

PUBLIC REPORT

20

19

RISE

KEY FIGURES 2019

Market value
of net assets

€34.9bn

at 31 December



Annualised internal rate
of return on investments

5.7%

since the creation of RAFP
(+12.5% in 2019)

€353m

benefit payment orders issued



€1.92bn

contributions collected



4.5m

active contributors



43,500

contributing employers

CROSS PERSPECTIVES

The final year of the fourth term of office of ERAFP's board of directors involved a wealth of fundamental decisions, which demonstrated the maturity of its members' thinking and the quality of its dialogue with its supervisory authorities.

With the prospect of a long period of low interest rates now entrenched in everyone's thoughts and actions, ERAFP has been given new opportunities to diversify its asset base. These allow it to progress further in its role not only as a long-term investor but also, first and foremost, as a pension scheme that takes care to maintain the purchasing power of the benefits it provides. Rises in service value over many years – indeed since the early days of the Scheme – compare favourably with French inflation rates. This is to be applauded, as it is the result of cautious, patient and constantly refined work.

Having been a pioneer of socially responsible investing, ERAFP never rests on its laurels: in 2019, it signed the Tobacco-Free Finance Pledge (and announced that it would no longer invest in this industry), and also disengaged from industries in which thermal coal accounts for more than 10% of revenues. At the same time, it is urging the companies in which it invests to adopt a strategy that conforms to the objectives of the Paris Agreement.



The final year of the fourth term of office of ERAFP's board of directors involved a wealth of fundamental decisions, which demonstrated the maturity of its members' thinking and the quality of its dialogue with its supervisory authorities.





DOMINIQUE LAMIOT, CHAIRMAN OF ERAFP

Along with other major public sector investors, ERAFP has also made a commitment to incorporate the United Nations Sustainable Development Goals into its investment strategy, setting itself priorities that will contribute towards their achievement by 2030.

All these topics, researched by our staff and discussed and examined in detail in committees, have been the subject of debate – sometimes intense debate – within the board. However, I support the assessment expressed by the directors themselves for the 2015-2019 term of office that what defines this board is our ability to respect one another's convictions and listen to their arguments. I must say this is something of which I am proud, and of which we can all be proud. I am sure there is some merit in looking back on the real progress made by a highly effective Scheme, not only in its financial, economic, social and environmental results, but also in its governance methods.

**LAURENT GALZY,
CEO OF ERAFP**

After years of taking small steps in the ramp-up of the public service additional pension scheme, a genuinely crucial change was made to the regulatory framework in 2019, which now gives ERAFP the means to fully play its role as a long-term investor serving the economy and as the trusted provider of an optimised pension supplement for its members.

The order of 31 July 2019 raises the upper limit for investments in equities and unlisted asset funds to 45%, raises the limit for real estate investments from 12.5% to 15% and makes it possible to borrow more to finance real estate purchases, raising the permitted loan-to-value ratio from 25% to 50% of the book value of the investments. The authorised limit for ERAFP's direct investments in collective investment undertakings was raised from 3% to 10%, giving us the scope to adopt a more ambitious policy for investing in property assets, in which we have been assisted since the end of the year by a committee that includes independent experts.





The return on our investments, 12.5% in 2019 and 5.7% since the Scheme was created, and the financial coverage ratio of 124% of the Scheme's commitments, are evidence of its performance. This lasting performance enables us to face up to an increasingly turbulent world with a greater capacity for resilience. ”

At the same time, ERAFP has been more vigorous in showing its permanent commitment to a 100% SRI policy, not only by signing the Tobacco-Free Finance Pledge, disengaging from coal, and signing the French public sector investors' charter in support of the Sustainable Development Goals (SDGs), but also by dint of its decisive action in support of housing for public employees. With a total portfolio worth €34.9 billion at the end of 2019, we can congratulate ourselves for winning the Europe-wide award for best equity investment strategy, but most of all for being a major player in financing the French economy, in which €12.4 billion (44%) of our total assets are invested. These results are down to the rigorous work of ERAFP's staff, who are proud to be a pioneer in French sustainable investment and to offer, with the support of the administrative management provided by CDC, the best possible service to our contributors and beneficiaries.

The return on our investments, 12.5% in 2019 and 5.7% since the Scheme was created, and the financial coverage ratio of 124% of the Scheme's commitments, are evidence of its performance. This lasting performance enables us to face up to an increasingly turbulent world with a greater capacity for resilience.

CROSS PERSPECTIVES

1 May 2019



IMPLEMENTATION OF CAPITAL SPLITTING

At its meeting of 28 March 2019, the board of directors resolves to adjust the payment terms for lump sum benefits, allowing for split payments in certain cases where the retiree’s final entitlement is not known at the time of liquidation.

> Page 23



3 July 2019



PUBLICATION OF A NEW CLIMATE INDICATOR IN ERAFP’S PUBLIC REPORT

ERAFP enhances its disclosures regarding climate commitments by publishing the temperature of its portfolio by sector and by asset class in its public report.

> Page 95

9 Aug. 2019



A NEW REGULATORY INVESTMENT FRAMEWORK FOR ERAFP

The order of 3 July 2019 creates more freedom to invest in equities, unlisted asset funds (private equity and infrastructure) and real estate.

> Page 44

26 Sept. 2019



SIGNING OF THE TOBACCO-FREE FINANCE DECLARATION

ERAFP announces that it no longer holds any investments in the tobacco industry and has taken the Tobacco Free Finance Pledge, as one of 150 signatories managing more than €8,000 billion in assets.

> Page 94

14 Nov. 2019



ALIGNMENT WITH THE OBJECTIVES OF THE PARIS AGREEMENT

ERAFP asks companies to develop a strategy in line with the objectives of the Paris Agreement and is accelerating its withdrawal from thermal coal by divesting from companies that derive more than 10% of their revenue from thermal coal-related activities.

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September

November

December

2 Dec. 2019



SIGNING OF THE PUBLIC SECTOR INVESTORS' CHARTER IN FAVOUR OF THE SDGS

Along with other major public sector investors, ERAFP has also made a commitment to incorporate the United Nations Sustainable Development Goals into its investment strategy, setting itself priorities that will contribute towards their achievement by 2030.

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3 Dec. 2019



ERAFP WINS AWARD FOR ITS EQUITY INVESTMENT STRATEGY

ERAFP was awarded the prize for the best European equity investment strategy at the annual IPE (Investment & Pensions Europe) Awards ceremony.

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ASSET MANAGEMENT MANDATES AWARDED BY ERAFP

Pursuant to the applicable regulations, asset management is mostly delegated to external asset management companies.

Allocating the delegated investment management portfolios to a number of different firms spreads financial risk across a number of service providers; this is a prudent approach to the management of assets administered on behalf of beneficiaries.

Other than for the euro-denominated corporate bond mandates, each of the asset management companies has created a dedicated investment fund, in which ERAFP invests based on market conditions in accordance with a fully internal investment process. Investments are made in each fund based on its overall performance and ERAFP's investment strategy.

On 22 October 2019, ERAFP issued a call for tenders with a view to awarding three SRI management mandates for global convertible bond portfolios.

IN CONNECTION WITH PREVIOUSLY LAUNCHED TENDERS, ERAFP:

awarded three SRI management mandates for emerging market corporate bonds on 23 January, namely one active mandate for Aberdeen Asset Management Limited and two standby mandates awarded to Amundi and BFT IM – Investec AM.

awarded a management mandate for French real estate assets on 4 November 2019 to AEW Ciloger.

AT THE END OF THE YEAR, ON ERAFP'S BEHALF:

- + three companies (Amundi, La Banque Postale AM and Ostrum AM) were managing euro-denominated corporate bonds;
- + one company (AXA Investment Managers Paris) was managing US dollar-denominated corporate bonds;
- + two companies (Schelcher Prince Gestion and Lombard Odier Gestion) were managing convertible bonds, one under a European mandate and the other globally;
- + three companies (Aberdeen Asset Management Limited, Amundi and BFT IM – Investec AM) were managing emerging country corporate bonds;
- + seven companies (Allianz GI, Amundi, AXA Investment Managers Paris, EdRAM, Mirova, Ofi AM and Sycomore AM) were managing euro-zone listed mid and large cap equities;
- + one company (Candriam) was managing European listed mid and large cap equities;
- + one consortium (BFT IM – Montanaro AM) was managing European listed small and mid cap equities;
- + two companies (Sycomore AM and Amiral Gestion) were managing French listed small and mid cap equities;

- + two companies (Ostrum AM and Robeco Institutional Asset Management) were managing North American listed large cap equities;
- + two companies (Comgest SA and Robeco Institutional Asset Management) were managing Pacific-region listed large cap equities;
- + one company (Amundi) was managing a multi-asset portfolio;
- + one company (Access Capital Partner) was managing a portfolio of unlisted private equity assets;
- + one company (Ardian Capital SA) was managing a portfolio of unlisted infrastructure assets;
- + two companies (AEW Ciloger and La Française REM) were managing French real estate assets;
- + two companies (AXA Real Estate Investments Managers SGP and LaSalle IM) were managing European real estate assets;
- + one company (Ampère Gestion) was managing French residential real estate assets;
- + one company (Millennium Global) was managing a specialised professional foreign exchange hedging fund.

RAFP OR ERAFP?

Article 76 of the 21 August 2003 pension reform law created a mandatory public service additional pension scheme – known as ‘retraite additionnelle de la fonction publique’, or RAFP – implemented by means of under Decree 2004-569 of 18 June 2004.

RAFP therefore generically describes the Scheme created through this law, which is not a legal entity.

ERAFP, or ‘*Établissement de retraite additionnelle de la fonction publique*’, is the public sector administrative entity charged with the Scheme’s management.

Legal references

Article 76 of the French Pension Reform Law 2003-775 of 21 August 2003.

Decree 2004-569 of 18 June 2004 on the French Public Service Additional Pension Scheme.

Order of 26 November 2004 implementing Decree 2004-569 of 18 June 2004 on the French Public Service Additional Pension Scheme.

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MANAGEMENT OF RAFP IN 2019

RAFP'S MAIN ROLES

A unique scheme,
operational since

2005

Operational since 2005, the French Public Service Additional Pension Scheme (RAFP) is a unique scheme.

> **Providing an additional pension to public sector employees**

Thanks to the Scheme, close to 4.5 million contributors will receive additional pension benefits. Their contributions are based largely on bonuses and are topped up by some 43,500 public sector employers. Contributions collected totalled €1.92bn in 2019.

> **Promoting public service values and socially responsible investment**

Since the Scheme was set up, the board of directors has striven to put into practice its fiduciary responsibility to its contributing public sector employees and beneficiaries.

Accordingly, it has developed an ambitious programme to institute a socially responsible investment policy founded on public service values. This policy takes environmental, social and governance criteria into account in all of the Scheme's investment decisions.

> **Recognition by the Scheme of its impact**

ERAFP is the only French pension fund that aims to show that an investor can promote the public interest by encouraging a carbon-free economy. It also follows ambitious investment plans in accessible housing, particularly where they benefit its contributors, and in developing economic activities that create jobs.

THE WORK OF THE BOARD OF DIRECTORS

In 2019 – four years into its mandate – the board of directors continued to work at a steady pace.

MAIN DECISIONS ADOPTED IN 2019

- _ At its meeting of 28 March 2019, the board of directors decided to amend the terms of lump-sum payments where the beneficiary has less than 5,125 vested points.
- _ At its meeting of 15 October 2019, the board of directors decided that the Scheme should join the Public Interest Group for the Modernisation of Social Security Declarations (GIP-MDS) as from 1 January 2020.
- _ At the same meeting, the board of directors adopted the evaluation report on its work during the 2015-2019 mandate.

NEW LAWS AND REGULATIONS APPLICABLE TO ERAFP

Order of 31 July 2019 on the French Public Service Additional Pension Scheme, which reforms ERAFP's investment framework.

This order notably gives ERAFP greater scope to diversify its assets.

Decree of 16 October 2019 amending various provisions relating to ERAFP.

This decree updates decree no. 2004-569 of 18 June 2004 on the Scheme with respect to various organisational aspects of its governing bodies.



UPDATE ON THE EVALUATION EXERCISE ON THE LAST BOARD MANDATE

Performing the first end-of-mandate evaluation of its work, as was proposed in the revision to its internal rules in 2018, has enabled the board of directors to identify a number of learning points from the period 2015-2019:

- _ Implementation of the technical management guidelines enabled the service value of a point to be increased in every year of the board's mandate by an amount equal to or above the previous year's inflation rate, thus doing more than merely maintaining the purchasing power of the Scheme's benefits.
- _ The continued move towards a more balanced allocation between bonds and variable-income assets has led among other things to the establishment of a medium-term real estate strategy with a focus on residential property, particularly 'intermediate housing' (properties for which the rent is higher than for social housing but below the free market rate), as well as a broadening of the geographical spread of investments and expansion into new investment types such as private equity and infrastructure.
- _ The revision of ERAFP's SRI Charter in 2016 made combating climate change a priority in terms of both investment selection and shareholder engagement, while also enabling it to gradually set up a system for monitoring companies' breaches of international standards, so as to spotlight controversial practices and measure the results of initiatives aimed at changing them.
- _ Close engagement in the board's work by directors and by those reporting to them is key to ensuring that board discussions are both open and knowledgeable, in an atmosphere in which all views are given a good hearing.

WORK BY THE BOARD'S BODIES IN 2019

ERAFP's board of directors met three times in 2019.

The board's sub-committees met 15 times in all during the year. Directors also took part in two training days on topics covering derivatives and hedging instruments and SRI approaches for non-rated investments; individual support was also offered to help directors complete their declarations of interest following their appointment.

