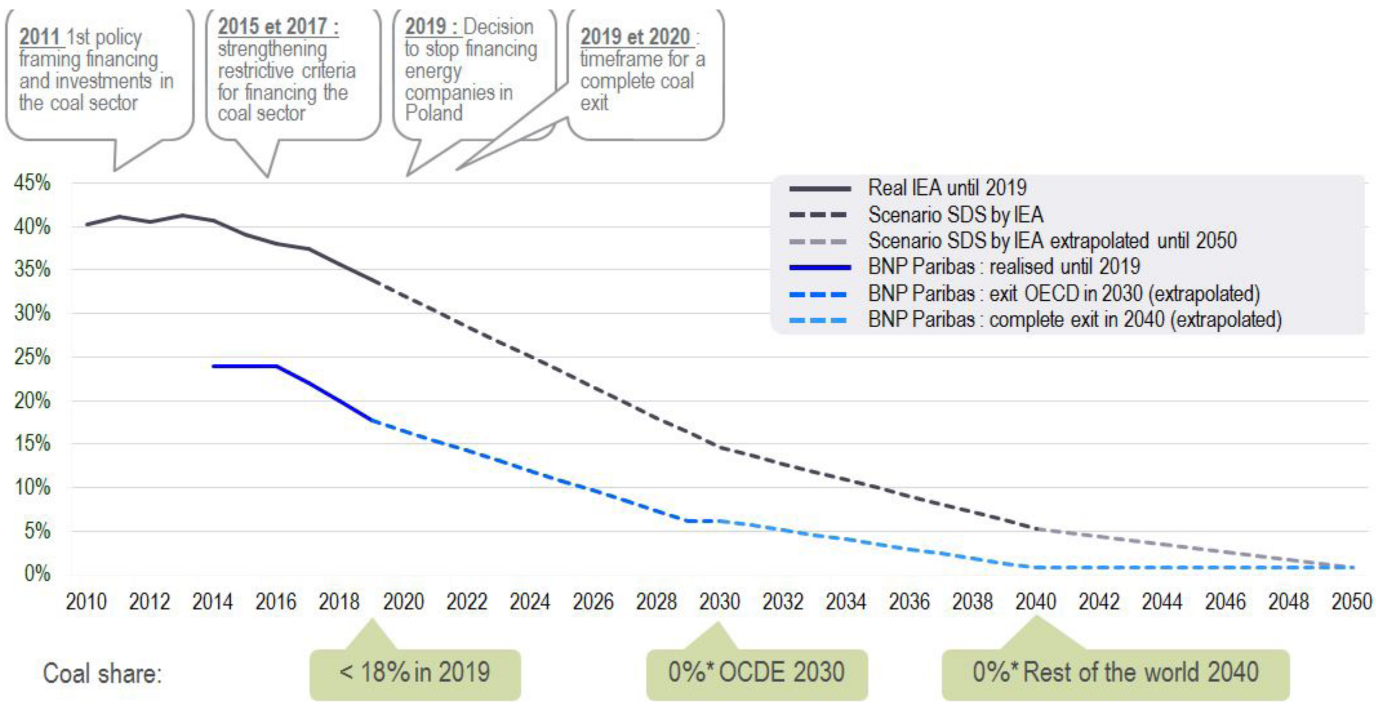
Following the implementation of progressively more stringent financing policies, the percentage of coal in the mix has fallen significantly, and is on track to hit zero by 2030 in the OECD and by 2040 in the rest of the world, i.e. ahead of schedule relative to the IEA's SDS.

Looking at the primary energy mix financed by the Group, the percentage of coal in the mix has steadily dropped since 2017, thanks to the implementation of the coal policy, and only made up 2.4% of the primary mix in 2019.

On a forward-looking basis, BNP Paribas also keeps track of its energy mixes over the longer term, through 2050 as shown in the figure below.



