

The Governor's foreword

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In the words of Albert Einstein, “The world as we have created it is a process of our thinking. It cannot be changed without changing our thinking.” This is the challenge that confronts all stakeholders – public authorities, private businesses, citizens – in the combat against climate change.

At the Banque de France, we are convinced that, within the framework of our monetary stability and financial stability missions, it is also our responsibility. This is why, in all the forums in which we participate and in all that we do, we champion an ambitious message in support of the Paris Climate Agreement.

This conviction is becoming ever more widely shared, which explains the success of the Central Banks and Supervisors Network for Greening the Financial System (NGFS) that we launched in December 2017 and for which we act as the permanent secretary. Today, the NGFS has more than 50 members and a dozen observers representing five continents and can boast a number of concrete achievements such as the publication of a Sustainable and Responsible Investment Guide for central banks in October 2019. Central banks hold 8% of the world's financial assets and have the means to influence every aspect of other financial institutions' investment decisions – risk perception, prices, yields, maturity and liquidity – in order to prevent an overly favourable allocation of capital to carbon-intensive sectors.

This has been the approach endorsed at the Banque de France since March 2018, when it adopted a Responsible Investment Charter – an innovative initiative within the central bank community. It applies to the management of the financial assets for which the Banque de France is solely and fully responsible, i.e. the portfolios backed to its own funds and to its pension liability.

In March 2019, we published our first *Responsible Investment Report*. It presented the Banque de France's ambitious responsible investment strategy, as well as an analysis of our portfolios carried out in accordance with the provisions of Article 173 of the French law on Energy Transition for Green Growth (LTECV) and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

This second report describes in real terms the implementation of our strategy over the past year and particularly the changes to our investment policy. These changes are the direct result of our objective to get aligned with a trajectory that limits global warming to 2°C above pre-industrial levels, in line with the commitment set out in the 2015 Paris Agreement. The Banque de France thereby hopes to make its own contribution to the intensified efforts made by all investors towards greater transparency.

THE CENTRAL BANKS AND SUPERVISORS NETWORK FOR GREENING THE FINANCIAL SYSTEM (NGFS)

The NGFS¹ is a Banque de France initiative launched during the One Planet Summit in Paris in December 2017. Its objective is to promote recommendations for the entire financial system and to spread best practices amongst central banks and supervisors. This commitment by the Banque de France is built on two core beliefs.

- Climate-related risks represent a risk to financial stability. The work of the NGFS involves understanding how these risks affect the financial sector and developing identification and prevention tools.
- The transition to a low-carbon economy is a financial challenge, which requires the mass mobilisation of capital, as well as a qualitative challenge, with the aim of avoiding all risks of greenwashing.

In order to support states, which are responsible for the public policies to combat climate change, the NGFS aims to reinforce the response required at a global level to reach the Paris Agreement targets. Encouraging the orderly and sound development of green financing is currently one of the key challenges for central banks and supervisors.

At the end of January 2020, 54 member – and 12 observer – institutions were actively and voluntarily involved in the NGFS. They share their experiences and best practices and contribute to the development of sound climate and environmental risk management in the financial sector.

The first report of the NGFS was published on 17 April 2019² during an international conference in Paris. It issued six recommendations. The first four are aimed at inspiring central banks and supervisors to take best practices on board when they fit within their mandate. For example, central banks are encouraged to integrate sustainability factors into their own portfolio management. The final two recommendations point to actions that can be taken by policymakers to facilitate the work of central banks and supervisors.

In April 2019, the NGFS also promised to publish a series of more “practical” guides building directly on these recommendations. The first, published in October 2019,³ is a responsible investment guide for central banks’ portfolio management.

1 <https://www.ngfs.net/en>

2 https://www.ngfs.net/sites/default/files/medias/documents/ngfs_first_comprehensive_report_-_17042019_0.pdf

3 <https://www.ngfs.net/sites/default/files/medias/documents/ngfs-a-sustainable-and-responsible-investment-guide.pdf>

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OVERVIEW OF THE BANQUE DE FRANCE'S RESPONSIBLE INVESTMENT STRATEGY

In March 2019, the Banque de France set out a responsible investment strategy that applies to the assets for which the Banque de France is solely and fully responsible.

These are portfolios backed to its own funds and to its pension liability (referred to hereinafter as the "Portfolios"). These Portfolios represented EUR 22 billion in assets as at 31 December 2019 (excluding portfolios held as part of the European System of Central Banks' missions defined by the Treaty on the Functioning of the European Union).

A responsible investment strategy built on three pillars

The Banque de France's responsible investment strategy is built on three pillars.

The first pillar involves aligning its investment strategy with France's climate commitments, that is achieving carbon neutrality by 2050. To do this, the Banque de France is reducing the climate impact of its Portfolios. In 2019, the initiatives undertaken to align its assets with a 2°C trajectory and with the financing of the energy and ecological transition were applied to its portfolio backed to own funds. The Banque de France will look into reinforcing and extending both aspects of these initiatives to the portfolio backed to its pension liability in 2020. It will communicate on this topic in the next annual responsible investment report.

The second pillar involves including extra-financial criteria in its asset management. The Banque de France thus selects issuers based on their ability to take into account and to manage the environmental, social and governance (ESG) risks to which they may be exposed.

Lastly, the third pillar involves the Banque de France exercising its voting rights in order to promote better recognition of ESG issues from the companies in which it invests. It thereby serves as a committed and responsible shareholder in order to encourage issuers to improve their practices.

A responsible investment strategy focused on five objectives implemented in 2019

In setting out its responsible investment strategy, the Banque de France also defined measurable objectives for each of the three pillars. These objectives were implemented as early as 2019. This report provides an overview of the progress made on the Banque de France's commitments.

Objective No. 1: Get aligned with a 2°C trajectory. Horizon set for 2020 for the own funds portfolio

In order to achieve this objective, the Banque de France has implemented a climate filter for the equity component of the portfolio backed to own funds, resulting in the exclusion of the least virtuous companies based on a climate

The Banque de France responsible investment strategy: three pillars and five objectives

Initiatives

Pillar 1: Aligning investments with France's climate commitments

Objective No. 1: Get aligned with a 2°C trajectory. Horizon set for 2020 for the own funds portfolio

Equity component of the portfolio backed to own funds aligned to 2°C

Objective No. 2: Contribute to financing the energy and ecological transition by increasing investment in green bonds and funds dedicated to the EET^{a)} from 2019

Investment target raised to EUR 1.7 bn by 2021
In 2019 : 1/3 achieved
EUR 477 m invested in green bonds
EUR 110 m subscribed in EET funds

Pillar 2: Including ESG^{b)} criteria in asset management

Objective No. 3: Equity portfolios meeting the requirements of pillar III of the French SRI label in 2019

20% of issuers excluded on the basis of ESG criteria

Pillar 3: Exercising its voting rights and influencing issuers

Objective No. 4: Adopt a voting policy which includes provisions on extra-financial transparency in 2019

Voting policy adopted

Objective No. 5: Reach a general meeting attendance rate of over 40% in 2019 and 80% by 2020

Attendance rate of 49% in 2019

a) Energy and Ecological Transition.

b) Environmental, Social and Governance criteria.

perspective from its investments. These exclusions have led to a marked improvement in the climate performance of this portfolio, which is now aligned with a trajectory that limits global warming to 2°C. This is only a first step: the Banque de France will continue to act in the future to further integrate more environmental criteria into its own-portfolio management. Furthermore, for the publication of its next responsible investment report, the Banque de France will propose a strategy to better align its portfolio backed to its pension liability.

Objective No. 2: Contribute to financing the energy and ecological transition by increasing investment in green bonds and funds dedicated to the energy and ecological transition as early as 2019

In keeping with its objective, in mid-2019 the Banque de France set the ambitious target of contributing EUR 900 million in financing to the energy and ecological transition (EET). At the end of 2019, the Banque de France had already invested EUR 477 million in green bonds and subscribed EUR 110 million in EET-dedicated funds. Encouraged by the success of these initial achievements, it has decided to step up its efforts by raising its target to EUR 1.7 billion (approximately 20% of the portfolios backed to own funds). With one-third of the programme already achieved, this objective will be fully met by 2021.

In 2020, the Banque de France will also determine how its portfolio backed to its pension liability can better contribute to financing the energy and ecological transition (EET) by boosting its investments in green bonds and EET-dedicated funds.

Objective No. 3: Equity portfolios meeting the requirements of pillar III of the French SRI label in 2019

In accordance with the Banque de France's commitments, the equity components of its Portfolios¹ now comply with the pillar III requirements of the French SRI label.² Consequently, more than 20% of the issuers that make up the Banque de France's investable universe for its own funds and pension liability are excluded on the basis of extra-financial criteria: regulatory and sector-based exclusions (the Banque de France notably excludes all companies that derive over 20% of their revenue from thermal coal); controversy-based exclusions (companies involved in controversies related to violations of human

¹ Excluding passive open-end index funds, i.e. 2% of Portfolios.

² The French Socially Responsible Investment (SRI) label is supported by the French Ministry for the Economy and Finance, which aims to offer

improved visibility to savers regarding SRI products, by ensuring that their management is based on solid methodologies with a strong requirement for transparency and high-quality information. SRI label reference: <https://www.llelabelisr.fr>

rights, International Labour Organisation (ILO) principles, financing of terrorism regulations, etc.); and, more generally, exclusions of companies with the poorest ESG risk management performances in their respective sectors.

Objective No. 4: Adopt a voting policy which includes provisions on extra-financial transparency in 2019

In order to fulfil its role as a committed and responsible shareholder, the Banque de France has adopted a voting policy that includes provisions for the consideration of ESG issues. In particular, the Banque de France expects the companies in which it is a shareholder to disclose information on the extra-financial impacts of their activities. It also expects the variable remuneration policy for their executives to incorporate precise, measurable extra-financial criteria.

Objective No. 5: Reach a general meeting attendance rate of over 40% in 2019 and 80% by 2020

In keeping with its commitment, the Banque de France had its main asset manager, BDF-Gestion,³ lower its capital ownership threshold triggering the right to vote. In so doing, the general meeting attendance rate exceeded the target and reached 49% in 2019. Furthermore, the Banque de France has attended 100% of the general meetings of the companies in which it is a direct shareholder.