REAPPOINTMENT OF THE BOARD OF DIRECTORS

_ Pursuant to the order of 22 October 2019, the members of the board of directors were appointed for a new mandate period with effect from 26 October.

_ By decree of the President of the Republic on 18 November 2019, Dominique Lamiot was reappointed as chairman of ERAFP.

_ By decree of the President of the Republic on 19 March 2020, Jean-Christophe Lansac was appointed as vice-chairman of ERAFP.



FIND OUT MORE

Scheme governance

ATTENDANCE AT BOARD MEETINGS IN 2019

Source — ERAFP

QUALIFIED PERSONS

Dominique Lamiot

Pierre Mayeur

Emmanuelle Walraet

EMPLOYERS' REPRESENTATIVES

Fédération hospitalière de France 1

Fédération hospitalière de France 2

Régions de France

Assemblée des départements de France

Association des maires de France

La Poste

MINEFE

Ministère de la Défense

REPRESENTATIVES OF ACTIVE CONTRIBUTORS

Solidaires

CFTC

CFE-CGC

UNSA

FSU

FO

CFDT

CGT



EMMANUELLE WALRAET,
CHAIR OF THE ASSET AND LIABILITY
MANAGEMENT COMMITTEE (CSAP)

WORK OF THE CSAP

Having already been a member of the asset and liability management committee during the mandate that ended in 2019, I am now, as this new mandate begins, following in the footsteps of my predecessor Éric Poglio in his endeavours to consolidate the robustness of the Scheme while also giving it the responsiveness it needs in a market environment where traditional benchmarks are being shaken up.

The order of 31 July 2019 marks an additional step in ERAFP's diversification of its asset base: with the rises in the investment limits for equities and alternative investment funds (from 40% to 45%) and real estate investments (from 12.5% to 15%), the means have been provided to allow greater flexibility in seizing market opportunities or taking part in market projects, while the limit on ERAFP's direct investments in collective investment undertakings has also been revised upwards from 3% to 10%. These recent changes will enable us to enjoy greater management fluidity in 2020, against an exceptional market backdrop.

While the changes in regulatory limits allow greater diversification on the asset side, further improvement is also required in the Scheme's technical management in terms of liability measurement: following on from the work carried out on mortality tables, which led to a better understanding of the Scheme's population, we can now ponder further changes to prudential parameters and build on our past experience as we implement the technical management guidelines. We will therefore continue to work on making appropriate adjustments to the discount rate parameters.

“
We can now
ponder
further changes
to prudential
parameters and
build on our past
experience as
we implement
the management
guidelines.”

WORK OF THE CSA

Significant work was carried out in 2019 by my predecessor, Francis Sahal. I particularly welcome the support provided by the Audit Committee to the efforts made by ERAFP's management and the administrative manager in striving to reduce the variances between forecasts and actual results, the effects of which can already be seen at the start of this new mandate and which must be continued.

Other highlights in 2019 include the implementation of the General Data Protection Regulation (GDPR), which gave rise to the drafting of an amendment to the 2016-2020 Objectives and Management Agreement and is now fully effective at ERAFP, and the adoption of a new, tighter schedule for approving financial statements starting from the 2019 accounts, which will also lead to earlier publication of the public report. Lastly, work was carried out on updating operational risk mapping and the financial risk management system. I intend to enhance awareness of and refine the quality of these systems, whether in relation to internal control, operational risk or financial risk management, through dialogue with all ERAFP's stakeholders. As the Objectives and Management Agreement 2016-2020, which governs ERAFP's relations with its administrative manager, the CDC, will shortly expire, the challenge for 2020 will be for ERAFP to lay down a new agreement and achieve the expected progress in a genuine partnership with the CDC.

MICHEL ARGIEWICZ,
CHAIR OF THE AUDIT
COMMITTEE (CSA)



Intend to enhance awareness of and refine the quality of these systems, whether in relation to internal control, operational risk or financial risk management, through dialogue with all ERAFP's stakeholders. ”



We will propose to the board of directors an improvement to the split lump sum payment scheme from the first half of 2020. ”



STEVE MAZENS,
CHAIR OF THE COLLECTIONS
COMMITTEE (CSR)

WORK OF THE CSR

In addition to its regular tasks, in 2019 the Collections Committee continued the work begun the previous year on resolving the difficulties caused by the conversion of lump sums to annuity payments. ERAFP's board of directors resolved to allow the split payment of lump sums (with a first instalment equivalent to 15 months' worth of annuity payments) in March, and this then took effect on 1 May 2019 for beneficiaries holding between 4,600 and 5,124 points at the time of initial liquidation. The balance of the lump-sum is then paid at the end of the 15-month period, with no conversion of capital into an annuity. The committee members paid particular attention to ensuring that RAFF members and associates were properly informed of this arrangement. A number of communications measures were therefore carried out. These included setting up a specific section on the www.rafp.fr website, posting practical information online and updating the RAFF benefits simulator, training telephone advisers and the setting-up of a voice server by the administrative manager, etc. In proposing this arrangement, the Committee requested that particular care be taken by the administrative manager: as it was rolled out, it became apparent that in some cases the plan did not correspond to the reality experienced by employees. In particular, contributors with long careers or in active categories have found that the time lag between leaving work and becoming entitled to Scheme benefits (at the legal retirement age of 62) has generally not enabled them to acquire new Scheme points. We will therefore propose to the board of directors an improvement to the split capital payment scheme from the first half of 2020.

**PHILIPPE LAURENT,
CHAIR OF THE INVESTMENT POLICY
MONITORING COMMITTEE (CSPP)**



WORK OF THE CSPP

Disinvesting from tobacco producers and issuers generating more than 10% of their revenue from thermal coal energy, methodological progress in the climate analysis of the portfolio, the signing of the French public sector investors' charter in favour of the Sustainable Development Goals (SDGs), a proactive dialogue policy with companies to commit them to complying with the objectives of the Paris Agreement, and more: ERAFP took a series of strong initiatives in 2019 to underpin its commitment to the energy transition, in line with the practical application of its SRI philosophy. These followed some occasionally intense discussions within our committee – I see this as proof of the engagement of its members and hope that our discussions will continue to be as lively in 2020, echoing the vitality of ERAFP's young and talented SRI team! This year, as always, we will be keeping a close eye on developments in our economies and societies, grappling with issues such as health which are undoubtedly essential for a long-term investor such as ERAFP.

“

ERAFP took a series of strong initiatives in 2019 to underpin its commitment to the energy transition, in line with the practical application of its SRI philosophy. ”

2019: ADDITIONAL PENSIONS IN BRIEF

Changes in regulations and Scheme parameters.



A mandatory, points-based scheme created for public servants working in French central government (civil and military), local and regional authorities and the public hospitals sector, and members of the judiciary.

An additional retirement benefit that takes into account bonuses and ancillary remuneration.

4.5 million contributors.

A contribution basis made up of all types of remuneration not included in the calculation of the basic pension – bonuses, overtime hours, allowances and benefits in kind, capped at 20% of gross basic salary.

An overall contribution rate set at 10% of the basis amount, split evenly between the employer (5%) and the public servant (5%).

Contributions that are credited to an individual retirement account, which can be viewed online www.rafp.fr



FIND OUT MORE

How are contributions calculated?

THE RAFF BENEFIT RIGHTS VESTING SYSTEM

LEGAL AND REGULATORY DEVELOPMENTS IN 2019

Decree No. 2019-1059 of 16 October 2019 amends decree no. 2004-569 of 18 June 2004 on the French Public Service Additional Pension Scheme by introducing the notion of 'the total gross balance' into article 2 of the ERAFP decree in order to determine the 20% cap on contributions by military personnel.

Law no. 2019-1446 of 24 December 2019 on the financing of social security for 2020 - Art. 18 (XII - 4°- c)

Article 18 of the social security financing law for 2020 extends the duties of the Unions de recouvrement des cotisations de sécurité sociale et d'allocations familiales (URSSAF). URSSAF is being entrusted with the collection of all contributions to basic or additional social security schemes that are legally mandatory for employees or similar persons. The collection of RAFF contributions will therefore be transferred to URSSAF for current activity periods with effect from 1 January 2023.

In accordance with decree no. 2018-873 of 9 October 2018 amending article 9 of decree no. 2004-569 of 18 June 2004 on the French Public Service Additional Pension Scheme, the board of directors has, by resolution no. 3 of 28 March 2019, put a split pay-out mechanism in place for lump-sums below the threshold of 5,125 points.

This mechanism provides for split payments for amounts between 4,600 and 5,124 points, in order to reduce the likelihood that beneficiaries are left owing money to the Scheme. Three cases are now provided for:

- _ up to 4,599 points, the benefit is paid out as a single lump sum;
- _ between 4,600 and 5,124 points, the benefit is paid out on a split basis;
- _ above 5,125 points, the benefit is paid out in the form of a monthly pension.

Parameters set by the board of directors

€1.2317

purchase value of a point in 2019

€0.04605

service value of a point in 2019

CONTRIBUTIONS AND BENEFITS IN 2019

The Scheme's administrative management has been entrusted to Caisse des Dépôts (CDC) et Consignations pursuant to article 32 of the decree of 18 June 2004 on additional pensions for public servants. CDC is responsible for the following tasks under the authority and supervision of the board of directors: collection of contributions, maintenance of individual pension rights accounts, liquidation of rights, payment of benefits,¹ and the Scheme's accounting and operational communications. It accordingly acts as the Scheme's point of contact for employers, retired beneficiaries and active contributors with regard to their right to information.



Around 43,500 employers paid contributions to Caisse des Dépôts in respect of the Scheme in 2019.

€1.92bn of contributions collected in respect of the 2019 financial year.

4.5m active contributors in 2019.

154,000 pension liquidations and 63,000 individual RAFFP account revisions in 2019.

€353m of benefit payment instructions issued.

Nearly 203,000 annuities in payment.

¹ Except for the payment of benefits to retired central government public servants, which is the responsibility of the Directorate of Public Finance.

AROUND 43,500 EMPLOYERS...

Approximately 43,500 employers paid contributions in respect of the Scheme in 2019. The vast majority are local and regional authorities and public sector hospitals.

French central government employers registered with the Scheme mainly comprise regional public finance departments, ministries and commissioners to the armed forces. Note that 97.4% of employers had fully paid up their accounts for 2018 by the end of 2019.²

Having remained stable below 5% for a number of years, the rate of payment errors decreased in 2019 due to an improving situation reflecting the recent restructuring of regional and local authorities and support from the administrative manager, particularly in the form of communications measures. The average rate for the year was 3.6%, compared with 3.8% in 2018.

These payment incidents are subject to corrective actions, with 99.3% of incidents arising in 2019 settled during the year.

AROUND €1.92BN COLLECTED

The Scheme collected around €1.92bn of contributions in 2019. Employers with at least ten contributing employees pay contributions on a monthly aggregate basis. Those with fewer than ten contributors pay contributions annually.

A surcharge is levied on contributions in the event of late payment. In 2019, 622 employers were subject to late payment penalties in respect of 2018.

AND 4.5M CONTRIBUTING PUBLIC SERVANTS IN 2019

Each year, employers send Caisse des Dépôts a declaration summarising for each of their public servants the contributions paid in during the previous year.

The deadline for reporting contributions collected during 2018 was 31 March 2019. Provided the amounts reported matched the contributions received, the contributors' individual

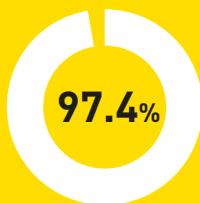
retirement accounts were updated after that date.

Working closely with the supervisory authority, ERAFP and Caisse des Dépôts have implemented actions to raise awareness among employers of their regulatory obligations and their employees' rights.

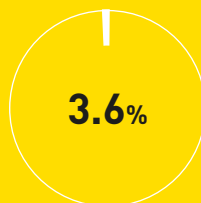
Caisse des Dépôts contacts employers, by telephone or in writing, whenever a discrepancy is observed between the amount declared and the amount received. The very high update rates for contributors' accounts since 2009 (almost 99% on average) is indicative of an increased awareness and understanding of the Scheme, which is helped by Caisse des Dépôts' actions to raise awareness among employers.

While the number of updated individual retirement accounts edged down in 2019, at 31 December the update rate stood at 99.5%.

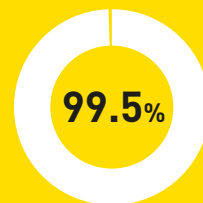
² As the employers' declarations are only required to be submitted in the year following payment of the contribution, the figures relate to 2018.



of employers' accounts fully paid up



rate of payment incidents, of which 99.3% were resolved



of individual retirement accounts updated at 31 December 2019

CLOSE TO 154,000 PENSION LIQUIDATIONS AND 63,000 BENEFITS REVISIONS IN 2019

Around 154,000 pensions were liquidated and 63,000 benefits³ were revised in 2019.

The significant fall in the number of revisions (-20%) is mainly due to the downward trend in the regional public service and public hospitals (-36% vs. 10% for the central civil service and military).

In all, €353m in benefits were paid out to beneficiaries in the year. This includes reversionary benefits paid out to partners and children under 21 of deceased beneficiaries.

CHANGES IN THE LUMP-SUM PAYMENT SCHEME

The introduction of the split lump-sum payment scheme led to a 12% decrease in the total amount of benefits paid in 2019. In particular, 130,792 lump-sum payments were made in 2019 compared with 150,751 in 2018, with an average amount paid of €2,881 in 2019 compared with €3,329 in 2018.⁴ This fall in the average figure compared to last year is because it includes the first instalments of split lump-sum payments to persons affected by the new arrangement. As these first instalments are only equal to 15 months' worth of annuity payments, this automatically leads to a reduction in the average lump-sum amounts received by the beneficiaries in 2019.