Primary energy mix financed by BNP Paribas



* Data based on the coal capacity at the end of 2018 of 80% of the BNP Paribas portfolio (as used to calculate the Group's electricity mix); the trajectory is based on the assumption of a total exit for each perimeter, without considering any existing commitments going beyond the exit deadlines

Percentage of coal in the electricity mix financed by BNP Paribas between 2010 and 2050, and main decisions to gradually exit the coal sector

BNP PARIBAS CARDIF MEASURES THE ESTIMATED TEMPERATURE OF ITS PORTFOLIOS RELATIVE TO THE 2°C PATHWAY PROMOTED BY THE PARIS AGREEMENT

Since 2017, BNP Paribas Cardif has published information on the alignment of its directly-owned equity and corporate bond portfolios with the climate goals set out in the Paris Agreement. Because there is no established methodology for measuring the temperature of portfolios in line with market standards and approved by the financial supervisors, BNP Paribas Cardif uses two methods generating different results:

- Carbon Impact Analytics (CIA), performed using data provided by consulting firm Carbone 4 in conjunction with Mirova, employed for the third time in 2019;
- Science Based 2°C Alignment (SB2A), performed by I Care & Consult, employed for the second time in 2019.

BNP Paribas Cardif presents the results of both methods to foster discussion in the marketplace. By researching and assimilating new appropriate metrics, climate-related goals can be incorporated in long-term investment decisions.

Both methods are predominantly based on the 2°C Scenario (2DS) promoted by the International Energy Agency. The climate performances of companies are analysed and compared to what they should be in a low-carbon scenario, and the performance gap is converted into an "temperature equivalent".
The portfolio temperatures resulting from the application of the two methods vary significantly, with those determined using the SB2A method turning out significantly lower. This is because the CIA method incorporates the carbon performance generated by the company's current business without including its past or promised reduction efforts, which tends to increase the "temperature equivalent" of the portfolio.

Temperatures of the equity and corporate bond portfolios held by BNP Paribas Cardif:

Equity portfolio		Bond portfolio	
Science-Based 2°C Alignment	Carbon Impact Analytics	Science-Based 2°C Alignment	Carbon Impact Analytics
2.3°C	4.3°C	2.2°C	3.1°C

Temperature comparison of BNP Paribas Cardif equity and bond portfolios according to SB2A and CIA methods (source: I Care & Consult / Mirova / Carbone 4)

BNP Paribas also measures the financial impacts of climate-related opportunities

Where possible, BNP Paribas also quantifies climate-related opportunities arising from new businesses in connection with the energy transition and decarbonisation of Group counterparties. For example, at the end of 2019, total financing contributing to the energy transition and the SDGs (loans to businesses belonging to sectors considered as net contributors to one or more SDGs) was € 180billion (compared with €168 billion in 2018). This business segment represents major income opportunities.

The financial impacts of other opportunities are quantified. Several examples are presented above in "Impact of climate-related opportunities on businesses and financial projections" (section 2.B).

B. Breakdown of GHG emissions by scope (Scopes 1, 2 and 3)

Each year, the BNP Paribas Group measures and publishes its operational GHG emissions, by converting the energy used in its buildings and in business travel into metric tons of CO_2 equivalent (teqCO_2, including the six GHG defined in the Kyoto Protocol). In 2019, the Group's GHG emissions amounted to 461,030 teqCO_2[30], representing a 7.1% year-on-year decrease.

Scope 1 : Direct emissions

Emissions generated by use of gas and fuel oil in Group buildings stood at 61,187 metric tons of CO_2 equivalent in 2019, down from 62,149 metric tons of CO_2 equivalent in 2018.

Scope 2 : Indirect emissions associated with energy purchases

Emissions generated by use of electricity in Group buildings came out at 280,789 metric tons of CO_2 equivalent in 2019, down from 288,902 metric tons of CO_2 equivalent in 2018.