An integrated responsible investment strategy at all levels of governance

The Banque de France has chosen an integrated governance approach. This means that the responsible investment strategy is applied at all levels of governance and does not lead to the creation of a dedicated committee: it is the responsibility of the existing committees in charge of Portfolio financial management to take into consideration the extra-financial aspects of the investments.

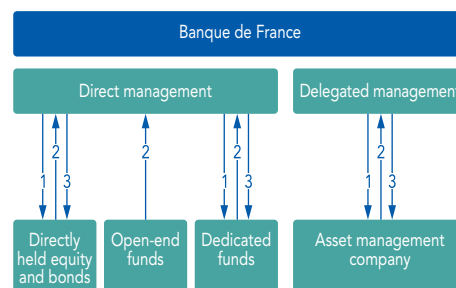
This choice is intended to guarantee the effective long-term management of the approach and to ensure consistency between the financial objectives assigned to management and the five responsible investment policy objectives.

The responsible investment strategy is applied differently depending on the methods employed to manage the Portfolios.

The Banque de France directly manages a portion of its Portfolio assets and delegates the remainder of its asset management. The responsible investment strategy is therefore applied as follows.

- For investments made outside the scope of management under mandate:
 - for direct investments, the Banque de France applies its strategy directly;
 - for investments made in dedicated funds, the prospectuses have been modified to integrate the Banque de France's responsible investment strategy;
 - for investments in open-end funds, alternative investment options in SRI funds are reviewed on a case-by-case basis.
- For investments made within the scope of management under mandate, the Banque de France ensures that the funds chosen by its agent comply with its responsible investment strategy.

Breakdown of the responsible investment strategy



Source: Banque de France.

Key

1. RI policy

2. Reporting

3. Control

A responsible investment strategy with measured results

In March 2019, the Banque de France published its first Responsible Investment Report and, in the process, carried out an assessment of the extra-financial performance of its Portfolios. The publication of the current report provided the opportunity to perform a fresh assessment based on the composition of its Portfolios as at 31 December 2019. Several indicators underline the impact of the implementation of the responsible investment strategy. They are considered in further detail in this report.

Overall, there has been a very sharp improvement in the extra-financial performances of the Portfolios. This is particularly the case for the equity component of the portfolio backed to own funds, which was a priority targeted by the Banque de France's strategy.

A responsible investment strategy that is publicly disclosed

The Banque de France is transparent in its disclosures to the public, to the employees covered by its pension fund and to its shareholder – the French state – on the implementation of its responsible investment strategy, via:

- this report, updated annually and made available to the public on the Banque de France website;
- information provided to staff representatives within the framework of the social and economic committee.

3 Created on 27 December 1995, BDF-Gestion is the Banque de France's asset management subsidiary.

Changes in the indicators monitored as part of the responsible investment strategy between 2018 and 2019

		Pension funds		Own funds	
		Equities	Bonds ^{a)}	Equities	Bonds ^{a)}
Pillar 1	2°C alignment	=	na	++	na
	Carbon footprint per EUR million invested	++	=	++	-
	Carbon footprint per unit of revenue	+	=	++	=
	Weighted average carbon intensity	=	=	++	=
	Investment in green bonds	=	=	++	++
	Investment in EET-dedicated funds ^{b)}	=	=	++	++
	Green share	-	na	++	na
	Exposure to physical risks	=	=	=	=
	Exposure to transition risks: brown share	+	na	++	na
Pillar 2	Average ESG ^{c)} score	+	=	=	+
	Health and safety indicator	=	na	=	na
	Non-discrimination indicator	+	na	=	na
Pillar 3	General meeting attendance rate	++			

Source: Banque de France.

na: non available

a) This covers sovereign bonds issued or explicitly warranted by States, which represent 94.1% of the bond component. The metrics above are not calculated for certain assets of the bond components: supranational bonds and some public companies' bonds (which represent 5.4% of the bond components and 2.6% of the Portfolios) because of a lack of data, and more marginally corporate bonds (which represent 0.6% of the bond components and 0.3% of the Portfolios).

b) Energy and Ecological Transition.

c) Environmental, Social and Governance criteria.

Footnote: +/- corresponds to an improvement/deterioration between +5%/-5% and +20%/-20%. ++/-- corresponds to an improvement/deterioration of more than +20%/-20%.

PILLAR 1: ALIGNING INVESTMENTS WITH FRANCE'S CLIMATE COMMITMENTS

The Banque de France has undertaken to incorporate global warming issues into its investment strategy by setting two objectives.

- **First, to reduce the climate impact of its Portfolios by aligning them with a greenhouse gas emissions trajectory that is compatible with global warming of less than 2°C above pre-industrial levels (Objective No. 1).**
- **Second, to contribute to the financing of the EET by increasing its investments in EET through the purchase of green bonds and thematic fund units (Objective No. 2).**

To this end, the Banque de France also monitors the climate impacts of its Portfolios and their exposures to the risks associated with climate change.

The Banque de France commits to a 2°C trajectory – Objective No. 1

To reduce the climate impact of its Portfolios and align them with a 2°C-compatible global warming trajectory (Objective No. 1), the Banque de France measures the consistency of the composition of its Portfolios with this 2°C target. It also tracks the carbon footprint¹ and carbon intensity of its assets.

Achievements in 2019

In 2019, the Banque de France amended its asset management, primarily of the equity component of the portfolio backed to own funds, in order to take into account the climate performance – on top of the financial performance – of issuers.

It sought the expertise of specialised data providers to assess the climate performance of the companies in which it invests: Carbone 4 Finance and Trucost for data on greenhouse gas emissions and alignment with a 2°C-compatible global warming trajectory; and Four Twenty Seven for data on the exposure to physical risks associated with climate change.

In the light of the data at its disposal, and in order to achieve its objective of complying with a 2°C-compatible global warming trajectory, the Banque de France implemented a filter to exclude 5% of issuers from its investable universe solely on the basis of companies' climate performances. This is referred to as a "best-in-universe" filter in that the worst performing companies in terms of climate are excluded, irrespective of their sector of activity. It will be updated every six months in order to incorporate the latest available company data.

Applying this filter has had a major positive impact on the climate performances of the equity component of the

"BEST-IN-CLASS" AND "BEST-IN-UNIVERSE" FILTERS

There are two possible exclusionary approaches to a responsible investment strategy and particularly to the implementation of a selection strategy based on environmental, social and governance (ESG) criteria.

The best-in-class approach to ESG selection consists in prioritising companies with the best extra-financial ratings within their sector of activity, without favouring or excluding any sector within the reference universe.

The best-in-universe approach to ESG selection consists in prioritising companies with the best extra-financial ratings, regardless of their sector of activity, thereby accepting sector biases, as sectors that are generally considered more virtuous will, naturally, be more represented.

Both approaches are used in the Banque de France's equity portfolios: a 5% best-in-universe filter based on climate performance is applied for the equity component of the portfolio backed to own funds, while a 20% best-in-class filter based on ESG scores is applied to equity portfolios as a whole.

portfolio backed to own funds. Furthermore, the Banque de France aims to round out this approach by investing more heavily in companies with the best climate performance. This initiative will be carried out in 2020.

2°C alignment

The 2°C alignment indicator is measured for the equity component of the Portfolios. It aims to assess the consistency of investments with the objective of getting aligned with a trajectory that limits global warming to 2°C (Objective No. 1). In contrast to carbon emission indicators, which are entirely retrospective, the 2°C alignment indicator has the advantage of incorporating past, present and future elements into its calculation methodology. **At the end of 2019, the equity component of the portfolio backed to own funds – on which the 5% climate filter was applied – was fully aligned with a 2°C-compatible global warming trajectory.**

Methodology

Various methodologies currently exist to measure alignment with a 2°C-compatible global warming trajectory, but there is, as yet, no consensus as to which should be applied. The Banque de France turned to Trucost, a specialist in the assessment of climate impacts, to measure the 2°C alignment of its Portfolios.

To create its 2°C alignment indicator, Trucost's methodology is built upon two approaches recommended by the Science Based Targets (SBT) initiative,² which, for each individual company, define the carbon intensities consistent with limiting global warming to 2°C.

¹ A carbon footprint is defined as the total greenhouse gas emissions generated by a specific actor. Greenhouse gases other than carbon dioxide (CO₂), such as methane (CH₄) and nitrous oxide (N₂O), are taken into consideration when measuring a carbon footprint. Emissions of these other greenhouse gases are expressed in terms of CO₂ equivalent and added to CO₂ emissions.

² The Science Based Targets (SBT) initiative founded by the United Nations Global Compact in 2015 aims to allocate a greenhouse gas emissions reduction target to each company, which is scientifically relevant and specific to its activities, its sector and/or its location, in order to limit global warming to 2°C.

- The first approach – the sectoral decarbonization approach (SDA) – concerns companies that emit the most greenhouse gases and whose business activities are homogeneous. Its basic principle is that of convergence: companies must converge towards greenhouse gas emission intensities that are compatible with their sectoral intensity and with a scenario that limits global warming to 2°C by 2050. A carbon intensity trajectory is thus defined for each company on the basis of their sector of activity, taking 2012 as the starting point and using absolute carbon intensity target levels for 2050 expressed in tonnes of carbon dioxide equivalent (tCO₂eq) per unit of activity (for example, tCO₂eq per gigawatt hour or tCO₂eq per tonne of manufactured cement). The SDA uses scenarios defined by the International Energy Agency.
- The second approach – greenhouse gas emissions per unit of value added (GEVA) – applies to companies which emit less or which have several sectors of activity. The GEVA methodology sets carbon intensity reduction targets for companies (expressed in tCO₂eq per million euro of value added), which are unrelated to the sectors of activity. As with the SDA, each company is thus allocated a theoretical 2°C trajectory starting from its 2012 carbon intensity.