ANNUITY PAYMENTS TAKE OFF

202,815 annuities were paid in 2019. The continued increase in the number of annuities compared with lump sum payments mirrors the Scheme's gradual growth since its inception in 2005. The average annuity in 2019 was €366⁵, 5.8% higher than in 2018 (€346). By definition, as contributions did not start until 2005, annuity recipients have only been able to contribute to the Scheme for a maximum of 14 years.

Annuity payment instructions issued in 2019 were equal to 23% of lump-sum payments (€65m of annuities vs. €288m) and are continuing to grow, having increased by around 41% compared with the €46m paid out in 2018.

154,000

pension liquidations
in 2019

63,000

benefits revisions

€353m

in benefit payment
orders issued, comprising
€65m in annuities and
€288m in lump sums

Average lump sum of

€2,881

and average annuity
of €366

See tables in the appendix showing
changes since 2014, p. 128

³ These revisions result from updates to employees' individual retirement accounts based on individual corrective or additional declarations, linked in particular to the beneficiaries' contributions for their last year of activity.

⁴ Based on the theoretical number of points of beneficiaries with an automatic right to a lump sum at the time of liquidation.

⁵ Average monthly payment for the full year. Based on the theoretical number of points of beneficiaries with an automatic right to an annuity at the time of liquidation.

INITIATIVES FOR EMPLOYERS AND BENEFICIARIES AND INFORMATION ABOUT THE SCHEME

ERAFF's communications strategy is aimed at enhancing the Scheme's effectiveness by providing all stakeholders (beneficiaries, employers and institutional players) with the information required to participate fully at the appropriate level in its activities. It also aims to promote and show the relevance of ERAFF's SRI approach, since social responsibility only becomes effective once it is shared.

ERAFF'S COMMUNICATIONS STRATEGY HAS TWO FOCUSES:

_ **Institutional communication**, mainly with public sector bodies, this being ERAFF's responsibility.

_ **Operational communication** to inform employers and beneficiaries of their rights and obligations, which is the responsibility of the Administrative Manager, CDC.



MORE DETAILED INFORMATION FOR PUBLIC SECTOR EMPLOYERS

In its early years, the Scheme essentially assisted public sector employers with the practical aspects of fulfilling their responsibilities. Now, it aims to form a closer understanding of their needs and enhance their awareness of the Scheme's specific capitalisation and long-term socially responsible investment features.

In 2019, ERAFF continued its 'Meetings with public employers' programme, organising three new events with the support of the administrative manager. The first, for central public service employers, was held in April in Paris, in close collaboration with the State Pensions Service. Two others, aimed at local and regional public sector employers and hospitals, were then held in Rennes in June and Ajaccio in October.

These events are a good opportunity to share ideas and experience face to face with the Scheme's main contacts and thus take on board their needs in terms of information and systems, particularly regarding:

- _ day-to-day administration procedures for individual employee records;
- _ informing contributors about their rights, especially the new 'split lump sum' method for paying out Scheme benefits.

1,230

emails processed in 2019



8,400

employers' calls handled



160,000

'e-services' account viewings by employers



On the operational front, Caisse des Dépôts' call centre in Bordeaux handled around 8,400 telephone calls from employers in 2019 (91% of calls received). This represents a 12% increase compared to the 7,500 calls handled the year before.

Caisse des Dépôts also held a number of training and information sessions for employers.

Two types of sessions are held:

_ training sessions on pension procedures and systems for employees dealing with pensions in local and regional authorities and hospitals;

_ information sessions for decision-makers in local and regional authorities and hospitals.

These sessions are regularly used to present ERAFP's very popular video tutorials.

CDC also handled around 1,230 emails in 2019, slightly fewer than the year before.

Note that around 160,000 account viewings were recorded on the 'e-services' website set up for employers, more than in 2018.

RESPONDING BETTER TO THE NEEDS OF ACTIVE CONTRIBUTORS IS A SCHEME PRIORITY

> **The RAFF website is a vital tool for communicating with beneficiaries and an important complement to information provided by the employer⁶**

The site currently gives active contributors detailed information about the Scheme and allows them to view their individual retirement accounts using applications developed by Caisse des Dépôts.

The Scheme is now able to interact with its target audiences entirely electronically, via contact forms and newsletter sign-up services.

The quarterly newsletter subscription forms are available in the 'Newsletter' section of the Scheme's website: <https://www.rafp.fr/newsletter/formulaire-d-abonnement>.

The payment simulator – a long-time favourite with the Scheme's beneficiaries – can be accessed via the site's homepage, and practical information sheets are available in the 'Publications' section.

In 2019, two new video tutorials were posted on the Scheme's website and ERAFP's YouTube channel: <https://www.youtube.com/channel/UCATu6OUACOSh9EvnryXnVLg/videos>.

These two new videos are in addition to the two series of videos already online, one for employers and the other for beneficiaries. With five videos each, these explain how the Scheme works and answer the most frequently asked questions about it.

⁶ Results of BVA's 2014 survey on Scheme awareness and image.

> Informing retired beneficiaries

– Nearly 126,000 telephone calls from retired public servants were handled in 2019 (94% of calls received), which represents an increase of 12.5% from the 112,000 calls handled the year before. Some 20,490 items of correspondence (letters and e-mails) were also processed over the year, a sharp rise of 15% over the 17,771 items processed in 2018.

– The number of users of the SARA online service users reached 1,301,500 in 2019, a 20% increase from 2018 (1,082,000). This portal is complemented by a telephone appointment system operated via the Scheme's website, in which beneficiaries ask for an appointment and are called back on the day and at the time requested.

The administrative manager also continuously measures user satisfaction with its information services in order to improve the quality of its responses and case monitoring.

> Informing active contributors

In compliance with the rights of active contributors to information, mandatory schemes as a whole sent out 836,969 documents relating to RAFF (individual statements and general indicative estimates). Note that since 2011 RAFF has been responsible for providing beneficiaries with information if the primary scheme is unable to produce the required documents.⁷ Accordingly, 50,728 of the 836,969 documents were sent out directly by RAFF, 30,847 of them electronically.

Furthermore, in 2019 Caisse des Dépôts handled nearly 33,300 telephone calls from active contributors under their right to information (92% of calls received), a 43% increase from the 23,300 calls handled in 2018, as well as around 1,800 letters and e-mails (a slight decline of 11%).

In 2019, Caisse des Dépôts participated in eight inter-scheme pension fairs and hosted 40 'Understanding retirement better' conferences aimed at active contributors, enabling them to communicate directly with 4,155 contributors.

COMMUNICATION TO THE PUBLIC

> Via the press

ERAFP's investments and strategy account for most of its citations in the press. Its communiqués on the award of mandates and its socially responsible engagement also continue to be widely reported. ERAFP's image is growing, particularly in the sphere of socially responsible investment, an area in which the institution is seen as a major player in France.

In 2019, a wealth of press and online articles referred to RAFF and ERAFP, mainly in connection with its engagement with the energy transition (aligning with the objectives of the Paris Agreement) or its investment commitments.

> Via social media

ERAFP is present on three social media platforms: Twitter (for the last 6 years), LinkedIn and YouTube.

These three accounts, managed by ERAFP's communications department, are real channels of communication that help strengthen the Scheme's identity, raise its visibility and highlight its initiatives, particularly in areas such as the energy transition.

ERAFP informs audiences already familiar with ERAFP and RAFF of its actions, commitments and news via these platforms. But more importantly they enable it to reach out more easily and on a much wider scale to those who know little or nothing about the Scheme.

> Via the website: a central communication tool for the Scheme

Site traffic remained steady in 2019, with approximately 65,000 visits per month both this year and the year before. The payment simulator was the most visited page, while the calculator guide, the premium and conversion factors, the point value changes and the guidance notes were the most downloaded items.

⁷ Such as in the case of invalid affiliation agreements, known career contributions below the requisite minimum amount, ongoing re-employment procedures or employees exiting manager status, as defined by the Union Retraite GIP (retirement information public interest group).

TYPICAL BENEFITS PAYMENT SIMULATIONS⁸



LUMP SUM

Lump sum payment

JEAN
AN ADMINISTRATIVE ASSISTANT,
retires in 2019 aged 62.

He has **4,448 points** in his
individual RAFP account
(< 4,600 points)

	4,448
x	0.04605 ⁹
x	24.62 ¹⁰
x	1.00 ¹¹
	€5,042.93 gross

JEAN WILL RECEIVE A GROSS
LUMP SUM OF €5,042.93

Split lump sum payment

CLAIRE
AN ADMINISTRATIVE ASSISTANT
retires in 2019 aged 62.

She has **4,800 points** in
her individual RAFP account
(between 4,600 and 5,124 points).

	4,800
x	0.04605 ⁹
x	1.00 ¹¹
÷	12
x	X 15

€276.30 gross

CLAIRE WILL RECEIVE A **FIRST
INSTALMENT** OF HER LUMP SUM,
EQUAL TO FIFTEEN MONTHS'
WORTH OF ANNUITY PAYMENTS,
I.E. **€276.30 GROSS.**

The balance of her lump sum
benefit will be paid to her at the
end of the 15-month period.¹²

This will include the points
she earned during her final
year of contributions.



**FIND OUT
MORE**

Benefit simulator



ANNUITY

Annuity payment

**STÉPHANE
AN ATTACHÉ**
retires in 2019 **aged 62.**

He has **7,250 points** in his individual
RAFP account
(> 5,125 points)

	7 250
x	0,04605 ⁹
x	1,00 ¹¹
	€333.86 gross

STÉPHANE WILL RECEIVE A GROSS
ANNUITY OF €333.86 PER YEAR,
I.E. **€27.82 PER MONTH.**

This amount will be revalued
each year in line with the
service value of a point.

**ODILE
AN ATTACHÉ**
retires in 2019 **aged 67.**

She has **7,250 points** in her
individual RAFP account
(>5,125 points)

	7 250
x	0,04605 ⁹
x	1,22 ¹¹
	€407.31 gross

ODILE WILL RECEIVE A GROSS
ANNUITY OF €407.31 PER YEAR,
I.E. **€33.94 PER MONTH.**

This amount will be revalued
each year in line with the
service value of a point.

8_ Illustrative examples only, not contractually binding and given for indicative purposes only.

9_ Service value of a point in 2019.

10_ Lump sum conversion factor corresponding to life expectancy at the age when the lump sum is paid.

11_ Premium factor: after age 62, the higher the retirement age, the greater the factor.

12_ This balance will be paid to her either as a second lump sum, if her final number of points is lower than 5,125, or as a monthly pension if her number of points is above 5,125.

ERAFF'S FINANCIAL STATEMENTS

The Scheme's financial statements illustrate both its steady expansion and its financial strength.

ERAFF has a specific chart of accounts that reflects the comprehensive provisioning of its commitments and the characteristics of its financial investments. It requires, *inter alia*:

- _ the recognition of assets at their historical value, less any amortisation and impairment; and
- _ a very conservatively set discounting rate for the Scheme's commitments. The resulting rate for 2019 was 0.7% (net of expenses).

The board of directors voted on the 2019 financial statements at its meeting of 30 April 2020. On said date, the statutory auditors certified without reservation that the annual financial statements gave a true and fair view of ERAFF's assets, liabilities, financial position and the results of its operations at the end of the year under review.

A SOLID BALANCE SHEET

In 2019, total assets came to €28.3bn, up by 9% from the previous year. On the liabilities side, the technical reserve, which reflects the present value of future commitments corresponding to rights being accumulated or paid, discounted at the very conservative rate of 0.7%, came to €26.4bn (up 10% from 2018). On the assets side, investments totalled €28.1bn (up 9% year-on-year). A long-term impairment provision of €2.9m was set aside for financial assets deemed subject to a permanent unrealised capital loss, while, pursuant to the principle of prudence, the overall unrealised capital gain of €4.5bn at 31 December 2019 was not recognised. The market value of the Scheme's assets, which totalled €34.9bn at year-end, was equivalent to 132% of the value of its commitments. On the accounting front, the commitments coverage ratio came to 107.1%, resulting in the recognition of non-technical reserves of €1.9bn.

As for the other asset items, cash and cash equivalents amounted to €79.6m, while receivables from contributors and beneficiaries totalled €119.5m, reflecting contributions

not paid at the end of the financial year but due for subsequent collection, as well as overpayments to beneficiaries resulting from the commencement of annuity payments.

On the liabilities side, given that the Scheme was only recently established, the largest item (€24.5bn) is the reserve for rights in the course of accumulation.

The shortening of the preparation period for the financial statements has led to a change in the method used to estimate the Scheme's commitments. In previous years, the Scheme's commitments were estimated on the basis of the individual data available at the end of March following the annual drive to obtain employers' declarations.

With effect from 2019, individual employers' declarations for the financial year are no longer taken into account. The reserve for the Scheme is calculated on the basis of the contributions received in 2019.

The reserve for rights being paid increases in line with the number of annuity payments; it represented €1.9bn at the end of the year, up 24% from 2018.