Scope 3 : Indirect emissions associated with business travel

Emissions generated by business travel totalled 119,055 metric tons of CO_2 equivalent in 2019, down from 144,974 metric tons of CO_2 equivalent in 2018.

Breakdown of GHG emissions by type

Breakdown of GHG emissions by GHG Protocol/ISO scope (teqCO_2)

Scope 3 : Loan book – Emissions financed by the Group

BNP Paribas does not calculate the total amount of emissions financed by the Group (via its lending activities), but instead takes a sector approach, for several reasons:

- The current methodologies used to calculate financed emissions are subject to major uncertainty (estimated at around 60% depending on the methodology, according to tests performed on samples from our loan book);
- The amount of emissions financed by the Group is not a relevant metric for the purpose of managing the loan book as a whole. The main purpose of calculating these emissions is to highlight that certain sectors, in certain countries, generate high GHG emissions (something determined by other means for a long time now). However, as a full-service bank, the objective for BNP Paribas is to continue financing all sectors of the economy (aside from certain duly identified sectors for which it has been determined that a transition compatible with the Paris Agreement goals is not possible), while working within each sector to encourage its clients to make a transition compatible with the Paris Agreement. In order to keep moving forward with this commitment, the Group is contributing to the development of other methodologies, as detailed opposite[31], while continuing to finance any economic sector in transition.

Scope 3 : Asset Management - Measurement of the portfolio's carbon footprint by BNP Paribas Asset Management

BNP Paribas Asset Management measures and publishes the carbon footprint of its portfolios in terms of financed GHG emissions. The approach determines the carbon footprint of each company in a portfolio, and corresponds to the share of a company's emissions that can be allocated to the portfolio, as a function of the percentage of ownership of each company. The carbon footprint of a portfolio is the weighted average of those carbon footprints. At this stage, only direct and indirect Scope 1 & 2 emissions are measured.

C. BNP Paribas has set quantitative targets to manage climate-related risks and opportunities

Alignment of loan book with Paris Agreement goal

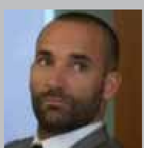
As indicated above[32], in accordance with the Katowice Commitment signed in 2018 and the Collective Commitment to Climate Action adopted in September 2019 under the aegis of UNEP FI, the Group has undertaken to develop tools that can be used to align its loan book with the goals of the Paris Agreement.

Accordingly, as of 2019, BNP Paribas uses the methodology developed, on a sector-by-sector basis, by the think tank "2 Degrees Investing Initiative", to calculate the loan book's profile at various maturity dates for five high-carbon sectors (extraction of fossil fuels, electricity generation, transport, steel production and cement production). The method, tailored to each sector, employs benchmark scenarios used and developed by independent organisations such as the International Energy Agency (IEA). For electricity generation, extraction of fossil fuels and the automotive sector, the approach is based on the energy mix[33] or technology mix. For aviation, maritime transport, cement and steel, carbon emissions intensities are analysed.

BNP Paribas work together withe banks having signed the Katowice Commitment to test and recommend to test and recommend ways to improve the general methodology developed by the 2 Degrees Investing Initiative. The resulting methodology will be co-built with banks and clients, then proposed on a larger scale to other stakeholders.

Initial tests of the methodology involved a significant percentage of clients in each sector (more than 80% of outstanding loans). As a result, BNP Paribas has an overview of the loan book, with a benchmark scenario at a given date, in addition to the projection for that same portfolio five years later. The loan book will be made increasingly compatible with the Paris Agreement scenario through dynamic management of the loan book itself and through external technological developments.

The Group is focusing its efforts on not only improving the percentage and quality of client coverage, but also gaining a better understanding of projected trends in each sector. The results of these efforts will serve to develop sector strategies and measure their impacts on the alignment of the loan book with the Paris Agreement goals.