The aligned theoretical trajectory is then compared with a trajectory based on the past carbon emissions since 2012 and on the expected carbon emissions until 2023. The gap between these two trajectories is used to determine whether or not the company is 2°C aligned.

Results

The equity component

The 2°C-alignment analysis covers 74% and 90%,³ respectively, of the value of the equity components of the portfolio backed to the pension liability and of the portfolio backed to own funds. The covered companies represent 91% and 98%, respectively, of each total portfolio emissions: they are therefore more significant in terms of carbon emissions.

The 2°C alignment of the Portfolios at 31 December 2019 is compared with their reference indices, which thus reveals the effect of management and tactical allocation choices.

The 2°C alignment indicator presented here shows the impact on the equity component of the portfolio backed to own funds of the measures taken by the Banque de France to improve its climate performance. This portfolio is now

REFERENCE INDICES

The Banque de France uses reference indices to measure performance and to assist in its management approach. These indices are representative of the markets in which the Portfolios are invested and are built based on the composition of the main stock indices (EuroStoxx, S&P500, etc.). They represent the strategic portfolio allocation.

In this report, four reference indices are used:

- a reference index for the equity component of the portfolio backed to the pension liability;

- a reference index for the bond component of the portfolio backed to the pension liability;

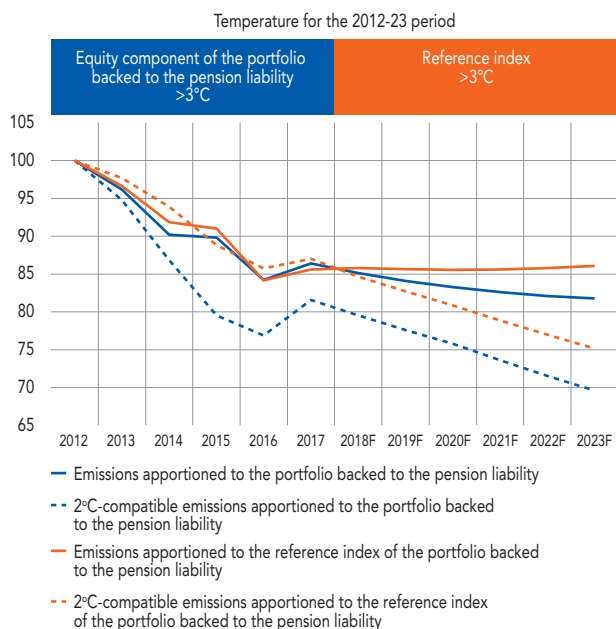
- a reference index for the equity component of the portfolio backed to own funds;

- a reference index for the bond component of the portfolio backed to own funds.

The extra-financial performances of the Portfolios are compared with the performances of the reference indices in this report.

2°C alignment of the portfolio backed to the pension liability

(2012 = 100)

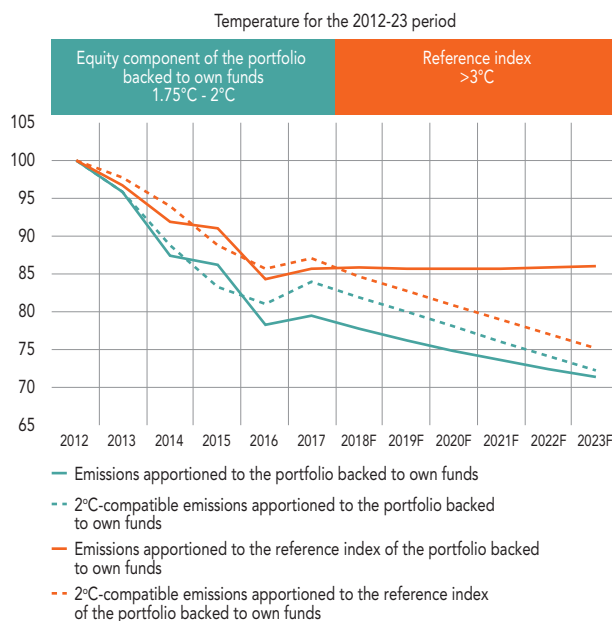


Sources: Trucost; Banque de France analysis.

Note: F stands for "forecast".

2°C alignment of the portfolio backed to own funds

(2012 = 100)



Sources: Trucost; Banque de France analysis.

Note: F stands for "forecast".

aligned with a trajectory that limits global warming to 2°C, in accordance with the set objective. The Banque de France will continue its efforts in order to maintain and improve this indicator over time. For the publication of its next responsible investment report, the Banque de France will also propose a strategy to better align its portfolio backed to its pension liability.

Carbon footprint and intensities

The carbon footprint measures the greenhouse gas emissions of the companies and states financed by the Portfolios. It is used to assess their past climate impact.

Overall, the equity component of the Banque de France's Portfolios is only slightly carbon intensive. Their carbon footprints are lower than those of the reference indices and are down sharply year-on-year, particularly for the portfolio backed to own funds. For the sovereign bond

component of the Portfolios, the carbon emission levels are close to both the prior-year portfolio levels and the reference indices.

The capital carbon footprint

The carbon footprint, expressed in tonnes of carbon dioxide equivalent (tCO₂eq), can be measured in relation to the size of the portfolios. This is referred to as the capital carbon footprint or the carbon footprint per million euro invested.

3 The 2°C alignment indicator has only recently been developed. At the moment, it can not be applied to 100% of the assets but its coverage rate will be improved with each report. In 2018, it

covered 71% and 78% of the value of the equity component of the portfolio backed to the pension liability and the portfolio backed to own funds, respectively.

Methodology

To calculate a company's carbon footprint, greenhouse gas emissions from its own activities (direct emissions) and from its direct suppliers (upstream indirect emissions) are taken into consideration:

- direct emissions cover emissions caused by the combustion of fossil fuels using resources owned or controlled by the company, such as a boiler or a fleet of vehicles;
- upstream indirect emissions cover emissions linked to all other relevant expenses in the company's income statement, such as the purchase of electricity, plane tickets, taxi fares or the acquisition of equipment and services.

The carbon footprint of a portfolio represents the total greenhouse gas emissions of the companies and states that it finances, i.e. the emissions of each company or state as a multiple of the Banque de France's stake in the capital and bond debt of companies or the gross debt of states. For example, if the Banque de France holds 1% of the value of issuer A, the Banque de France is allocated 1% of this issuer's greenhouse gas emissions.

For sovereign bonds, we consider the country's greenhouse gas emissions for its own consumption, including imports, and for the production of exported goods and services. This broad definition includes not only emissions by public services but also emissions by companies located in the country.

SCOPES 1, 2 AND 3

Greenhouse gas emissions are usually divided into three levels, or emission "scopes".

- Scope 1 corresponds to direct emissions from a company's fossil fuel combustion, such as gas, oil, coal, etc.
- Scope 2 corresponds to indirect emissions linked to the consumption of electricity, heat or steam needed to manufacture a product.
- Scope 3 corresponds to all other indirect emissions, such as the mining of materials needed to manufacture a product and purchased by the company, or emissions linked to employee transport or customers travelling to buy a product.

In accordance with this classification, the carbon emissions calculated in this report take into consideration scope 1, scope 2 and – in the absence of a satisfactory methodology for measuring its full scope for diversified portfolios – a part of scope 3.

CARBON FOOTPRINT AND GREEN BONDS

When calculating the carbon footprint of a bond portfolio, the type of underlying bonds is not taken into account. Only the issuer is considered. Thus, a portfolio solely made up of green bonds from a given issuer will be given the same carbon footprint as a portfolio made up of traditional bonds from the same issuer (for the same outstanding amount). In other words, green bonds do not reduce the carbon footprint of a portfolio.

The implementation of its objective to finance the energy and ecological transition has notably resulted in the Banque de France buying green bonds issued by countries whose carbon footprint is relatively high. Despite being counterintuitive, the increase in this portfolio's carbon footprint is a result of these purchases.

The carbon footprint was measured in accordance with the requirements of the French law on Energy Transition for Green Growth (LTECV) and TCFD recommendations.

Results

The capital carbon footprint of the Portfolios at 31 December 2019 is compared to their reference indices.

The equity component

The analysis of the capital carbon footprint covers more than 99%⁴ of the equity component of the Portfolios. In 2019, the capital carbon footprint of the equity component of the portfolio backed to the pension liability amounted to 105 tCO₂eq/EUR million invested. **This is 37% lower than its reference index and 27% lower than the same portfolio's carbon footprint in 2018.** The capital carbon footprint of the equity component of the portfolio backed to own funds amounted to 118 tCO₂eq/EUR million invested. **This is 41% lower than its reference index and 41% lower than the same portfolio's carbon footprint in 2018.**

The sovereign bond component

The indicators presented in this report are not calculated for certain Banque de France bond portfolio securities. Debt securities issued by supranational institutions and certain public sector companies (corresponding to 5.4%

of the bond component, or 2.6% of the Portfolios) are not included due to a lack of data, and debt securities issued by private companies, a residual component (0.6% of the bond component, or 0.3% of the Portfolios), are also excluded. Sovereign bonds explicitly issued or guaranteed by states, which represent 94.1% of the bond component, are covered.

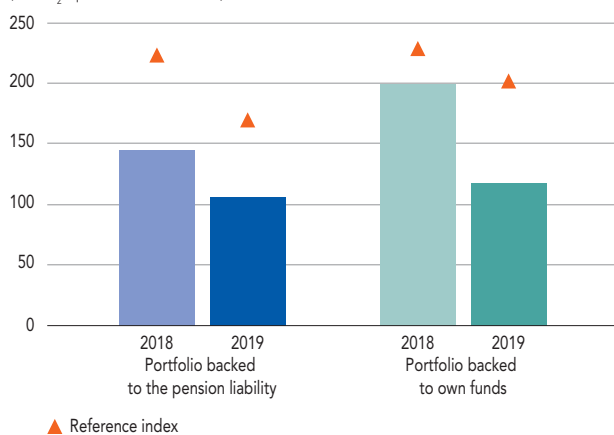
The analysis of the capital carbon footprint covers more than 99% of the sovereign bond component of the Portfolios. In 2019, the capital carbon footprint of the sovereign bond component of the portfolio backed to the pension liability amounted to 454 tCO₂eq/EUR million invested. **This is 18% lower than its reference index and 3% lower than the same portfolio's carbon footprint in 2018.** The capital carbon footprint of the sovereign bond component of the portfolio backed to own funds amounted to 468 tCO₂eq/EUR million invested. **This is 10% lower than its reference index but 5% higher than the same portfolio's carbon footprint in 2018.**

4 There are two cases in which securities are not covered: (i) new securities (from IPOs, mergers, etc.) that are not yet covered by the service

provider; or (ii) when the data needed to calculate the carbon footprint are unavailable.