BALANCE SHEET OVERVIEW

Source – ERAFP

Assets (net) in € millions

	2018	2019	VARIATION
Financial investments	25,818	28,089	8.8%
Receivables	115	120	4.5%
Cash and cash equivalents	89	80	-10.1%
TOTAL	26,022	28,288	8.7%

Liabilities (net) in € millions

	2018	2019	VARIATION
Technical reserves	23,988	26,399	10.1%
Non-technical reserves	2,024	1,877	-7.3%
Payables	10	11	9.0%
TOTAL	26,022	28,288	8.7%

€2.27bn

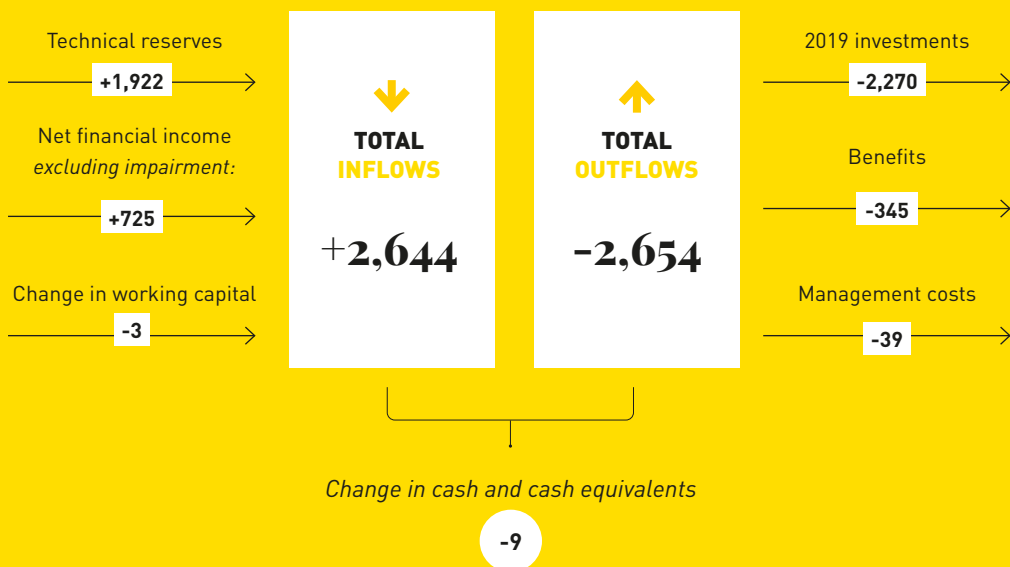
in funds invested in 2019

€2.27BN IN FUNDS INVESTED IN 2019

As regards financial flows, contributions and financial income for the year came to €2.65bn. Of these inflows, €2.27bn was invested and €345m was used to pay benefits.¹³ There was consequently a net increase of €9m in cash and cash equivalents.

CASH FLOW OVERVIEW (IN € MILLIONS)

Source — ERAFP



2019 INCOME STATEMENT

In 2019, technical income, mainly comprising contributions to the Scheme, totalled €1.92bn, unchanged from 2019. The technical reserve increased by €2.26bn. Net financial income totalled €724m, a 2% fall compared with 2018 which was mainly due to declining bond income and realised losses on disposals. Together with benefits (down by 12%) along with operating expenses of €39m,¹⁴ this led to a technical loss of €147m. Pursuant to Decree no. 2010-1742 of 30 December 2010, the accounting result was brought to zero through a reversal of the provision of the non-technical reserves, the amount of which consequently reduced to €1.9bn from €2bn at the end of 2018.

The balance sheet, income statement and cover letter of the statutory auditors' report appear in the appendix to this report.

€345m

benefits paid

€1.9bn

non-technical reserves

INCOME STATEMENT OVERVIEW (IN € MILLIONS)

Source — ERAFP

Technical income	1,922
Net financial income	724
Change in Scheme reserves	-2,412
Benefits	-345
Operating expenses	-39
Non-recurring income	3
Income before allocation to non-technical reserves	-147
Change in non-technical reserves (release)	147
TOTAL	0

¹³ In 2019, benefits recognised in the income statement, representing payments actually made, came to €345m while benefits calculated, or 'payment instructions issued', came to €353m. The difference is the amount of annuities in pre-allocation suspense accounts, which are credited to RAFF.

¹⁴ See p. 36 of the report.

MANAGEMENT COSTS IN 2019

A Scheme managed by a public administrative institution under the supervision of the State.

Administrative management provided by Caisse des Dépôts et Consignations (CDC), under the authority and control of the board of directors.

Management of financial assets partially delegated to investment management firms.

Direct management by ERAFP of government bonds, government-backed securities and investment funds.

Management costs in 2019: €39.1 m.

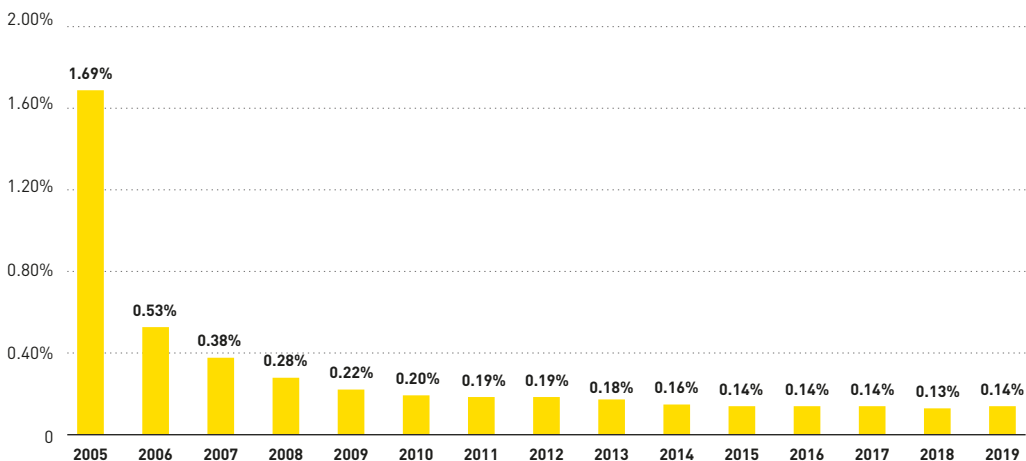
CONTROLLED MANAGEMENT COSTS

The operating budget for the Scheme and ERAFP is financed directly from amounts deducted from contributions, and is approved annually by the board of directors.

In 2019, the Scheme's management costs totalled €39.1m, the equivalent of 0.14% of the Scheme's net assets or 2% of contributions collected in 2019.

CHANGES IN SCHEME MANAGEMENT COSTS SINCE 2005 AS A PERCENTAGE OF NET ASSETS AT AMORTISED COST

Source — ERAFP



ERAFP: KEY FIGURES*

FINANCIAL DATA

Balance sheet assets of around

€28.3bn

Estimated financial coverage ratio of around

107%

Technical reserves of around

€26.4bn

Non-technical reserves of

€1.9bn

Discount rate set at

0.7%**

ECONOMIC DATA

Net assets at market value of

€34.9bn

Economic coverage ratio after revaluation of around

124%

Annualised internal rate of return on investments of

5.7%

since 1 January 2006

* Valuation at end 2019.

** Discount rate net of management fees, set using a method that takes account of re-investment risk.

SCHEME **STRATEGY AND PERFORMANCE**



TECHNICAL STEERING MECHANISMS

During the 2008 financial crisis and the ensuing economic crisis, the Scheme successfully and systematically covered its commitments to active contributors and retired beneficiaries.



—
ERAFP's long-term investment approach
is based on:

- _ **A particularly conservative approach** to defining technical parameters.
- _ **An asset allocation** designed to ensure its equilibrium over the long term.



RAFP is subject to strict prudential regulations stipulating that:

- _ **the Scheme's commitments** to its beneficiaries must always be fully covered by its assets.
- _ **the estimated present value** of these commitments must be calculated using a **conservative discount rate** (i.e. one consistent with a conservatively estimated return on the Scheme's assets).
- _ **the board of directors is responsible for ensuring this financial equilibrium.**

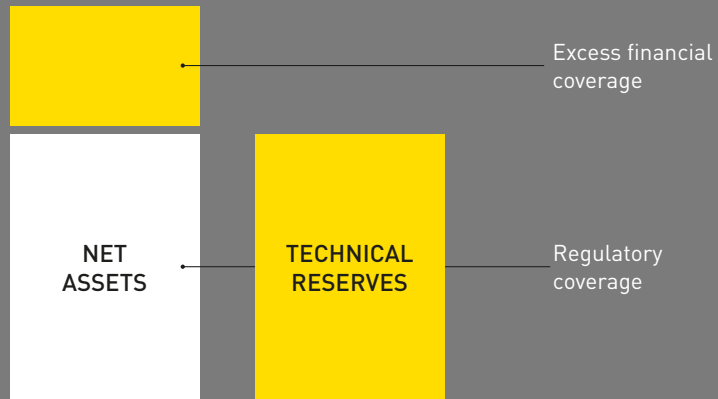
Conscious of its regulatory and prudential responsibilities, the board of directors has adopted written guidelines for managing the Scheme's technical parameters with a view to maintaining the purchasing power of beneficiaries' vested pension rights over the long term.

Ever since the Scheme was formed, the board of directors has carefully monitored changes in the following parameters:

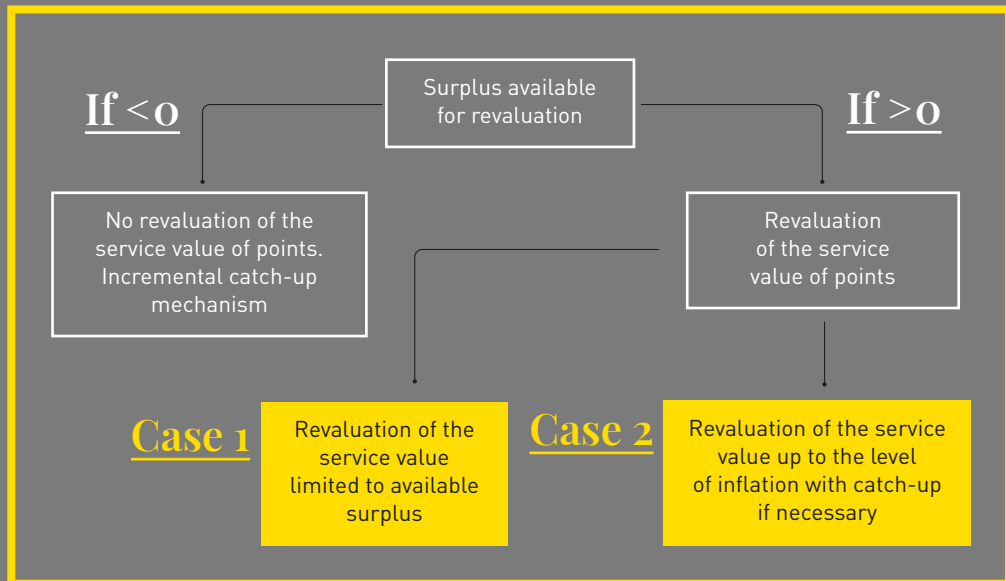
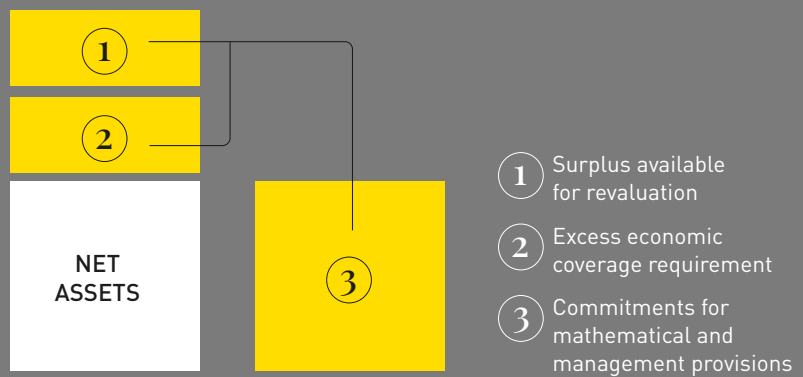
- _ the purchase and service values of points;
- _ the coverage ratio of the Scheme's commitments;
- _ the discount rate applied to reserves;
- _ the technical interest rate or 'premium rate'.

The guidelines recognise the existence of the link between the Scheme's ability to revalue vested rights and its assets, and also set out the conditions in which the premium rate may be revised.

Financial approach



Economic approach



Financial coverage ratio of

107.1%

COMMITMENTS COVERAGE RATIO

The obligation to cover the Scheme's commitments at all times entails careful monitoring of the financial coverage ratio. At the end of 2019, this ratio stood at approximately 107.1%. Mindful of its regulatory obligations, the Scheme has the necessary reserves and provides satisfactory coverage of its commitments. Nonetheless, the continuing very low level of bond yields in 2019 calls for a highly prudent approach to steering these parameters. To round out this first approach, ERAFP has sought to better define its capacity to revalue contributors' and beneficiaries' rights over the

long-term horizon in which it operates. Accordingly, it has defined an 'economic' coverage ratio, which takes into account the latent value of the Scheme's assets¹⁵ as well as the risks for which a margin of prudence should be recognised. This margin is defined as the 'excess economic coverage requirement'. If this requirement is not met, the service value of a point may not be increased, regardless of the financial coverage ratio. At 31 December 2019, the Scheme's economic coverage ratio after revaluation was 123.8%.

CHANGE IN POINT PURCHASE AND SERVICE VALUES SINCE 2014

Source — ERAFP

	2014	2015	2016	2017	2018	2019	2020
Purchase value (in €)	1.09585	1.1452	1.1967	1.2003	1.2123	1.2317	1.2452
Change	+1%	+4.5%	+4.5%	+0.3%	+1%	+1.6%	+1.1%
Service value (in €)	0.04465	0.04465	0.04474	0.04487	0.04532	0.04605	0.04656
Change	+1%	0%	+0.2%	+0.3%	+1%	+1.6%	+1.1%

¹⁵ The economic coverage ratio represents the relationship between, on the one hand, bonds valued at amortised cost and all other assets at market value and, on the other hand, the technical and investment management reserve.

PURCHASE AND SERVICE VALUES OF POINTS

The board of directors sets these parameters each year. Since adopting the management guidelines, it has taken into account the excess economic coverage requirement.