STANISLAS DUPRÉ,
Founder and CEO of 2 Degrees Investing Initiative

"BNP Paribas was one of the very first banks to participate in the development of the PACTA method and tool, then played a key role with the Katowice group in the emergence of voluntary commitments to align credit portfolios with the goal of the Paris agreement. Today, this dynamic is gaining momentum within the banking sector on a global level, but the hard part remains before us: measuring and managing the climate impact of decisions associated with the granting of loans and the management of portfolios."

Amount allocated to renewable energy finance

In 2015, BNP Paribas set a goal of doubling the amount allocated to renewable energy finance by 2020 (compared to 2015 levels), which meant reaching a goal of €15 billion by 2020. The Group exceeded that goal as of 2018. At end-2019, loans to the renewable energy sector totalled €15.9 billion. The Group has raised its target for the sector to €18 billion by end-2021.

Carbon intensity per kWh financed by the Group

As presented above[33], the carbon content of each kWh financed by the Group stood at 299 gCO_2e in 2018, versus a global average of 476 gCO_2e.

In line with the Paris Agreement, BNP Paribas is committed to reducing the kWh carbon content financed like the world average, which is due to fall under the IEA SDS scenario (i.e. 81gCO_2e/kWh by 2040).

BNP Paribas Asset Management also monitors the carbon intensity of electricity producers in its portfolio, and compares it with the Paris Agreement pathway for the sector as determined by the IEA in its SDS.

Indicators	2012	2016	2017	2018	2019	2020 Objective
Greenhouse gas emissions (teqCO_2/FTE)	3.21	2.72	2.54	2.45	2.32	2.41

GHG emissions in scope of operations (tCO_2e/FTE), between 2012 and 2019, and target for 2020

BNP Paribas Group's operational emissions and carbon neutrality

The Group's total emissions stood at 461 kteqCO_2 in 2019, as indicated above. The 2020 target (to reduce emissions per employee by 25% versus 2012) was not only reached, but surpassed, as of 2019.

Since 2017, the Group has undertaken to offset the GHG emissions it is unable to avoid[34], in order to fully align its businesses with the Paris Agreement scenario, which calls for the global economy to rapidly achieve carbon neutrality.

SEVERAL GROUP SUBSIDIARIES (BNP PARIBAS CARDIF, BDDF) HAVE SET TARGETS FOR CLIMATE-RELATED OPPORTUNITIES

In addition to the targets set at Group level, a number of subsidiaries and business lines have also set their own targets for climate-related opportunities:

- Insurance subsidiary BNP Paribas Cardif set a green investment target of €3.5 billion by end-2020.
- French Retail Banking (BDDF) provides its corporate clients with solutions to support them in their ecological and energy transition. A global product line was co-built with other Group business lines (Arval, BNP Paribas Rental Solutions and BNP Paribas Leasing Solutions, and the Group's partner Économie D'Énergie (EDE)) centred on three of the company's areas of focus in order to reduce energy use: real estate, transport and mobility, and non-real estate assets. At end-2019, BDDF's support for the energy transition of French SMEs amounted to €2.7 billion. It has also set a target of €3 billion in loans to corporate clients to fund energy transition projects by 2021.
- In accordance with the "Oceans" position, published in 2019, BNP Paribas has undertaken to finance the ecological transition of maritime vessels in the amount of €1 billion by 2025, for example by supporting LNG dual-fuel engine projects.

• CONCLUSION

The preparation of this inaugural TCFD report is included in a wider work of assessment and management of BNP Paribas' climate-related risks and opportunities. It proved:

- in terms of **internal awareness**: consulting the various internal stakeholders on climate-related risks and opportunities, then having their feedback validated by Management, are invaluable learning opportunities, giving a better understanding of the risks involved and convincing the different entities to seize available opportunities;
- in terms of **risk analysis**: by analysing different scenarios, we gain a semi-quantitative understanding of climate-related risks and opportunities, allowing to define more organised corrective measures aimed at improving the company's resilience;
- the methodology framework provided by the TCFD provides an excellent foundation for **engaging in constructive dialogue with Group clients and companies** in which the Group invests on climate-related risks and opportunities and how they plan to make their transition to a model compatible with the Paris Agreement goals;
- lastly, the Group would like for the exercise in transparency that is the disclosure of information in line with TCFD recommendations to generate **feedback from its stakeholders** and productive communication on these vital issues.