Capital carbon footprint of the equity component of the Portfolios

(in tCO₂eq/EUR million invested)

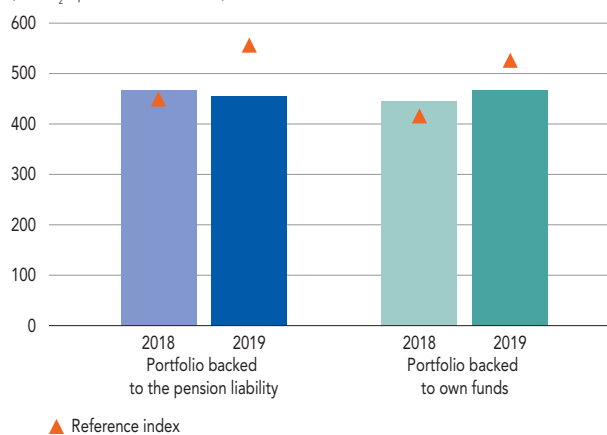


Sources: Trucost; Banque de France analysis.

Note: tCO₂eq – tonne of carbon dioxide equivalent.

Capital carbon footprint of the sovereign bond component of the Portfolios

(in tCO₂eq/EUR million invested)



Sources: Trucost; Banque de France analysis.

Note: tCO₂eq – tonne of carbon dioxide equivalent.

The capital carbon footprint, a measurement of greenhouse gas emissions for each euro invested, is an indicator that is relevant, easy to understand in terms of methodology, and widely used by investors. Nevertheless, it has several shortcomings. First, it is sensitive to fluctuations in market values: for the same portfolio composition, a 10% increase in the value of the shares in the portfolio would mechanically reduce the capital carbon footprint by 10%. Second, it is not based on size parameters that are intrinsic to the company, such as revenue, and therefore does not assess issuers' carbon efficiency. For these reasons, the carbon footprint per unit of revenue or GDP is used to round out the analysis.

Carbon footprint per unit of revenue or GDP

The carbon footprint per unit of revenue or GDP compares the carbon footprint of a portfolio to the share of revenue or GDP held, meaning that the carbon efficiency of companies can be taken into account.

Methodology

In order to calculate the carbon footprint per unit of revenue or GDP, greenhouse gas emissions are calculated as a ratio of the revenue or GDP allocated to the portfolio according to the size of the stake. For example, if the Banque de France holds 1% of the value of issuer A, the Banque de France is allocated 1% of this issuer's revenue

or GDP. Dividing the sum of the allocated greenhouse gas emissions by the sum of the allocated revenue (or GDP) gives the carbon footprint per million euro of revenue or GDP.

Results

The equity component

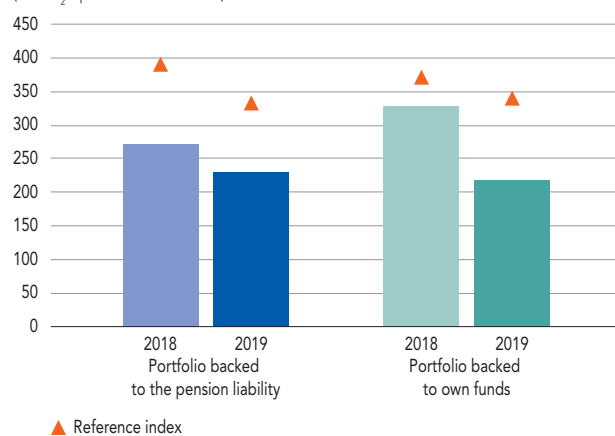
The analysis of the carbon footprint per unit of revenue covers more than 99% of the equity component of the Portfolios. In 2019, the carbon footprint per unit of revenue of the equity component of the portfolio backed to the pension liability amounted to 230 tCO₂eq per million euro of revenue (tCO₂eq/EUR million revenue). **This is 30% lower than its reference index and 15% lower than the same portfolio's carbon footprint in 2018.** The carbon footprint per unit of revenue of the equity component of the portfolio backed to own funds amounted to 219 tCO₂eq/EUR million revenue. **This is 35% lower than its reference index and 33% lower than the same portfolio's carbon footprint in 2018.**

The sovereign bond component

The analysis of the carbon footprint per unit of GDP covers more than 99% of the sovereign bond component of the Portfolios. In 2019, the carbon footprint per unit of GDP of the sovereign bond component of the portfolio

Carbon footprint per unit of revenue of the equity component of the Portfolios

(in tCO₂eq/EUR million revenue)

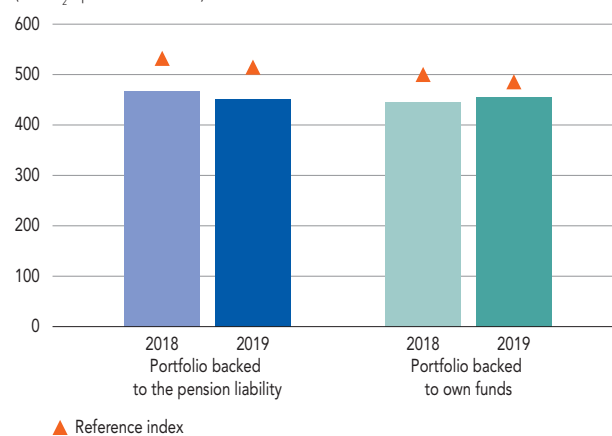


Sources: Trucost; Banque de France analysis.

Note: tCO₂eq – tonne of carbon dioxide equivalent.

Carbon footprint per unit of GDP of the sovereign bond component of the Portfolios

(in tCO₂eq/EUR million GDP)



Sources: Trucost; Banque de France analysis.

Note: tCO₂eq – tonne of carbon dioxide equivalent.

backed to the pension liability amounted to 451 tCO₂eq per million euro of GDP (tCO₂eq/EUR million GDP). **This is 11% lower than its reference index and 4% lower than the same portfolio's carbon footprint in 2018.** The carbon footprint per unit of GDP of the sovereign bond component of the portfolio backed to own funds amounted to 455 tCO₂eq/EUR million GDP. **This is 5% lower than its reference index but 2% higher than the same portfolio's carbon footprint in 2018.**

Weighted average carbon intensities

The weighted average carbon intensity indicator is used to measure a portfolio's exposure to companies or states considered carbon-heavy, i.e. whose greenhouse gas emissions as a ratio of revenue or GDP are high.

Methodology

This indicator is calculated as the weighted average (by outstanding portfolio amounts) of the carbon intensity ratios of portfolio securities. Unlike the carbon footprint per unit of revenue or GDP, this indicator does not consider the size of the holding or the value of the company, and therefore does not provide information on emissions caused or attributable to a portfolio: it can be seen as an indicator of exposure to climate risk. It therefore has the advantage of being unaffected by changes in the prices of equity or bonds.

Results

The equity component

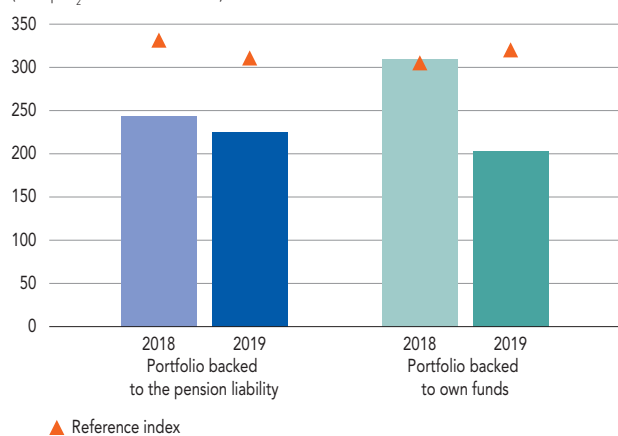
The analysis of weighted average carbon intensities covers more than 99% of the equity component of the Portfolios. In 2019, the weighted average carbon intensity of the equity component of the portfolio backed to the pension liability amounted to 225 tCO₂eq/EUR million revenue. **This is 27% lower than its reference index and 8% lower than the same portfolio's carbon intensity in 2018.** The weighted average carbon intensity of the equity component of the portfolio backed to own funds amounted to 202 tCO₂eq/EUR million revenue. **This is 36% lower than its reference index and 35% lower than the same portfolio's carbon intensity in 2018.**

The sovereign bond component

The analysis of weighted average carbon intensities covers more than 99% of the sovereign bond component of the Portfolios. In 2019, the weighted average carbon intensity of the sovereign bond component of the portfolio backed to the pension liability amounted to 450 tCO₂eq/EUR million GDP. **This is 9% lower than its reference index and 4% lower than the same portfolio's carbon intensity in 2018.** The weighted average carbon intensity of the sovereign bond component of the portfolio backed

Weighted average carbon intensity of the equity component of the Portfolios

(in tCO₂eq/EUR million revenue)

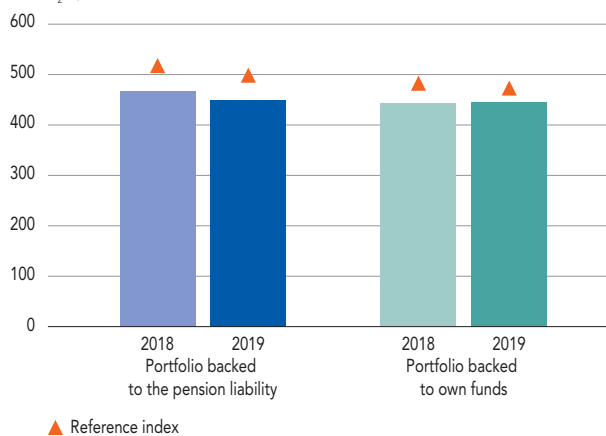


Sources: Trucost; Banque de France analysis.