The mechanism set out in the guidelines links any revaluation of points to the economic coverage ratio. If the points revaluation is lower than the inflation rate, particularly if the coverage ratio is inadequate, a mechanism is implemented in subsequent years to allow increases in the purchase and service values of points to catch up with inflation.

In early 2020, the board of directors increased both the service value and the purchase value of a point by 1.1% for 2020.

RESERVE DISCOUNT RATE

The discount rate applied to the Scheme's reserves is set at a very conservative level, particularly compared with the practices of other European pension funds. It takes account of the decline in bond yields seen in recent years.

As a result of changes in the investment regulatory framework in 2016, which enable the Scheme to further diversify its asset allocation, certain parameters of the discount rate formula were updated in 2016, notably by including a conservative, flat-rate return for equities and gradually phasing out the dilution effect of contributions. These adjustments were based on the observed levels of income generated by the equities in ERAFP's current portfolio and by past investments, with a prudential margin consistently applied.

The discount rate net of fees used to value the technical reserve at 31 December 2019 was set at 0.7%, 10 basis points lower than the year before, owing to the substantial drop in interest rates towards the year end.

The regulatory minimum level of management fees is 0.20%, in accordance with the order published on 26 November 2018. This minimum level is used in the discount rate formula in order to reflect the economic realities that the Scheme faces.¹⁶ The resulting discount rate gross of fees came to 0.9%.

TECHNICAL INTEREST RATE OR 'PREMIUM RATE'

On the Scheme's inception, the initial annuity was calculated on the basis of a technical interest rate (premium rate) net of inflation set at 1.34% reflecting a return on benchmark assets of 3.34%. The real return of 1.34% was determined based on a long-term inflation rate of 2%, corresponding to the ECB's maximum target rate.

As these parameters fell out of sync with prevailing economic and financial conditions, the Scheme's premium rate was revised to make it consistent with market rates, by increasing the purchase value in 2015 and 2016 and raising the pivotal age for applying the premium.¹⁷ These changes reduced the premium rate to 0.90%.

+1.1%

Revaluation of the service value of a point for 2020

¹⁶ See 'Management costs' on page 36.

¹⁷ The guidelines provide for an immediate revision of the Scheme's premium rate if, at the end of a financial year, the discount rate is lower than the premium rate.

STRATEGIC ASSET ALLOCATION: GENERAL ORIENTATIONS AND INVESTMENT DECISIONS

ERAFP, A LONG-TERM INVESTOR IN THE ECONOMY

ERAFP's financial commitments have a duration of around 20 years. As a result, ERAFP naturally has very long-term resources. Because it is still only at the beginning of its expansion phase, the additional pension scheme will also generate a positive net cash flow of some €2 bn a year over the next few years. This high level of long-term liquidity is a strategic plus when it comes to the financing of long-term investment projects, such as real estate, private equity and infrastructure.

> **Changes in investment regulations**


The order of 31 July 2019 amending the order of 26 November 2004 implementing decree 2004-569 of 18 June 2004 on the public service additional pension scheme came into force on 9 August 2019. It reforms ERAFP's investment framework by amending the investment limits for the asset categories in which it is authorised to invest its funds, with a view to improving its expected returns and increasing its contribution to business financing. The supervisory authorities have thus established a framework for the next few years that is consistent with the Scheme's long-term objectives. ERAFP has thus seen rises in the upper limit for investments in

equities and unlisted asset funds (from 40% to 45%), real estate investments (from 12.5% to 15%) and, for real estate, an increase in the permitted loan-to-value ratio from 25% to 50% of the book value of the investments.

Lastly, the authorised limit for ERAFP's direct investments in collective investment undertakings was increased from 3% to 10%.

The changes in investment regulations in 2019 therefore give ERAFP the means to fully perform its role as a long-term investor, giving it new latitude to ensure that the portfolio remains balanced over time while improving its ability to respond to a changing economic environment.

The changes in investment regulations in 2019 enable ERAFP to fully perform its role as a long-term investor.



GRADUAL SHIFT IN ASSET ALLOCATION TOWARDS EQUITIES, REAL ESTATE, PRIVATE EQUITY AND INFRASTRUCTURE

In 2019, the board of directors sought to continue the gradual rebalancing of ERAFP's asset allocation, in line with the guidelines approved in 2018 and in accordance with the changes made to the regulatory framework since 2015. Based on these considerations, it decided to adopt general guidelines for the investment policy, which include:

- _ continuing to reduce the weighting in bonds given the low interest rate environment (-2.1 percentage points), while also commencing investments under the mandate for emerging market corporate issuers;
- _ increasing equity investments, with a target range of between 28.5% and 29.5% of total assets;
- _ further investments in real estate, up to 11.5%-12% of total assets, with 50% of new real estate commitments to be in the residential sector;
- _ further investments in unlisted companies (private equity and infrastructure).

STRATEGIC ALLOCATION ADOPTED BY THE BOARD OF DIRECTORS' MEETING ON 18 DECEMBER 2018

Source — ERAFP

	TARGET	MAXIMUM	
Cash	49.1%		
<i>_ Public sector bonds</i>			
Bonds			
<i>_ Corporate bonds</i>	3.1%	3.4%	
<i>_ Convertible bonds</i>	2.6%	2.8%	
<i>_ Total bonds</i>	54.8%		
Equities	28.5%	29.5%	
Diversification	2.7%	3.0%	34.3%
Private equity and infrastructure	1.7%	1.8%	
Real estate	11.5%	12%	
Foreign exchange hedging	0.8%		

> Investment flows by asset class

New investments of around €2.10bn were made across all asset classes in 2019.

Bonds (including convertible bonds) accounted for 25% of investments, i.e. €535 m, most of which related to the reinvestment in corporate bonds of proceeds from disposals of sovereign bonds sold amid the low interest rate environment. The largest part of new investments (38%, or €808m) was invested in equities. An additional €140m was added to the multi-asset mandate, while 7% (€138.6m) of the funds invested went to unlisted private equity and infrastructure funds.

Substantial investment continued to be made in real estate, which accounted for 21% of new investments, i.e. €441m. Lastly, the amount allocated to the specific currency hedging segment totalled €40m, or 2% of the total.

> ERAFP's portfolio by asset class

At 31 December 2019, the strategic allocation was broadly in line with the policy adopted by the board of directors in December 2018. Bonds thus represented 54.5% of total assets, which was two percentage points less than in 2018 (56.7%) and within the target range set by the board (52.9%-54.8%). Equities

accounted for 29% of total assets at the year end, which represented a rise of 0.7 percentage points over the previous year and was in the middle of the range set by the board (28.5%-29.5%). Multi-assets represented 3% of ERAFP's portfolio, slightly more than in 2018 (up 0.3 percentage points); this was in line with the target set for this asset class (2.8%-3%). The ramp-up of private equity and infrastructure investment continued, rising from 1.2% of assets in 2018 to 1.6% in 2019, i.e. an increase of 0.4 percentage points. The total is slightly below the range of 1.7%-1.8% set by the board for this asset class in 2019.

INVESTMENT FLOWS BY ASSET CLASS IN 2019

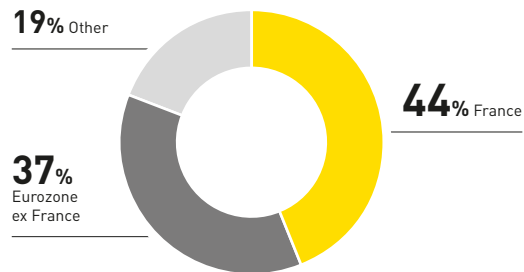
Source — ERAFP

ASSETS	2019 INVESTMENTS	
	In € millions	As a percentage
Money market	1.3	0%
Bonds	534.6	25%
Equities	808.1	38%
Diversification	140.0	7%
Private equity and infrastructure	138.6	7%
Real estate	440.9	21%
Foreign exchange hedging	40.2	2%
TOTAL	2,103.6	100%

Only one asset class missed the target set by the board of directors for 2019, namely real estate. Although the allocation is higher than the previous year (+0.7 points), it remains 0.8 percentage points below the range set by the board (11.5%-12%). This is due to the condition of the real estate markets, in which fierce competition for infrequent investment opportunities is putting pressure on potential returns. ERAFP therefore invested less in this asset class in 2019 than it had intended. In 2019, ERAFP provided €12.4bn of financing to the French economy, in the broad sense, representing 44% of its total assets at amortised cost.

INVESTMENTS IN FRANCE, THE EU AND GLOBALLY AT DECEMBER 31, 2019 (AT AMORTISED COST)

Source - ERAFP



CHANGE IN THE GLOBAL AGGREGATE PORTFOLIO BY ASSET CLASS AS AT 31 DECEMBER 2019, 31 DECEMBER 2018 AND 31 DECEMBER 2014 (AS A % OF AMORTISED COST)

Source - ERAFP

	At 31 Dec 2019	At 31 Dec 2018	At 31 Dec 2014
Public sector bonds	29.1%	33.2%	51%
Corporate bonds	22.6%	20.9%	17.4%
Convertible bonds	2.8%	2.6%	2%
Equities	29%	28.3%	23.4%
Multi-asset	3%	2.7%	1.6%
Private equity and infrastructure	1.6%	1.2%	0%
Real estate	10.6%	9.9%	3.1%
Foreign exchange hedging	0.7%	0.8%	0%
Cash	0.6%	0.5%	1.6%
Total ERAFP net assets	100%	100%	100%

A STRONG COMMITMENT TO SRI

VISION AND VALUES

As a public institution established for the benefit of public servants employed by the State, regional and local authorities, hospitals and the judiciary, ERAFP's role is to serve the public interest. As a pension scheme with a capitalisation-based business model, it acts over the long term to ensure equity and intergenerational solidarity.

And, as the Brundtland report pointed out, focus on the long term and future generations is the cornerstone of the sustainable development concept: 'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'¹⁸

ERAFP's inclusion of sustainable development in its financial management has led it to adopt a socially responsible investment approach since its creation.

In 2006, SRI assets amounted to €17bn in France;¹⁹ a recent study by AFG (the French Asset Management Association)²⁰ estimated that they had exceeded €1,450bn by the end of 2018. While the definitions and scope of analysis have evolved over the last ten-plus years, these figures give an idea of the market's strong growth.

ERAFP did not wait for the trend to take hold, however. As early as 2006, its board of directors stressed that 'investments based solely on the criterion of maximum financial return fail to account for their social, economic and environmental consequences' (excerpt from the SRI Charter).

ERAFP has therefore played a pioneering role in the field of SRI. As well as being an early adopter, it has an authentic approach based on values set out in its Charter and which its board of directors has consistently promoted.

The values embodied in ERAFP's Charter provide answers to the challenges that we face as a society.

Environment and climate change challenges - the World Meteorological Organization (WMO) report published in 2019²¹ estimates that the average temperature between 2015 and 2019 was 1.1°C higher than in the period from 1850 to 1900. A year earlier, the Intergovernmental Panel on Climate Change (IPCC) warned of the dramatic consequences of warming exceeding 1.5°C;²² if nothing is done to reverse the curve of greenhouse gas emissions, the increase in temperatures compared to the pre-industrial era will be 5.5°C by 2100. The situation is therefore critical. Through its investments and on the basis of 18

separate selection criteria, ERAFP seeks to encourage companies to take account of the environmental impact of their products and services, control the risks associated with climate change and contribute to the energy transition.

Governance challenges - For ERAFP, analysing governance is essential in that it makes it possible to assess a company's responsibility towards its stakeholders. ERAFP seeks to promote companies with governance that ensures a balance of power, effective control mechanisms and a responsible remuneration policy. Good quality governance makes it possible to rise to challenges such as the fight against corruption and money laundering, the respect and protection of customers' rights, and tax transparency and responsibility.

Social challenges - The very identity and composition of ERAFP's board of directors make the social dimension a fundamental one, with eight representatives of active contributors proposed by the representative trade unions, eight representatives of employers and three qualified persons. ERAFP seeks to promote the rule of law and human rights through both its sovereign investments and its private-sector investments, with a particular focus on supply chains and subcontractors.

18_ Definition given in the so-called Brundtland report by the United Nations World Commission on the Environment and Development (*Our Common Future, 1987*).

19_ According to Novethic.

20_ 'L'investissement responsable atteint plus de 1 400 milliards d'euros', French Asset Management Association, <https://www.afg.asso.fr/wp-content/uploads/2019/07/2019-07-11-cp-stat-ir-2018-.pdf>

21_ WMO statement on the state of the global climate in 2019, https://library.wmo.int/doc_num.php?explnum_id=10211

22_ Summary for policymakers, IPCC, 2019: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf

**AN AMBITIOUS, COMPREHENSIVE AND DEMANDING CHARTER
A PIONEERING MEASURE THAT APPLIES TO ALL ASSET CLASSES**

5 VALUES



- _ RULE OF LAW AND HUMAN RIGHTS
- _ SOCIAL PROGRESS
- _ DEMOCRATIC LABOUR RELATIONS
- _ ENVIRONMENT
- _ GOOD GOVERNANCE AND TRANSPARENCY



18 CRITERIA FOR SELECTION



A **best in class** APPROACH



SRI PERFORMANCE MEASUREMENT



INDIVIDUAL SHAREHOLDER ENGAGEMENT



COLLECTIVE ENGAGEMENT



VIGILANCE VIS-À-VIS CONTROVERSIES



IMPACT



As a French public institution, ERAFP seeks to protect social benefits by promoting labour-management dialogue and the respect of union rights. Lastly, in the face of social crises and restructurings, ERAFP expects companies to manage careers responsibly and to be committed to developing jobs. Faced with these challenges, and to encourage companies to embrace its values, ERAFP has adopted an approach based on selection and support.