Climate change is a source of major risks and opportunities, both in general and for BNP Paribas specifically. The Group has given itself tools to identify, assess and manage these risks and opportunities to the best of its ability, with a clear ambition encompassing all its businesses: alignment with the Paris Agreement goal. The Group employs various measures and initiatives to achieve this goal, notably by reducing its support for sectors generating high GHG emissions and by providing its clients with products and services to help them achieve their own energy and climate transition.

Based on current methodologies and databases, BNP Paribas deems its business model to be resilient to climate change in the short, medium and long term. Of course, the analysis of this resilience shall be constantly revised, and resilience itself can never be fully taken for granted: the Group must continuously assess and readjust its initiatives to align them with the objective of achieving the Paris Agreement goals.

Extensive efforts are taken both internally and externally to incorporate climate-related risks and opportunities: improvement of general knowledge, acquisition of necessary data, refinement of measurement tools, collective development of marketplace standards, continuous oversight of targets and adjustment of initiatives if necessary, etc.

Publishing this inaugural TCFD report, in the interest of constructive transparency, is a step forward on the path to gradually aligning BNP Paribas's businesses with the climate goals of the Paris Agreement, a top priority for the 21st century.

• APPENDICES

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• GLOSSARY

ACPR: Autorité de contrôle prudentiel et de résolution (French prudential supervisory and resolution authority)
BDDF: Banque de détail en France (French Retail Banking)
CDP: Carbon Disclosure Project
CIB: Corporate and Institutional Banking
CSR: Corporate Social Responsibility
EMEA: Europe, Middle East, Africa
EpE: Entreprises pour l’environnement
ESG: Environmental, social and governance (criteria)
FBF: Fédération bancaire française (French Banking Federation)
FTE: Full-time equivalent
GHG: Greenhouse gases
IEA: International Energy Agency
IMO: International Maritime Organization
IPCC: Intergovernmental Panel on Climate Change
NGFS: Network for Greening the Financial System
RAS: Risk Appetite Statement
SBTi: Science Based Target initiative
SDS: Sustainable Development Scenario (developed by the IEA)
SGDs: (United Nations) Sustainable Development Goals
SLLs: Sustainability-Linked Loans
TEG: Technical Expert Group (on Sustainable Finance)
UNEP FI: United Nations Environment Programme Finance Initiative
WBCSD: World Business Council for Sustainable Development
ZEN2050: (Study) “Zéro émissions nettes” (Zero net emission) by 2050

FOOTNOTES

1. The Group assesses not only "inside-out" risks, i.e. the risks associated with its business operations and those of its clients, but also "outside-in" risks, i.e. the risks generated by climate deregulationchange and associated changes for its business operations and those of its clients. (P.7)

2. http://media.bnpparibas.com/fluidbook/REGISTRATION-DOCUMENT-2018/#/568 (P.7)

3. BNP Paribas' materiality matrix is presented on P.35 of this report. (P.9)

4. More details on these indicators are given in the paragraph "In parallel, BNP Paribas measures and publishes the electricity and energy mix financed and their carbon intensity" in section 4.A. (P.9)

5. See "The Group assesses the resilience of its loan books to transition and physical risks" in section 2.C for more details. (P.9)

6. https://group.bnpparibas/uploads/file/manifeste_25_01_2018_en_lien_02.pdf (P.11)

7. More details on sectoral policies are provided in the paragraph "ESG risks, including in particular climate-related risks, have been effectively incorporated in all BNP Paribas risk management systems" in section 3. (P.12)