Note: tCO₂eq – tonne of carbon dioxide equivalent.

Weighted average carbon intensity of the sovereign bond component of the Portfolios

(in tCO₂eq/EUR million GDP)



Sources: Trucost; Banque de France analysis.

Note: tCO₂eq – tonne of carbon dioxide equivalent.

to own funds amounted to 447 tCO₂eq/EUR million GDP. **This is 5% lower than its reference index but 1% higher than the same portfolio's carbon intensity in 2018.**

The Banque de France's contribution to financing the energy and ecological transition – Objective No. 2

In accordance with its goal to align its Portfolios with a 2°C-compatible global warming trajectory, the Banque de France seeks to contribute to the financing of the EET. This involves a shift towards a sustainable development model that addresses the major environmental challenges of climate change, resource scarcity, the accelerated loss of biodiversity and increasing environmental health risks. Thus, the EET scope includes activities that directly or indirectly contribute to “green growth” by, for example, developing renewable energies (wind, solar, geothermal, hydropower, marine, biomass or other forms), the energy efficiency and better carbon footprints of buildings and industrial processes, the circular economy, clean transport systems, agriculture and forestry or climate change adaptation infrastructures. In order to contribute to the financing of this transition, the Banque de France has undertaken to increase its net investments in green bonds and EET-dedicated funds. The Banque de France also monitors the green share of its Portfolios – the share associated with activities of issuers that contribute to the EET.

Achievements in 2019

In mid-2019, the Banque de France decided to contribute EUR 900 million to the financing of the EET by investing in green bonds and dedicated funds. **At the end of 2019, the Banque de France had already invested EUR 477 million in green bonds and subscribed EUR 110 million in EET-dedicated funds.** Encouraged by the success of these achievements, it decided to step up its efforts and thus raised its target to EUR 1.7 billion (approximately 20% of the portfolios backed to own funds). With one-third of the programme already achieved, the Banque de France expects this objective to be fully met by 2021. In 2020, the Banque de France will also determine how its portfolio backed to its pension liability can better contribute to financing the energy and ecological transition by boosting its investments in green bonds and EET-dedicated funds.

The Banque de France's contribution to financing the EET



Sources: Banque de France.

Note: EET – energy and ecological transition.

THE WORK OF THE EUROPEAN COMMISSION ON SUSTAINABLE FINANCE

As part of its action plan on sustainable finance, in 2018 the European Commission published ten legislative actions. More specifically, it set up a Technical Expert Group (TEG) to assist on four subjects by 2020:

- the development of a classification system – the “EU Taxonomy” – for environmentally sustainable activities;
- the development of an “EU Green Bond Standard”;
- the definition of a methodology for “EU Climate Transition Benchmarks” and their disclosure;
- the publication of guidance to improve corporate disclosure of climate-related information.

To date, three issues have been prioritised for particular progress. At the end of 2019, the European regulation on benchmarks was amended and a “disclosure” regulation was adopted, while by the end of 2020 a regulation on a taxonomy for environmentally sustainable activities may be in place. The work of the TEG is currently continuing to provide the technical criteria and details needed by the Commission.

Green bonds

Green bonds are debt instruments earmarked to fund projects or activities of benefit to the environment. Two international initiatives were put in place with the aim of providing a more precise definition: the Climate Bond Initiative (CBI) developed its Climate Bond Standard and the International Capital Market Association (ICMA) defined its Green Bond Principles. At the same time, the Technical Expert Group (TEG) on sustainable finance published its EU Green Bond Standard in June 2019. The Banque de France supports this initiative and intends to use this new standard as the basis for its green bond purchase choices. Pending the European Commission's adoption of the TEG's recommendations and their translation into legislative texts, the Banque de France has relied on data made available by Bloomberg in order to select green bonds as defined by the CBI and ICMA.

The Banque de France's green bond purchases have consisted of sovereign bonds and quasi-sovereign bonds, almost half of which were green *obligations assimilables du Trésor* (OAT – French Treasury bonds), with the remainder bonds issued by Ireland, Belgium or the Netherlands (all purchased on the secondary market in accordance with Article 123 of the Treaty on the Functioning of the European Union).

GREEN OAT – FRENCH SOVEREIGN GREEN BONDS

Green *obligations assimilables du Trésor* (OAT – French Treasury bonds) have been issued by *Agence France Trésor* (AFT) since 2017 to finance the French government's "eligible green expenditure". The Green OAT, defined in a framework document, may fall under the general state budget or "Invest for the Future" programmes, and must concern six predefined sectors. France's Green OAT thus aims to contribute to the financing of (i) public transport, (ii) energy efficiency improvements in buildings, (iii) the integration of renewable energies in power grids, (iv) the preservation of living resources, (v) weather event observation systems, and (vi) waste reduction and recycling.

EET-dedicated funds

Funds that contribute to the EET can take several forms, such as listed equity funds, bond funds, infrastructure funds, private equity funds or hedge funds. For its investments in dedicated funds, the Banque de France prioritises the non-listed universe, which is deemed a more direct means of financing the transition.

In order to identify and differentiate between the candidate funds, in addition to an analysis of traditional financial criteria, the Banque de France considers extra-financial criteria such as the impact on the EET of projects financed by the funds, and the nature and quality of published impact indicators. Furthermore, the Banque de France relied on the Greenfin label,⁵ created in 2015 by the French Ministry for the Ecological and Solidarity Transition, when making its first subscriptions. This label, whose aim is to mobilise a part of savings towards financing the energy and ecological transition, serves as a guarantee of investment funds' green quality.

This process resulted in the selection of Greenfin-certified green infrastructure funds. These funds, in which the Banque de France has subscribed EUR 100 million, help to finance infrastructure projects for renewable energy production – solar, wind or biomass – and infrastructure dedicated to sustainable mobility. The tangible projects that are thus financed have an easily measurable impact on the EET. In addition, the Banque de France made a EUR 10 million subscription to a multi-sector green debt fund aimed at supporting the development of the green debt market on new asset classes, such as private debt.

⁵ <https://www.ecologique-solidaire.gouv.fr/label-greenfin>

Green share

In order to supplement its analysis of its contribution to the financing of the EET, the Banque de France monitors the green share of its Portfolios. This measures the proportion of the revenue of issuers in the Portfolios that corresponds to a green activity. The results are presented for the equity component of the Portfolios and therefore do not include green bond purchases or investments in EET-dedicated funds.

Methodology

Pending the publication of the European Commission's comprehensive green taxonomy, the Banque de France followed the restrictive methodology of its service provider, which considers the following sectors when calculating the green share:

- the production of renewable energies (wind, solar, tidal, geothermal, hydroelectric);
- sustainable transport (operation and production of rail transport as well as passenger public transport);
- waste management services;

- water management services;
- alternative energies (biomass and landfill gas energy).

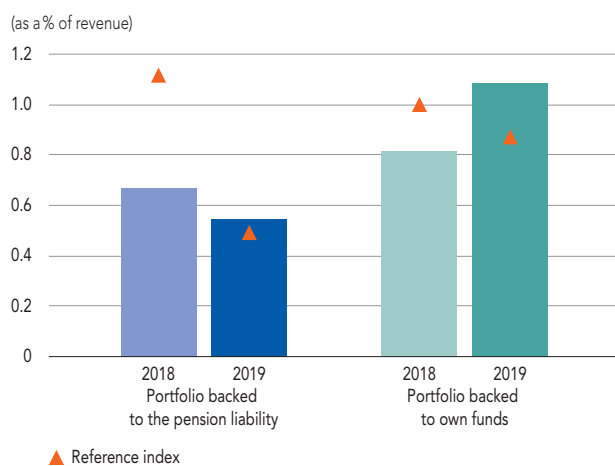
The production and revenue of each company is broken down by sector of activity, then analysed to ascertain if they belong to a sector that contributes to the energy and ecological transition. For example, the green share of an energy company is defined as the share of revenue earned from renewable energies.

Results

The equity component

The analysis of the green share covers more than 99% of the equity component of the Portfolios. In 2019, the share of revenue generated in sectors contributing to the EET by companies in the equity component of the portfolio backed to the pension liability was 0.55%. **This is higher than its reference index and lower than the same portfolio's share in 2018.** The share was 1.09% for the equity component of the portfolio backed to own funds. **This is higher than its reference index and higher than the same portfolio's share in 2018.**

Share of revenue generated by companies in activities that contribute to the EET



Sources: Trucost; Banque de France analysis.

Note: EET – energy and ecological transition.

Portfolio exposure to physical and transition risks

Article 173 of the French law on Energy Transition for Green Growth (LTECV) requires the disclosure of an assessment of climate-related risks as part of the publication of extra-financial information. The risks that arise on asset portfolios as a result of climate change mainly fall into two categories: physical risks and transition risks.⁶ The Banque de France Portfolios' exposure to these risks is assessed through several specific indicators.

Exposure to physical risks

Physical risks can result from extreme weather events such as droughts, floods or storms, and also from gradual changes in climate and meteorological conditions such as rising temperatures. They result in property damage, drops in productivity, and even disruptions to the global supply chain.

Methodology

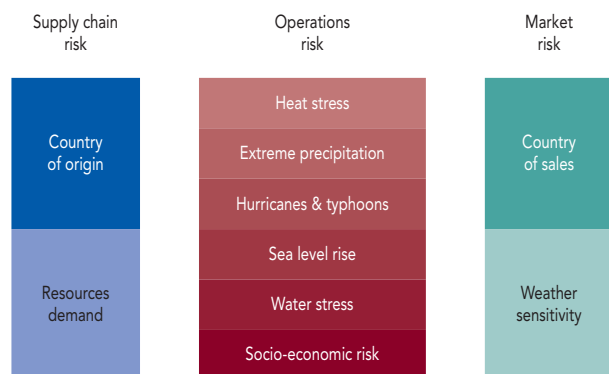
The Banque de France relied on the service provider Four Twenty Seven to assess the physical risks to which its Portfolios are exposed.