> **Selecting and supporting**

Selecting - Seeking to invest responsibly in all economic sectors, ERAFP applies a best in class approach aimed at promoting the most responsible issuers in each sector.

For all its investments, ERAFP evaluates issuers on the basis of an SRI reference framework developed in line with its values. It accordingly applies its best in class rules to each asset class with the aim of encouraging each issuer to improve.

ERAFP ensures that its issuers are progressing by monitoring their SRI rating over time, with ratings produced both by its own managers and by a third-party rating agency. ERAFP also ensures the effectiveness of its SRI approach by comparing the ESG (environmental, social and governance) performance of its portfolios with benchmark indices. In most cases, the ESG performance of ERAFP's portfolio exceeds that of its benchmark index (see part 3 of this report, p. 62).

Supporting – ERAFP strives to be a long-term partner to the issuers in which it decides to invest, in order to encourage them to adopt practices that comply with the values it supports.

As well as diversifying its assets, ERAFP has rounded out its best in class approach by stepping up its engagement with issuers. Through its investment managers (who take a range of individual shareholder engagement measures), through direct participation in collective engagements (via joint initiatives) and by exercising its voting rights, ERAFP seeks to push issuers to make progress across the full range of SRI values.

For instance, by participating in the Climate Action 100+ initiative, ERAFP enters into dialogue with issuers in the utilities and automotive sectors to encourage them to make climate change issue management part of their governance, reduce their greenhouse gas emissions across their whole supply chain and disclose more fully how they take climate change risks and opportunities into account in their activities.

The in-depth monitoring of controversial practices also makes it possible to advise issuers on their responses and the tools they can use to prevent the negative impacts of their businesses on society and the environment.

PROGRESS MADE IN 2019

ERAFP's SRI Charter, which was adopted by the board of directors in 2006, follows a best in class approach based on the principle of taking the world as it is, but aiming to make progress in every industry. Rather than ruling issuers out, this is about favouring the most positive issuers in each industry and region.

ERAFP analyses the SRI performance of each industry on the basis of the Global Industry Classification Standard (GICS) drawn up by Morgan Stanley and Standard and Poor's (S&P). GICS classifies firms according to a four-level taxonomy by sector, industry group, industry and sub-industry. Whilst not abandoning its best in class approach, ERAFP takes the view that some of the sub-industries identified in the taxonomy are neither sustainable nor responsible.

On this basis, ERAFP took two significant decisions in this area in 2019, choosing to exclude investments in companies involved in tobacco production and those deriving more than 10% of their revenue from thermal coal. ERAFP has also updated its best in class policy by requiring companies in sectors with major energy transition issues to adopt a strategy that complies with the objectives of the Paris Agreement.

ERAFP's three priority action areas cover four SDGs.

In addition to these specific actions to foster more sustainable and responsible industries, ERAFP, together with other French public investors, made a commitment in late November 2019 **to put the policies regarding the Sustainable Development Goals (SDGs) set out in the Charter into action in its investment policy.** This includes in particular:

- _ incorporating the SDGs into the investment strategy;
- _ ensuring that internal operations comply with the SDGs;
- _ assessing the impact of its business on the SDGs and reporting on their implementation;
- _ spreading best practices regarding the SDGs among stakeholders.

Lastly, thanks to the **reform of the investment framework** which came into force on 9 August 2019, which modified the investment limits for the asset classes in which ERAFP is authorised to invest its funds, ERAFP now has greater flexibility to invest in the financing of businesses, particularly in SMEs.

THREE IMPACT PRIORITIES:

- _ FIGHT CLIMATE CHANGE
- _ SUPPORT BUSINESS AND EMPLOYMENT
- _ DEVELOP INTERMEDIATE HOUSING

> Impact priorities and alignment with the SDGs

Impact investing aims to generate concrete social or environmental added value by financing specific projects. The aim is therefore to reconcile the transformation of the economy with financial returns.²³

In seeking to adopt this pragmatic approach to SRI as a complement to its process for assessing the environmental and social impact of its investments (see section 3, p. 62), ERAFP has chosen to invest in three specific areas:

- _ fighting climate change;
- _ supporting business and employment;
- _ financing intermediate housing.

Under the French public investors' charter in support of the Sustainable Development Goals (SDGs), signatories undertake to take account of the contribution

made by the SDGs to investment and agree to 'ensure that they focus their action on the SDGs that are priorities in the sense of being material to their activities'. ERAFP's three priority action areas cover four SDGs:

- _ fighting climate change corresponds to 'Climate action' (SDG 13);
- _ supporting business and employment corresponds to 'Decent work and economic growth' (SDG 8) and support for 'Industry, innovation and infrastructure' (SDG 9);
- _ financing intermediate housing corresponds to 'Sustainable cities and communities' (SDG 11).

A more in-depth study is due to be carried out in 2020 under the aegis of ERAFP's board of directors, in order to set out more precisely how ERAFP's SRI Charter corresponds to the seventeen SDGs.

23_ Source : Novethic.

MONITORING IMPACT PRIORITIES

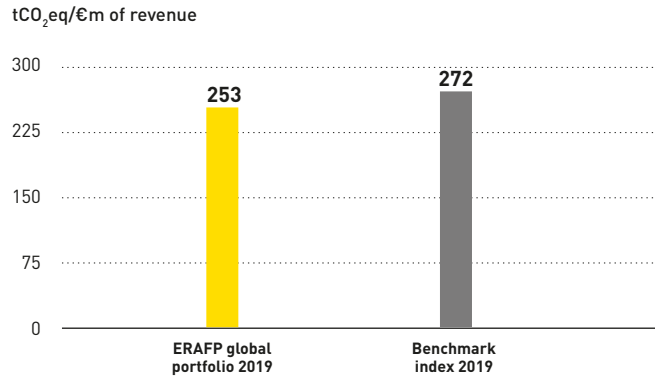
> Fighting climate change

Ever since it was established, ERAFP has had a particular focus on combating climate change. ERAFP was one of the first organisations to use carbon footprints as a measure of how its investment portfolios contribute to global warming. If we focus on the portfolio likely to have the biggest effect, namely the global aggregate portfolio²⁴ (see chart opposite), it is clear that ERAFP's performance outstrips that of the benchmark index, thanks to its best in class approach whereby companies can be selected based on the intensity of their CO₂ emissions.²⁵

In 2019, ERAFP's global aggregate portfolio emitted only 253 tonnes of CO₂ equivalent per million euros of revenue, as compared with 272 tonnes for the benchmark index. A historical analysis of carbon intensity by asset class within ERAFP's global aggregate portfolio backs up this conclusion, highlighting the overall downward trend in

CARBON INTENSITY OF THE GLOBAL LISTED COMPANIES PORTFOLIO RELATIVE TO BENCHMARK

Source – Trucost



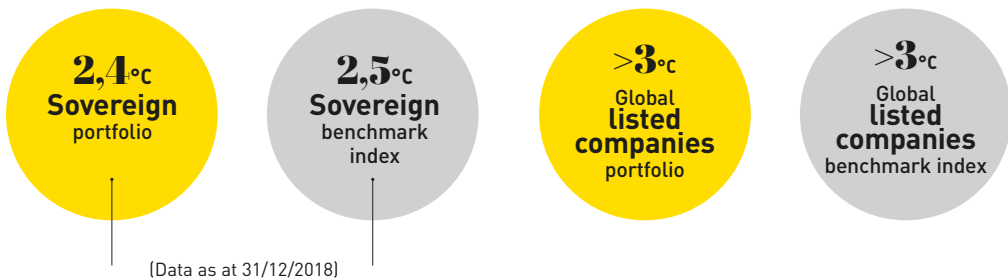
its greenhouse gas emissions. Between 2015 and 2019, the carbon footprint of ERAFP's corporate bond portfolio fell significantly, from 379 tonnes of CO₂ equivalent in 2015 to 311 tonnes in 2019. Over the same period, ERAFP's convertible bond portfolio also fell from 268 tonnes to 239 tonnes of CO₂ equivalent. The only exception to

this downward trend is the equity portfolio, whose carbon footprint has largely stood still, moving from 229 tonnes of CO₂ equivalent in 2016 to 230 tonnes in 2019.

Another starting point for estimating ERAFP's contribution to the energy transition is the temperature of its portfolio. The temperature of

TEMPERATURE OF ERAFP'S SOVEREIGN AND GLOBAL AGGREGATE PORTFOLIOS COMPARED WITH THEIR BENCHMARK INDICES

Source – Trucost

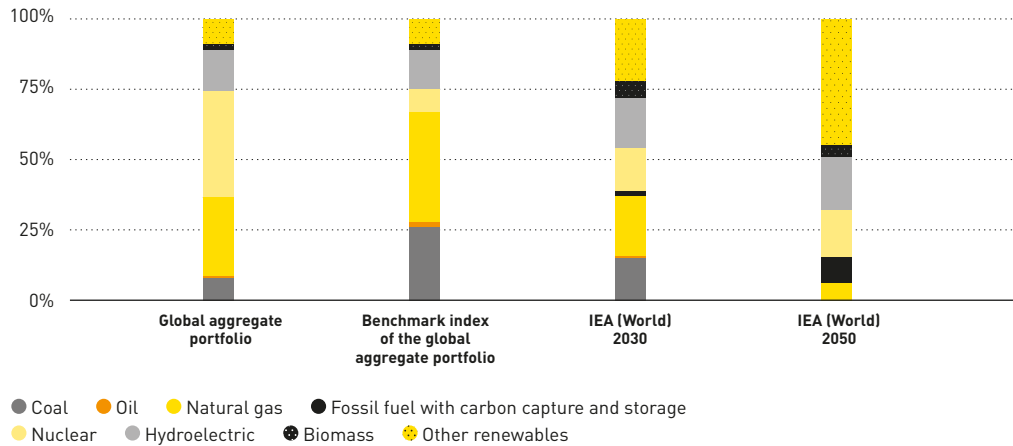


²⁴ The global aggregate portfolio is the sum of the credit portfolio, the equity portfolio and the convertible bond portfolio.

²⁵ 'CO₂ equivalent' (CO₂eq) is a unit created by the IPCC to compare the impacts of different greenhouse gases on global warming and enable total emissions to be aggregated.

ANALYSIS OF THE ELECTRICITY GENERATION MIX- WEIGHTED AVERAGE CARBON INTENSITY

Source: Trucost based on IEA scenarios



the sovereign and global aggregate portfolios is comparable to that of their benchmark indices.

The temperature of ERAFP's global aggregate portfolio is significantly out of line with the Paris Agreement target of keeping the rise in temperatures by 2050 below 2°C compared with pre-industrial levels. However, taking a closer look by industry puts this observation into perspective. The result for the electricity sector is especially positive, with a temperature below 1.75°C. The temperature for this sector is thus not only in line with the target of limiting the rise in temperatures by 2050 to 2°C compared to the pre-industrial era, but also on track towards meeting the aim of limiting the increase by 2100 to 1.5°C.

This is particularly encouraging, as the industry is currently the world's largest emitter of CO₂ and electricity producers are therefore vital to minimising climate change.

More detailed insight into ERAFP's results for the electricity generation sector can be obtained by looking at how the electricity generation mix in ERAFP's portfolio in 2019 compares with the benchmark index, and comparing both to the

projected mix required to achieve a 2°C scenario in 2030 and 2050 (see chart above).

It is therefore apparent that the energy mix of ERAFP's global aggregate portfolio is in many respects in line with the 2030 and 2050 scenarios produced by the International Energy Agency (IEA), which set the path that must be followed if the Paris Agreement targets are to be met, while that of the benchmark index is not.

In relation to the IEA 2030 and 2050 scenarios, the energy mix of ERAFP's global aggregate portfolio is better placed than the benchmark index in almost every respect.

This observation is particularly striking for coal, which accounts for 8% of the energy mix of ERAFP's global aggregate portfolio, compared with 25% for the benchmark index. This figure is well below the target set in the IEA 2030 scenario, according to which coal must not exceed more than 15% of the energy mix of an overall portfolio. The energy mix of ERAFP's global aggregate portfolio is thus on track to match the IEA 2050 scenario, which recommends the complete disappearance of coal-fired power.

A similar trend can be seen in natural gas: although gas still accounts for 28% of ERAFP's energy mix, which is above the target of 21% in the IEA 2030 scenario, this figure is nevertheless significantly lower than the 39% figure for the benchmark index. Oil, meanwhile, has virtually disappeared from ERAFP's energy mix (1%), which is fully in line with the target set in the IEA 2030 scenario.

€2.6bn

invested in energy transition or contributing to the decarbonisation of the economy

ERAFP's results in terms of its contribution to the energy transition are explained by the application of its SRI approach, which screens out the least environmentally sound issuers, and by its choosing to invest directly in the energy transition or make investments that contribute to the decarbonisation of the economy across the various asset classes.

Such investments totalled €2.6bn at the end of 2019 and represented approximately 7.5% of ERAFP's total assets. A significant portion of the total relates to the low-carbon equities mandate managed by Amundi, in which ERAFP has invested more than €2.1bn. These investments have also resulted in the creation of renewable energy capacities - which are crucial to cutting greenhouse gas emissions

- producing nearly 5,825 GWh. Of the total, 613 GWh is due to investments in listed companies and 5,212 GWh to investments in unlisted companies.

> Supporting business and employment

European SMEs saw their access to financing deteriorate in the years following the major credit contraction of 2008-2009.²⁶ And yet financing these investments, which have a material impact on employment and the economy's capacity for innovation, is a key way of generating economic growth.²⁷ In 2016, there was a continued lack of private equity financing in France.²⁸

By the end of 2019, ERAFP had committed nearly €1.8bn to financing European SMEs.