8. See 3.B: "BNP Paribas has developed a procedure governing the management of climate-related risks, both specific to this type of risk and fully integrated in its overall risk management system" (P.12)

9. "Wells, Wires, and Wheels… – EROCI and the Tough Road Ahead for Oil", available online at: https://investors-corner.bnpparibas-am.com/investment-themes/sri/petrol-eroci-petroleum-age/. (P.13)

10. Key employees: senior managers, high-potential employees and local key resources. (P.13)

11. The BNP Paribas Group's other principal risks are: risks of financial instability due to the conduct of monetary policies, risks of reduction of international trade from protectionist measures, laws and regulations applicable to financial institutions, and cybersecurity and technology risk. (P.15)

12. Network for Greening the Financial System. (P.15)

13. See "Identification of short, medium and longterm opportunities related to the energy transition and carbon requirements" in section 2.A. (P.16)

14. https://www.linkedin.com/pulse/financer-l%C3%A9conomie-au-xxi%C3%A8me-si%C3%A8cle-cest-%C3%AAtre-un-de-la-bonnaf%C3%A9/ (P.17)

15. http://www.epe-asso.org/en/zen-2050-imagining-and-building-a-carbon-neutral-france-july-2019/ (P.19)

16. The CDP (formerly the Carbon Disclosure Project) is a non-profit international organisation that manages the largest environmental reporting platform covering corporations and cities alike. (P.21)

17. The report is available online: https://shareaction.org/research-resources/banking-on-a-low-carbon-future-ii/ (P.22)

18. The report is available online at: https://www.ran.org/wp-content/uploads/2020/03/Banking_on_Climate_Change__2020_vF.pdf. (P.22)

19. Rainforest Action Network, Banktrack, Indigenous Environmental Network, OilChange International, Reclaim Finance, Sierra Club. (P.22)

20. The report is available online at: https://shareaction.org/wp-content/uploads/2020/03/Point-of-no-Returns.pdf. (P.22)

21. The report is available online: https://www.majorityaction.us/asset-manager-report (P.22)

22. IPCC: Intergovernmental Panel on Climate Change. (P.28)

23. This comparaison is available in figure section 4.A.: “Percentage of coal in the electricity mix financed by BNP Paribas between 2010 and 2050, and main decisions to gradually exit the coal sector“. (P.28)

24. BNP Paribas Cardif uses a strong climate change scenario (Representative Concentration Pathway or RCP of 8.5), established by the IPCC for 2050. (P.30)

25. The ACPR (Autorité de contrôle prudentiel et de résolution) is the French prudential supervisory and resolution authority for the banking and insurance industry. (P.31)

26. See “Alignment of loan book with Paris Agreement goal”, in section 4.C. (P.31)

27. https://group.bnpparibas/en/financing-investment-policies (P.37)

28. See P.515 of the 2019 Universal Registration Document and Annual Financial Report Document, available online at: https://invest.bnpparibas.com/sites/default/files/documents/bnp2019_urd_en_20_03_13.pdf. (P.39)

29. See “Loan book: BNP Paribas has made strong commitments in favour of decarbonising the energy sector”, in section 2.B. (P.39)

30. This figure is calculated using a location-based approach, i.e. based on the average carbon footprint of electricity used in each country. (P.42)

31. See “Alignment of loan book with Paris Agreement goal” in section 4.C. (P.42)

32. See paragraph “ BNP Paribas is helping develop methods that can be used to manage the exposure of loan books and investment portfolios to climate risks, in partnership with external organisations” in section 2.C. (P.43)

33. See paragraph “At the same time, BNP Paribas measures and publishes the electricity and energy mixes financed by the Group and their carbon intensity” in section 4.A. (P.44)

34. See paragraph “BNP Paribas is carbon-neutral in its scope of operations” in section 2.C. (P.44)

BNP PARIBAS

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