With regard to companies, for each issuer Four Twenty Seven calculates a score reflecting its relative exposure to physical climate-related risks, based on the distribution of its assets around the world. It is a composite score based on ten indicators, which are themselves grouped into three pillars. Each indicator is scored from zero to 100, where zero is a low risk and 100 is a very high risk. The ten indicators are added together to obtain the company's final physical risk exposure score, with the following weighting:

- supply chain risk (pillar 1): 15%;
- operations risk (pillar 2): 70%;
- market risk (pillar 3): 15%.

For example, the maps below illustrate the exposure of the physical assets of portfolio companies to the risk of flooding. Each point corresponds to a site. The colour of the points represents the level of exposure. Red reflects the highest level of risk and green reflects the lowest.

Method to assess the effects of climate change on equity portfolios



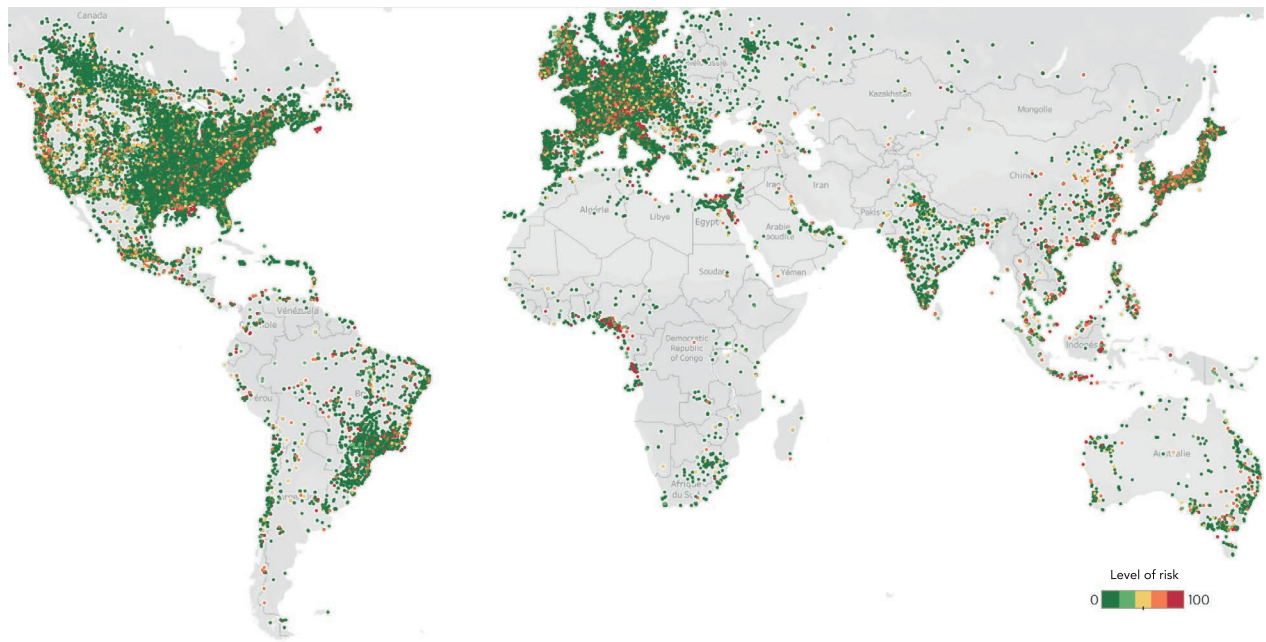
Source: Four Twenty Seven.

⁶ Liability risk is sometimes added as the third type of climate-related risk. It was cited by Mark Carney, Governor of the Bank of England, in his speech of 29 September 2015, "Breaking

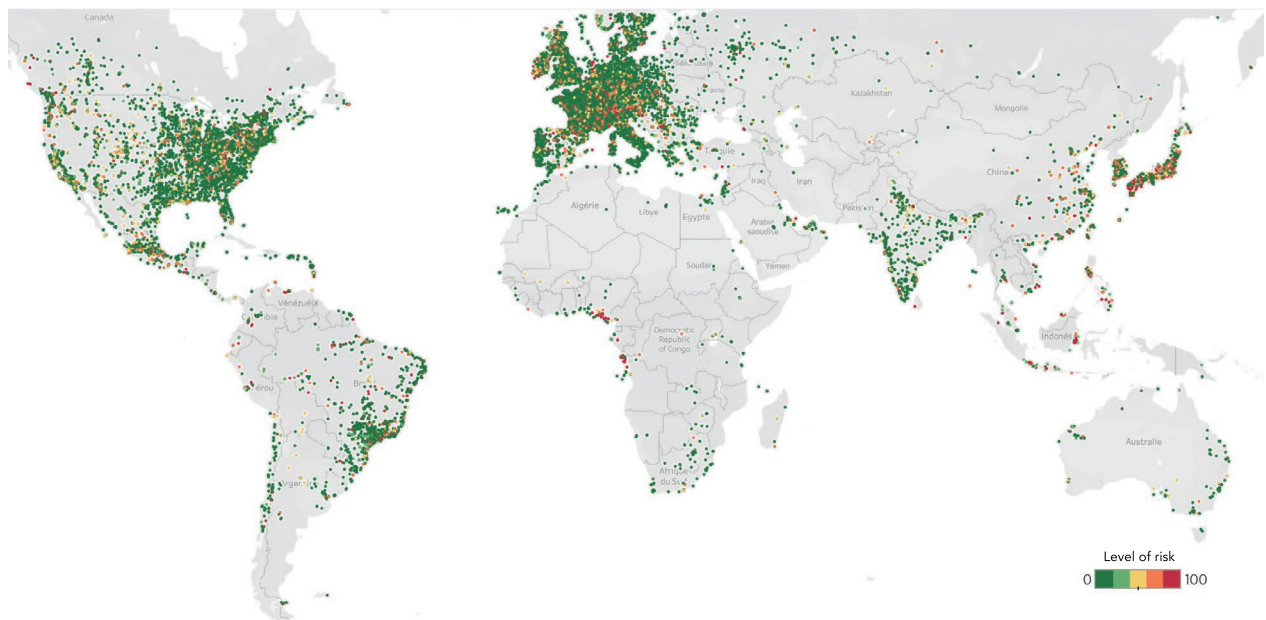
the tragedy of the horizon – climate change and financial stability". <https://www.bankofengland.co.uk/speech/2015/breaking-the-tragedy-of-the-horizon-climate-change-and-financial-stability>

Exposure to flooding of the assets of companies in the equity component of the portfolio

a) Portfolio backed to the pension liability



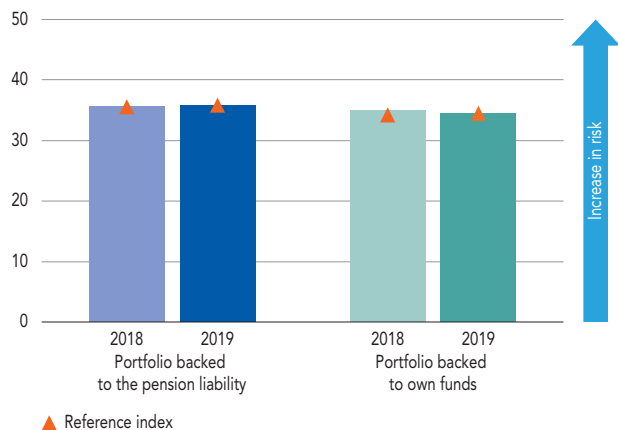
b) Portfolio backed to own funds



Source: Four Twenty Seven.

Consolidated physical risk score for the equity component of the Portfolios

(y axis: physical risk score)

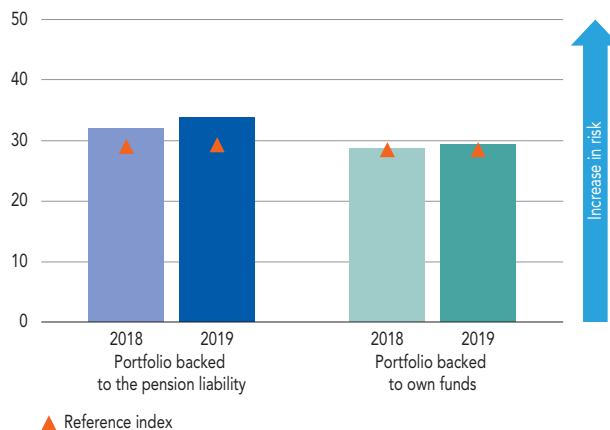


Source: Four Twenty Seven.

Note: The risk score ranges from 0 to 100.

Consolidated physical risk score for the sovereign bond component of the Portfolios

(y axis: physical risk score)



Source: Four Twenty Seven.

Note: The risk score ranges from 0 to 100.

For each country, Four Twenty Seven calculates a score that takes into account its exposure to climate-related risk and its ability to resist and respond to physical impacts. It summarises 31 indicators organised into several categories: economic, social, environmental and governance risks and risks associated with natural disasters. Countries are scored from zero to 100. For a given country, when the exposure to climate-related risk varies depending on the regions, those regions that contribute the most to economic activity are weighted more heavily. Socio-economic data comes from the World Bank, the United Nations and university databases. The country risk is used to build indicators of companies' supply chain risk and market risk.

Results

On a consolidated basis, the Portfolios continue to have a low risk of exposure to physical climate-related risks: as in 2018, the scores for different components of the Portfolios were all below 40 on a scale from zero to 100. This means that the physical assets of portfolio companies, as well as the states that issued the sovereign bonds held by the Banque de France, are concentrated in world regions with low exposure to climate change.