INVESTMENTS IN ENERGY TRANSITION OR CONTRIBUTING TO THE DECARBONISATION OF THE ECONOMY

Source - ERAFP

ASSET CLASS	AMOUNT INVESTED (market value - in €m)	
Equities	Climate-themed equity funds	191.2
	Low-carbon management mandate	2,128.9
Bonds	Green bonds	172.4
Real estate	Forestry	26.9
Infrastructure	Renewable energy	110
TOTAL		2,629.4

²⁶ Source: OECD, *Le financement des PME et des entrepreneurs* ('The financing of SMEs and entrepreneurs'), Key Indicators, 2013.

²⁷ Source: Conseil d'analyse économique, *Une stratégie PME pour La France* ('An SME strategy for France'), report, 2006.

²⁸ Source: Cour des Comptes, *L'État actionnaire*, ('The shareholder state'), thematic report, January 2017).



UPDATE ON WESSANEN

Founded in 1765, the Dutch company Wessanen is a leader in the European organic foods market. Its assets include the Bjorg and Bonneterre brands, which are marketed in France. The PAI Europe VII fund, which finances European SMEs and mid-caps and to which ERAFP has committed €10 m (of which around €1 m has so far been invested), invested in this company in 2019.

- _ Total sales in 2018 were €628m, up 0.4% compared with 2017.
- _ The company had a workforce of more than 1,300 in 2018.
- _ To achieve its goal of creating healthy foods, the company uses organic produce, vegetarian products and products certified under the Global Food Safety Initiative (GFSI).
- _ ERAFP's investments in unlisted companies are a sign of its support for a more sustainable agriculture.

ERAFP is involved at various stages of the development of SMEs and mid-caps:

- _ it supports 127 SMEs and mid-caps through investments totalling €852.5m in small-cap management mandates entrusted to Amiral Gestion, BFT IM – Montanaro AM and Sycomore AM;
- _ it is contributing €410.3m (by market value) to the financing of 218 unlisted SMEs and mid-caps through loan securitisation funds in which it invests directly or through the management mandates held by Amundi, La Banque Postale AM and Ostrum AM;
- _ it is contributing €561m (amount committed) to private equity investments in 254 unlisted European SMEs, through direct participation in open-ended funds and via a management mandate entrusted to Access Capital Partners.

The 'transmission belt' channeling innovation into the production system, private equity operates at different stages of company development:

- _ venture capital investments (minority equity interests in start-ups), which enable young firms to roll out a strategy;
- _ growth capital investments, which help existing firms to grow and are made either in the form of minority equity interests...
- _ ...or by taking a controlling stake.

The Tibi²⁹ report published in July 2019 has highlighted the difficulties French start-ups face in obtaining finance in the later stages of their development. Too big to be funded by the country's venture capital funds, but too fragile to list on the stock market, they struggle to find investors to fund their ongoing growth. In response to this finding,

in September 2019 ERAFP and some 20 French institutional investors agreed to make investments over a three-year period in French innovation capital funds.³⁰ Currently still a rarity in France, these funds are designed to help the most promising French technology companies to continue their late-stage growth. Private equity is an effective conduit for so-called impact investment, which factors in social objectives such as developing businesses and jobs in disadvantaged areas, meeting the basic needs of vulnerable populations, promoting sustainable modes of consumption and sharing value creation with stakeholders.

²⁹ https://minefi.hosting.augure.com/Augure_Minefi/r/ContenuEnLigne/Download?id=40C3DA75-8DAB-4300-86D1-C7ED87BD9045&filename=1351%20-%20Rapport%20Tibi%20-%20FR.pdf

³⁰ These funds are intended to hold investments of more than €1 bn in unlisted companies in a late-stage growth phase.

FINANCING INTERMEDIATE HOUSING FOR THE BENEFIT OF PUBLIC SECTOR EMPLOYEES

In line with the real estate strategy set by the board of directors, the aim of which is to take greater account of economic and social issues, ERAFP's investments in the French residential sector (intermediate housing, open-market housing and managed residences) accounted for 29.7% of its real estate portfolio in 2019.

At the end of 2019, ERAFP had invested more than €963 m in residential property, i.e. approximately 2.8% of its total assets. The investments comprised a total of 4,264 dwellings (target number), including 1,546 intermediate dwellings,³¹ 1,694 rented on the open market and 1,023 in managed accommodation.

In direct application of its SRI investment policy, ERAFP has taken a role in financing intermediate housing projects for public sector employees. Intermediate housing is designed to facilitate access to housing in high-pressure areas,³² where rents are high in relation to disposable incomes, by offering homes for rent at levels between

BREAKDOWN BY SECTOR OF THE REAL ESTATE PORTFOLIO AT 31 DECEMBER 2019 (AT AMORTISED COST)

Source – ERAFP



the rates for social housing and the open market (10-15% below market prices). It thus represents a mid-way solution between private and social housing for people with incomes higher than the social housing threshold.

At the end of 2019, ERAFP had committed a total of €318m (€222m under contract and the remainder close to signing) and had 1,243 intermediate sector homes potentially available for rent. Of these, 199 had already been delivered, 621 were under construction and 423 were at the negotiation stage.³³

This total committed amount derives from a number of separate investments made by ERAFP since 2014, as follows:

- In 2014, ERAFP invested €60m in an initial trial conducted through the FLI intermediate housing fund.
- In February 2018, ERAFP activated a residential property mandate awarded to Ampère Gestion, the objective of which is to invest in residential assets in France, particularly in intermediate housing (market value of more than €300 m at the end of 2019).
- In early 2019, ERAFP invested €40m in the FLI II fund managed by Ampère Gestion-CDC Habitat.

When making these investments in intermediate housing, ERAFP has insisted on obtaining a priority information right with a one-month exclusivity period. This enables it to have these units allocated to public sector employees priced out of the housing market in Paris and its environs, on the Côte d'Azur or in the Gex region.



UPDATE ON THE CDC-HABITAT WEBSITE

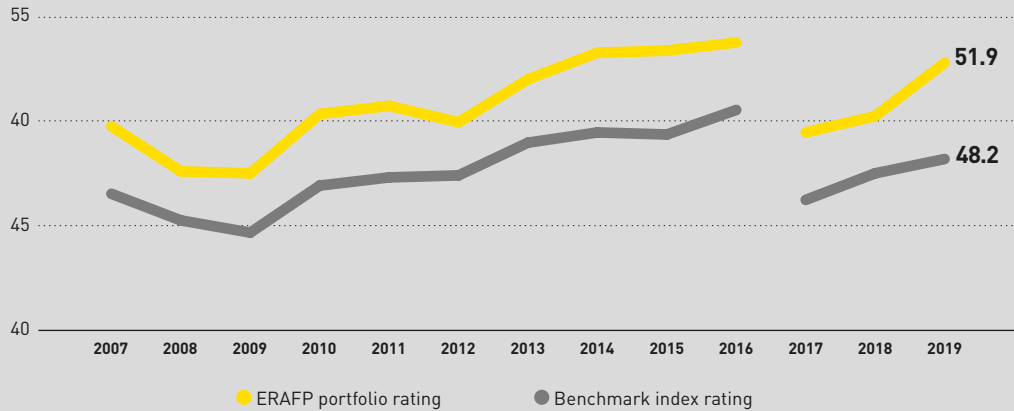
In 2018, CDC-Habitat dedicated a specific area on its housing ads website to ERAFP's investments: <https://www.cdc-habitat.fr/fonctionpublique>. Central government employees can now use the site to create their own account, view 'partner' offers and apply for accommodation.

Account holders who have asked for updates on housing available in a given area receive related information seven months before the reserved housing units are delivered. Then, no later than three and a half months ahead of delivery, they can access the ads for the platform's reserved housing units. This exclusive access runs for a one-month period.

The FLI housing deliveries are set to continue mainly over the next three years, after which the more recent dedicated intermediate housing investments will result in further deliveries.

CHANGE IN THE AVERAGE SRI RATING FOR THE EURO-ZONE EQUITY PORTFOLIO COMPARED WITH THE BENCHMARK

Source - ERAFP



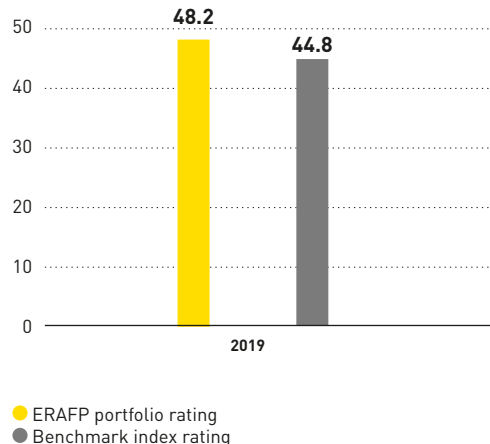
KEY FACTORS IN ESG PERFORMANCE

The selectivity rate compared with the potential investment universe - i.e. the percentage of companies excluded under ERAFP's ESG methodology - is 30%. In other words, a third of the companies in which ERAFP could potentially invest are ruled out as a result of SRI screening. This very high rate reflects both the stringency and the effectiveness of the screening methodology.

As a result, the SRI rating of ERAFP's listed company portfolio has outperformed its benchmark index by 3.4 points (see chart opposite, and see also section 3 for a detailed analysis of the SRI profile of ERAFP's various asset classes, p. 62). Looking at the broader equity portfolio (see chart above), it can be seen that ERAFP's SRI rating is by no means a cyclical phenomenon. Since the SRI Charter was adopted, the SRI rating has risen consistently while remaining systematically higher than that of the benchmark index. The decrease in 2016 was due to a change in methodology.

SRI RATING OF THE ERAFP LISTED COMPANY PORTFOLIO COMPARED WITH THE BENCHMARK

Source - Vigeo



31_ This is a target number.


32_ The areas eligible for the intermediate housing scheme are those where prices are highest, namely Paris, its neighbouring municipalities and outer suburbs, the Côte d'Azur and the Swiss border, Lyon, Marseille, Lille and Montpellier as well as other regional cities.

33_ Off-plan sales in course of negotiation. Reflects the number of dwellings in transactions close to completion under the Ampère mandate.

FINANCIAL PERFORMANCE OF INVESTMENTS

Internal rate of
return in 2019 of

12.5%



RETURNS OF 5.7% SINCE THE SCHEME'S CREATION

As a long-term investor, ERAFP seeks to invest its annual cash inflows to maximise returns on its portfolio while keeping risk at an acceptable level for the Scheme. The internal rate of return (IRR) is a measure of the relevance of investment allocation within a portfolio over time.³⁴

While annual performance is a useful monitoring indicator, for ERAFP, as a long-term investor in its expansion phase, it seems more appropriate to measure performance over a longer period.

The internal rate of return since ERAFP's creation is 5.7% in terms of economic value. This level is mainly due to the performance of the bond asset classes. Returns on euro-denominated corporate bonds are 4% since the first investment, while returns on government bonds and similar instruments are 5.2% since 2006. These figures were initially driven by interest rates, which were still high when ERAFP made its first investments, and later by the rise in the value of its holdings, which offset falling yields. For equities, returns have ranged between 7% and 12%, depending on region, over the period since the first investment.

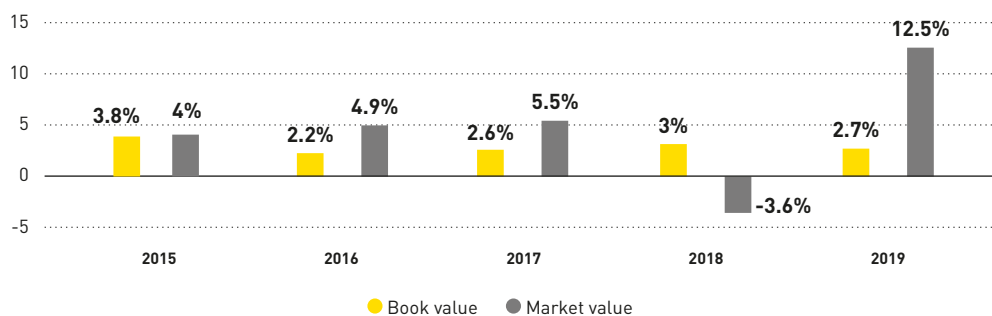
The internal rate of return over five years (2014-2019) of ERAFP's portfolio is 4.6% per annum in market value terms. The performance of equities over the period (which account for 29% of the portfolio) contributed significantly to this IRR figure. The five-year performance of sovereign and similar bond asset classes is 2.66%, which is lower than the performance since the Scheme was formed (5.18%). This is due in particular to the sharp fall in overall interest rates in 2019, despite a slight uptick at the year end. The five-year IRRs on euro-denominated corporate bonds (2.9%) and convertible bonds (1.9%) have fallen since these portfolios were created.

In 2019, the internal rate of return for the portfolio as a whole was 12.5%. This is a reflection of positive economic performance over the year by the ERAFP portfolio, notably due to high returns on its equity portfolio. The return in book value terms was 2.7%.

³⁴ The internal rate of return (IRR) is a measure of the relevance of investment allocation within a portfolio. It differs from performance in that it takes into account the timing of investment and divestment flows or, in the case of delegated asset management, subscriptions and redemptions.