The equity component

The physical risk analysis covers 90% of the equity component of the Portfolios. In 2019, the physical risk exposure score of the equity component of the portfolio backed to the pension liability was 36. **This corresponds to its reference index and to the score calculated for the same portfolio in 2018.** The physical risk exposure score of the equity component of the portfolio backed to own funds was 35. **This corresponds to its reference index and is 2 points lower than the score calculated for the same portfolio in 2018.**

The sovereign bond component

The physical risk analysis covers 90% of the sovereign bond component of the Portfolios. In 2019, the physical risk exposure score of the sovereign bond component of the portfolio backed to the pension liability was 34. **This is 15 points higher than its reference index and 5 points higher than the score calculated for the same portfolio in 2018.** The physical risk exposure score of the sovereign bond component of the portfolio backed to own funds was 30. **This is 3 points higher than its reference index and 2 points higher than the score calculated for the same portfolio in 2018.**

Exposure to transition risk: brown share

Transition risk is the financial risk that can result from the regulatory and technological transformations and changes in market sentiments associated with the process of shifting towards a less carbon-intensive economy.

The Banque de France measures Portfolio exposure to transition risk through a brown share – as opposed to the green share – indicator.

Methodology

There is no consensus on the methodology to be applied when calculating the brown share. The Banque de France chose to define the brown share as an indicator of exposure to fossil fuels. The brown share indicator therefore covers activities related to the extraction of fossil fuels⁷ or the production of electricity from fossil fuels.⁸

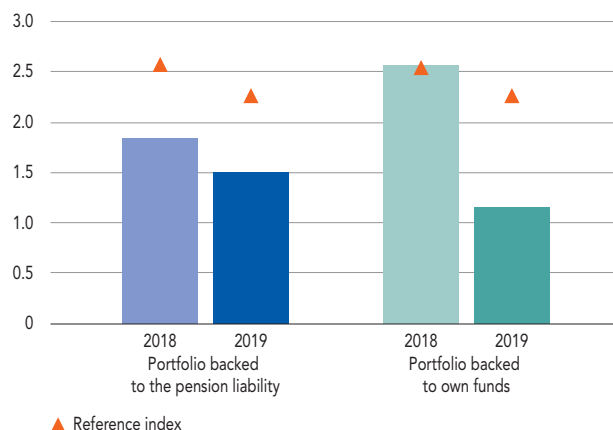
Results

The equity component

The analysis of the brown share covers more than 99% of the equity component of the Portfolios. In 2019, the proportion of revenue derived from activities linked to fossil fuels in the equity component of the portfolios backed to the pension liability amounted to 1.5%. **This is 33% lower than its reference index and 18% lower than the proportion calculated for the same portfolio in 2018.** The proportion of revenue derived from activities linked to fossil fuels in the equity component of the portfolios backed to own funds amounted to 1.2%. **This is 49% lower than its reference index and 55% lower than the proportion calculated for the same portfolio in 2018.**

Proportion of revenue generated by companies in activities linked to fossil fuels

(as a % of revenue)



Sources: Trucost; Banque de France analysis.

⁷ Fossil fuel extraction: crude oil and natural gas extraction, oil sands, liquid natural gas, underground bituminous coal, open-pit coal and bituminous lignite,

oil and gas well drilling, and activities to support oil and gas operations.

⁸ Fossil fuel based electricity production: oil, coal or natural gas based production.

PILLAR 2: INCLUDING ESG CRITERIA IN ASSET MANAGEMENT

As part of its responsible investment strategy, the Banque de France is committed to including ESG criteria in its asset management.

Equity portfolios meeting the requirements of pillar III of the French SRI label in 2019 – Objective No. 3

In defining its objective with regard to including ESG criteria in the management of its financial assets, the Banque de France referred to the Socially Responsible Investment (SRI) label issued by the French Ministry for the Economy and Finance. In accordance with the pillar III requirements of the SRI label, the Banque de France therefore aims to exclude at least 20% of the issuers that make up its investable universe on the basis of their ESG behaviour and performance. In so doing, the Banque de France ensures that ESG criteria have a genuine impact on its asset management.

Achievements in 2019

In 2019, in collaboration with its main asset manager BDF-Gestion, the Banque de France implemented a filter that resulted in the exclusion of more than 20% of issuers on the basis of their behaviour and management of ESG risks. This filter applies to the entire equity component of its Portfolios,¹ and is implemented in two stages: (i) regulatory and sector-based exclusions; and (ii) exclusions based on ESG performance.

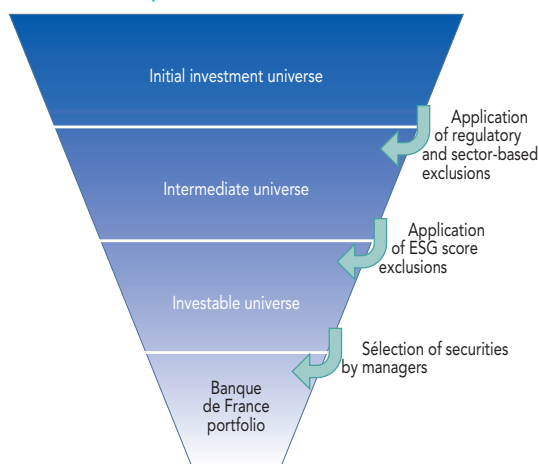
A filter incorporating regulatory and sector-based exclusions

Companies and states that do not comply with national and international regulations in terms of combating terrorist financing, corruption and tax havens (non-cooperative states and regions with regard to tax information exchange according to the Financial Action Task Force – FATF) as well as International Labour Organization (ILO)² principles are excluded from Portfolios. Similarly, the Banque de France does not invest in the public or parapublic debt of a country deemed very high-risk by the European Commission³ in terms of anti-money laundering and counter terrorist financing.

The following companies are also excluded from the Portfolios:

- companies which do not adhere to the Ottawa or Oslo Conventions of 1999 and 2010 prohibiting the production, use, storage, sale and transfer of anti-personnel mines and cluster bombs;
- companies registered in a country which does not respect human or citizens' rights as defined in the Universal Declaration of Human Rights;
- coal mining companies and coal-based energy producers that derive over 20% of their revenue from thermal coal.

Portfolio creation process



Source: Banque de France.

Note: ESG – Environmental, Social and Governance.

ISSUERS' ESG PERFORMANCE

An issuer's ESG performance is an assessment of its management of the Environmental, Social and Governance (ESG) risks to which it is exposed. The ESG criteria generally constitute the three pillars of extra-financial analysis. These criteria can be used as the basis for an assessment of company responsibility towards the environment and its stakeholders (employees, partners, subcontractors, clients and shareholders).

The environmental criterion notably considers waste management, greenhouse gas emission reduction and preventing environmental risks. The social criterion mainly covers accident prevention, staff training, respect of employee rights, the subcontracting chain and labour relations. The governance criterion verifies the independence of the board of directors and the management structure amongst other concerns.

In addition, companies may also be excluded if they are involved in controversies related to the violation of:

- the Universal Declaration of Human Rights;
- International Labour Organization principles;
- national and international regulations on combating terrorist financing, corruption and tax havens.

A filter based on companies' management of ESG risks

In order to achieve the objective of excluding at least 20% of issuers, a best-in-class filter is applied in addition to the disqualifications described above to exclude those companies with the worst ESG performance on a sector-by-sector basis.

Therefore, the investable universe of the Banque de France (the companies that are not excluded from its Portfolios) is the result of the successive application of the exclusions described above and at least 20% of the companies have been eliminated compared with the initial investment universe.

THE FRENCH SRI LABEL

The French Socially Responsible Investment (SRI) label, supported by the French Ministry for the Economy and Finance, aims to encourage the development and visibility of SRI products. It is based on a decree and ruling published in January 2016 to create the certification and define its specifications and control methods.

To receive the SRI label, the funds must meet different criteria, specifically:

- the share of ESG-analysed issuers in the portfolio must be above 90%, long-term;
- the investable universe must be reduced by at least 20% by excluding those with the lowest ESG scores.

1 Excluding passive open-end index funds, i.e. 2% of Portfolios.

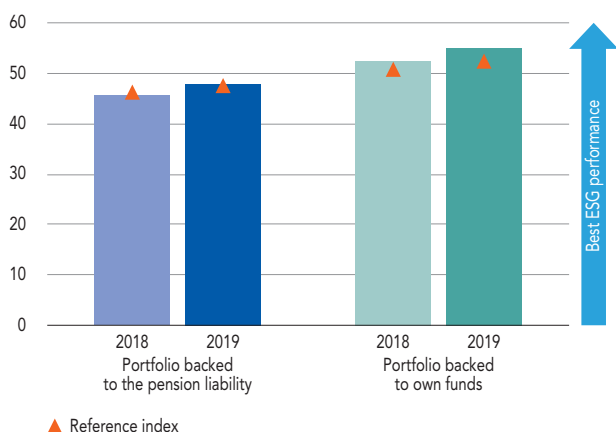
2 Specifically respect for the freedom of association and the right to collective bargaining,

elimination of forced labour and child labour and employment discrimination.

3 https://ec.europa.eu/commission/presscorner/detail/en/IP_19_781

Average ESG scores for the equity component of the Portfolios

(y-axis: average ESG score)

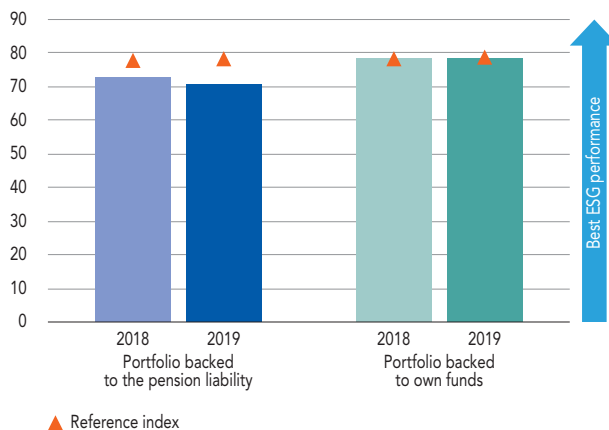


Sources: Vigeo Eiris, Banque de France analysis.

Note: The ESG score ranges from 0 to 100. ESG – Environmental, Social and Governance.

Average ESG scores for the sovereign bond component of the Portfolios

(y-axis: average ESG score)



Sources: Vigeo Eiris, Banque de France analysis.

Note: The ESG score ranges from 0 to 100. ESG – Environmental, Social and Governance.

ESG performance

The ESG scores of companies or states can be used to assess their ability to manage the ESG risks to which they may be exposed. The Banque de France uses the Vigeo Eiris database to monitor ESG scores.

Methodology

A company's ESG performance indicator is a measure of its management of ESG risks. The calculated score is based on the study of 330 indicators, grouped into 38 criteria, such as the definition of an environmental strategy, respect for fundamental human rights, responsible customer information or the promotion of labour relations. The scores received for each of the criteria are then weighted according to the company's sector of activity so that the final score reflects the company's management of its most material risks for a given sector. For example, the criterion for the definition of an environmental strategy accounts for a larger share of the final score for a company in the energy sector than for a company involved in personal services.

For a state, the ESG score is based on an analysis of 172 ESG performance and risk factors divided into three areas: environmental protection, social protection and solidarity, and governance responsibility.

Results

The equity component

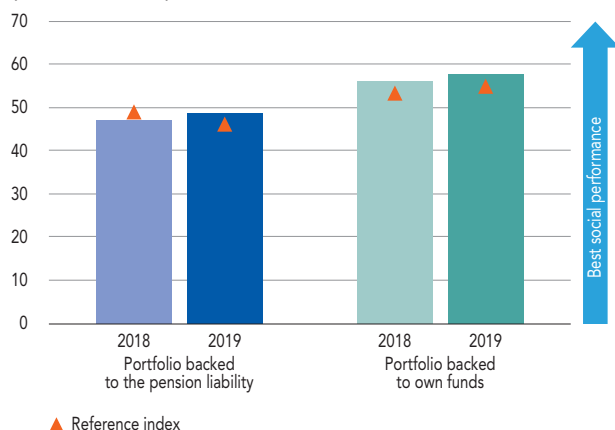
The analysis of ESG scores covers more than 99% of the equity component of the Portfolios. In 2019, the average ESG score for the equity component of the portfolio backed to the pension liability was 48 out of 100. **This corresponds to its reference index and is 5 points higher than the score calculated for the same portfolio in 2018.** The average ESG score for the equity component of the portfolio backed to own funds was 55 out of 100. **This is 5 points higher than its reference index and 5 points higher than the score calculated for the same portfolio in 2018.**

The sovereign bond component

The analysis of ESG scores covers more than 99% of the sovereign bond component of the Portfolios. In 2019, the average ESG score for the sovereign bond component of the portfolio backed to the pension liability was 71 out of 100. **This is 10 points lower than its reference index and 3 points lower than the score calculated for the same portfolio in 2018.** The average ESG score for the sovereign bond component of the portfolio backed to own funds was 79 out of 100. **This corresponds to its reference index and to the score calculated for the same portfolio in 2018.**

Score relating to occupational health and safety for the equity component of the Portfolios

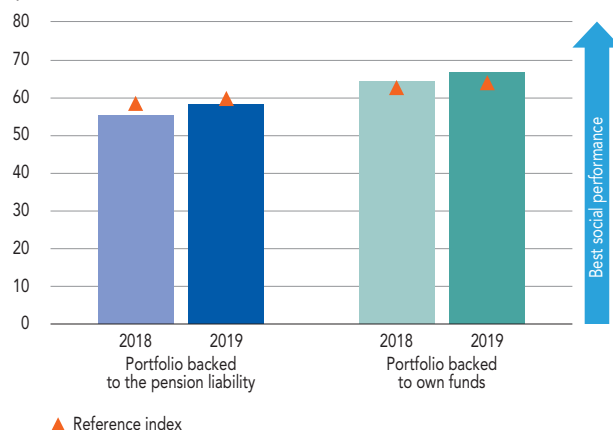
(y-axis: health and safety score)



Sources: Vigeo Eiris, Banque de France analysis.

Score relating to non-discrimination for the equity component of the Portfolios

(y-axis: non-discrimination score)



Sources: Vigeo Eiris, Banque de France analysis.

Focus on social performance

In terms of social performance, the Banque de France pays particularly close attention to the evolution of two indicators for equity portfolios:

- occupational health and safety;
- non-discrimination.

Methodology

The data comes from ESG scores provided by Vigeo Eiris.

The score relating to occupational health and safety considers the following information:

- company commitment and actions to protect the right of employees to a safe working environment, provide safe working conditions and protect their physical and emotional wellbeing;
- the result of several performance indicators such as accident frequency and severity.

The score relating to non-discrimination considers the following information:

- the way in which the company prevents all forms of discrimination in the workplace, including training and awareness, whistleblowing or reporting procedures,

positive action initiatives, risk assessments, networking initiatives, monitoring wage gaps and flexitime initiatives;

- the result of several performance indicators such as the percentage of women in management positions and the inclusion of disabled persons.

Results

The equity component

The analysis of social performance indicators covers more than 99% of the equity component of the Portfolios. In 2019, the score relating to occupational health and safety for the equity component of the portfolio backed to the pension liability was 49 out of 100. **This is 2 points higher than its reference index and 3 points higher than the score calculated for the same portfolio in 2018.** The score relating to occupational health and safety for the equity component of the portfolio backed to own funds was 58 out of 100. **This is 6 points higher than its reference index and 3 points higher than the score calculated for the same portfolio in 2018.**

In 2019, the score relating to non-discrimination for the equity component of the portfolio backed to the pension liability was 59 out of 100. **This is 2 points lower than its reference index but 5 points higher than the score calculated for the same portfolio in 2018.** For the equity component of the portfolio backed to own funds, the score was 67 out of 100. **This is 5 points higher than its reference index and 4 points higher than the score calculated for the same portfolio in 2018.**

PILLAR 3:

EXERCISING ITS VOTING RIGHTS

AND INFLUENCING ISSUERS

In order to fulfil its role as a committed and responsible shareholder, the Banque de France intends to exercise its voting rights in accordance with a formalised policy promoting, among other things, better recognition of ESG issues from the companies in which it invests. The Banque de France commits to being a shareholder with a long-term outlook.

Adopt a voting policy which includes provisions on extra-financial transparency in 2019 – Objective No. 4

The Banque de France believes that the exercise of its voting rights is a concrete means of leverage to encourage issuers to change their practices on ESG issues over a long-term horizon. In accordance with its set objective, the Banque de France has adopted a voting policy that sets out its expectations of issuers. In particular, extra-financial transparency is now a voting criterion for general meetings. In short, the Banque de France's voting policy is built on the following principles, broken down according to the types of resolutions proposed to the shareholders.

- Approval of financial statements and management: integrity of management and financial and extra-financial information.** As such, the Banque de France expects extra-financial information such as carbon emissions related to the company's activities to be disclosed, in accordance with European directive 2104/95/EU.
- Profit distribution, management of own funds and capital transactions: a distribution policy geared towards long-term investment.** For example, the Banque de France is in favour of paying bonus dividends as long as they reward long-term shareholder loyalty.
- Board of directors or supervisory board: competence and independence of the board, diversity and separation of powers.** In particular, the Banque de France aims to ensure gender balance on the boards of directors, the appointment of directors with a good understanding of the challenges of the energy and ecological transition (EET), the creation of a committee dedicated to EET issues, and the consideration of the company's extra-financial performance when reappointing executives.
- Executive remuneration and workforce association: a transparent and consistent remuneration policy.** In particular, the variable remuneration of executives must take into account extra-financial criteria.
- Amendments of company articles and shareholder rights: respecting shareholder rights.** For example,

amendments of company articles to authorise head office transfers should be considered on a case-by-case basis, taking into account the issue of tax and legal havens, shareholder rights and governance practices.

- **External resolutions:¹ improving environmental, social and governance practices.** In particular, the Banque de France supports external resolutions aimed at setting CO₂ emission reduction targets, reducing the carbon intensity of activities and minimising the risks associated with climate change (physical, financial or regulatory).

The Banque de France intends to apply its voting policy to all the companies in which it invests. It will be implemented as from 2020 for all companies in which the Banque de France is a direct shareholder. Given its role as a supervisor and a guarantor of financial stability, the Banque de France refrains from directly owning equity in the companies that it supervises – banks or insurance undertakings – in order to avoid any risk of conflict of interest between its supervisory activities and its investment activities.

In the event that the Banque de France invests in dedicated funds or via delegated management, it ensures that the practices of its managers are consistent with the principles defined in its voting policy. In 2019, a project was launched to align the existing practices of the Banque de France's main asset manager, BDF-Gestion,² with the principles set out above. For example, BDF-Gestion voted against the appointment of the chair of the appointments committee (or one of its members) when a minimum threshold of 40% women on the board of directors had not been reached. The alignment of practices will be finalised in time for the 2021 general meeting votes on the 2020 financial year. This gives the management company the time to integrate the new provisions.

The Banque de France may revise its voting policy to take into account the latest regulatory developments, changes in governance practices in France and around the world, and dialogues with investors.

Reach a general meeting attendance rate of over 40% in 2019 and 80% by 2020 – Objective No. 5

The general meeting attendance rate objective for 2019 was met: calculated overall for all equity portfolios,³ it came to 49%. The rate was 100% for companies in which the Banque de France is a direct shareholder. The Banque de France and its main asset manager will continue their efforts in order to achieve an attendance rate of 80% by 2020, in accordance with the objective set.

¹ Resolutions tabled by shareholders at general meetings, in addition to the resolutions drafted by the board of directors, which make up almost all the resolutions submitted to a vote. These shareholder resolutions reflect investor commitment to engaging with companies in order to influence their strategy. Over recent years, the climate has been a favoured theme for investors filing resolutions.

² BDF-Gestion was created on 27 December 1995 and is the Banque de France's asset

management subsidiary. It manages 30 collective investment schemes (dedicated, open to the public and employee savings schemes) as well as a number of individual mandates for individual investors. It is set behind a strict Chinese wall and does not benefit from any insider information on the economic sectors covered by the supervisory missions of the Banque de France.

³ Excluding passive external index funds, i.e. 2% of Portfolios.

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