ANNUALISED INTERNAL RATE OF RETURN IN BOOK VALUE AND MARKET VALUE TERMS SINCE 2015

Source — ERAFP



ANNUALISED INTERNAL RATES OF RETURN IN BOOK VALUE AND MARKET VALUE TERMS SINCE 2006

Source — ERAFP

	ANNUALISED IRR SINCE 2006	
	Book value	Market value
Money market	0.2%	0.2%
Sovereign bonds and similar	3.8%	5.2%
Euro-denominated corporate bonds	2.9%	4.1%
International corporate bonds	1.1%	3.0%
Convertible bonds	0.0%	2.5%
Euro-zone and European equities	0.9%	7.1%
International equities	6.7%	12.1%
Multi-asset	0.0%	4.7%
Unlisted and other	5.5%	8.1%
Real estate	1.9%	4.7%
Foreign exchange hedging	-11.5%	-15.9%
Global aggregate portfolio	3.0%	5.7%

**ANNUALISED FIVE-YEAR INTERNAL RATE OF RETURN IN BOOK VALUE
AND MARKET VALUE TERMS TO 31 DECEMBER 2019**

Source — ERAFP

	5-YEAR ANNUALISED IRR TO 31/12/2019	
	Book value	Market value
Money market	0.0%	0.0%
Sovereign bonds and similar	3.9%	2.7%
Euro-denominated corporate bonds	2.8%	2.9%
International corporate bonds	1.1%	3.0%
Convertible bonds	0.0%	1.9%
Euro-zone and European equities	1.4%	8.2%
International equities	8.2%	11.0%
Multi-asset	0.0%	4.2%
Unlisted and other	5.5%	8.1%
Real estate	2.0%	4.8%
Foreign exchange hedging	-11.5%	-15.9%
Global aggregate portfolio	2.9%	4.6%

INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM

ERAFP has put in place an internal control and risk management system alongside the Scheme's technical and financial management tools, notably to ensure permanent risk monitoring and compliance with the rules and procedures in force.

In view of ERAFP's activities, a significant part of the internal control and risk management system is dedicated, aside from the control of operational risks, to investments and the associated financial risks, as well as to technical risks. Its

ability to fulfil its missions is thus assessed regularly and appropriately in view of its organisation and that of delegated asset managers and representatives.

An overview of the 2019 internal control report appears in the appendix to this document. Applicable regulations provide that the board of directors deliberate each year on a detailed control report, which reviews the ongoing assessment of all risks over the past financial year.³⁵

20 November 2019

ERAFP selects two consulting firms specialising in the assessment of climate change risks and opportunities.

³⁵ Article 22 of decree 2004-569 of 18 June 2004 on the French Public Service Additional Pension Scheme.



SRI ANALYSIS OF ERAFP'S PORTFOLIOS

In accordance with the recommendations of Article 173 of the law on the energy transition for green growth and those of the G20 Task Force on Climate-related Financial Disclosures (TCFD), this section is structured as follows:



Presentation of the general environmental, social and governance (ESG) approach and the ESG analysis method.

Presentation of the climate approach based on the TCFD themes.

Engagement strategy and related initiatives.

Impact of the ESG approach on implementation of the investment policy, by asset class.

GENERAL ESG APPROACH

THE SCHEME'S SRI APPROACH IS ORIGINAL IN A NUMBER OF RESPECTS:

- _ the board of directors oversees the SRI approach internally; while the board and management naturally rely on outside service providers such as consultants and rating agencies, the board itself defined the approach to satisfy the demands and values of the board members, and permanently monitors its application;
- _ the policy's content is '100% SRI', in other words the SRI Charter applies to all of the Scheme's investments and takes into account the specific features of each asset class.

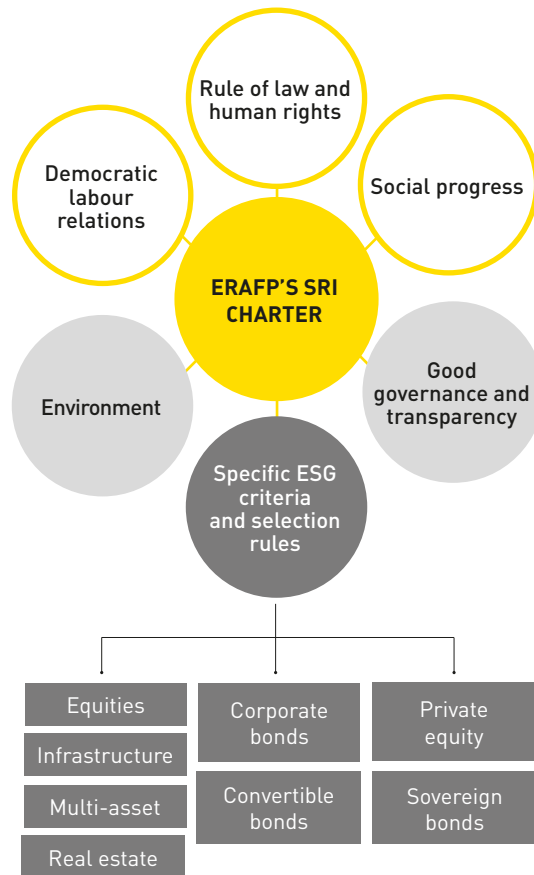
THE SCHEME'S SRI APPROACH IS GLOBAL:

- _ not only does it concern all of the Scheme's investments but it also applies to all the investment phases, from the first stage of asset allocation to the post-investment stage of monitoring the companies whose shares or bonds are included in the portfolio;
- _ it is based on a broad-based, cross-cutting selection of stocks rather than a large number of single-themed sub-portfolios.

For an investor of ERAFP's size that wishes to adopt a uniform approach for all of the asset classes in which it invests, the best in class approach seems the most appropriate, as it focuses on the links between the various considerations and the various issuers rather than tackling each issue in isolation.

The application of the best in class principle results in the inclusion in the guidelines of quantitative

AN SRI CHARTER BROKEN DOWN INTO EVALUATION CRITERIA FOR THE VARIOUS ASSET CLASSES



rules that make it possible to determine the eligible investment universe. These rules are defined for each asset class with the aim of encouraging each one to improve. Generally speaking this means:

- _ excluding no business sector, but promoting the issuers with the best ESG practices within each

sector and, more generally, within groups of comparable issuers. However, tobacco and coal are excluded due to their particularly negative impact;

- _ showcasing progress made;
- _ monitoring and supporting issuers that have adopted a continuous improvement approach.

IMPLEMENTATION OF SRI AT ERAFP

In accordance with article 173 of the energy transition law, this report sets out below ERAFP's adherence to the codes or initiatives that support the values it promotes, its SRI governance approach, the management of its investments' ESG risks, as well as its values framework and the way in which it is implemented.

ADHERENCE TO CODES OR INITIATIVES

The financial sector can only adopt a longer-term vision in its practices and systematically take into consideration environmental, social and governance factors if responsible investors work together to influence the sector as a whole.

With this in mind, in 2006 ERAFP became a signatory of the United Nations' Principles for Responsible Investment (PRI), and has duly undertaken to apply each of these principles.

Each year, in accordance with the sixth principle, ERAFP completes a questionnaire assessing its implementation of the Principles for Responsible Investment, which is sent to the PRI's secretariat and duly published.³⁶

This report presents – non-exhaustively – information illustrating the effective application of these principles.

- 1 Incorporate environmental, social and governance (ESG) issues into investment analysis and decision-making processes.
- 2 Be active owners and incorporate ESG issues into our ownership policies and practices.
- 3 Seek appropriate disclosure on ESG issues by the entities in which we invest.
- 4 Promote acceptance and implementation of the Principles within the investment industry.
- 5 Work together to apply the Principles more effectively.
- 6 Report on our activities and progress towards implementing the Principles.

³⁶ <https://reporting.unpri.org/surveys/PRI-reporting-framework-2018/AB355B99-ED76-4A15-A9B1-58ABFBDBA575/79894dbc337a40828d895f9402aa63de/html/2/?lang=en&a=1>

As well as the PRI, ERAFP has joined other initiatives:

Internationally

- _ in 2012, the International Investors Group on Climate Change (IIGCC), which enables it to lobby issuers and regulatory bodies to promote more responsible practices on this key issue for ERAFP;
- _ in 2015, the Portfolio Decarbonization Coalition (PDC), a United Nations Environment Programme (UNEP) initiative, and the Carbon Disclosure Project;
- _ in 2017, the Asian Corporate Governance Association (ACGA);
- _ in early 2020, the Net-Zero Asset Owner Alliance, which aims to achieve carbon neutrality by 2050.

In France

- _ in 2016, the *Forum pour l'Investissement Responsable* (FIR – Responsible Investment Forum), which promotes SRI and related best practice, in particular by taking positions publicly;
 - _ in 2016, Finance for Tomorrow, a Paris financial markets initiative for green and sustainable finance.
- Involvement in this type of initiative is borne out of ERAFP's engagement approach, which is described in more detail on page 85.

SRI GOVERNANCE AT ERAFP

> The board of directors

The board of directors:

- _ sets the general orientation of the SRI policy;
- _ and ensures that it is effectively applied.

To enable it to be truly responsive, the board is kept permanently and fully informed, notably through regular meetings of its investment policy monitoring committee (CSPP).

ERAFP'S MANAGEMENT

ERAFP's management plays a number of roles:

- _ it drafts proposed changes to the SRI policy for submission to the board of directors;
- _ it directly implements the SRI guidelines in relation to internal bond management, which under the Scheme's current regulations covers sovereign and similar bonds;
- _ it ensures that the external asset management companies apply the SRI policy, whether in terms of using the best in class principle for securities selection or following ERAFP's voting policy at shareholder meetings;
- _ it ensures that contracts entered into with SRI rating agencies are correctly performed;
- _ it reports to the board of directors and the CSPP on implementation of the SRI policy, and assists directors with the preparation of their work.

> Rating agencies

The rating agency – currently Vigeo – is responsible for analysing the asset portfolio and providing detailed half-yearly reports on the bond and equity portfolios for submission to ERAFP.

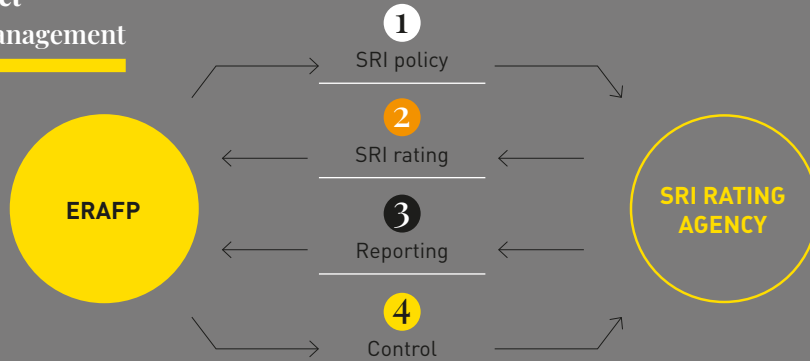
> Asset management companies

The management of asset classes other than sovereign and similar bonds is delegated almost entirely to asset management companies.

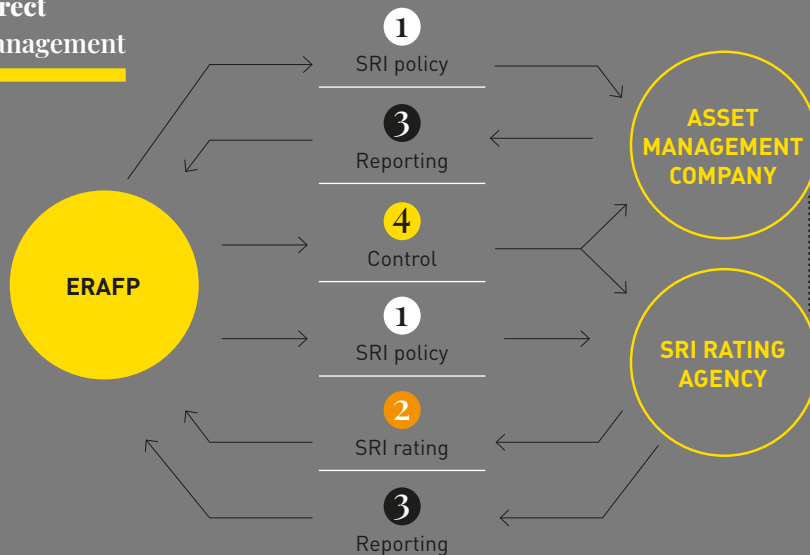
At the end of 2019, ERAFP had 28 dedicated mandates under management with management companies, which were charged with investing on its behalf in listed company shares, corporate bonds, convertible bonds, unlisted companies and real estate. Under these mandates, each management company must comply with ERAFP's SRI guidelines (PRI - Principle 4). ERAFP holds six-monthly investment committee meetings with each of its delegated asset managers to discuss matters such as the mandates' SRI profile.

ROLES OF THE VARIOUS ENTITIES AND CONTROL PROCEDURES

For direct bond management



For indirect bond management



1 SRI POLICY

- Definition of the investment policy
- Settlement of any differences in interpretation
- Decisions on changes to the charter and reference framework

2 SRI RATING

- Key SRI data for the managing institution
- Alerts

3 REPORTING

- Half-yearly reporting
- Regular updates

4 CONTROL

- Monitoring application of SRI procedures, controls and any requests to adjust investments
- Review of annual reports (managers, agencies, committees, etc.)

GENERAL DESCRIPTION OF ESG RISKS

Like many pension funds and insurers, ERAFP makes a commitment to its contributors and beneficiaries lasting decades. Unlike some others, however, ERAFP enjoys a relatively unusual advantage: as a young, mandatory scheme it benefits from sizeable net financial inflows (contributions net of benefits paid and investment income), which can be quite accurately forecast. While these factors give it a very long-term responsibility with regard to its beneficiaries, they also provide

it with the resources to implement a commensurate investment policy. This obligation and its capacity to take a very long view are what make ERAFP strive to integrate into its investment policy, in as detailed a way possible, environmental, social and governance criteria.

While the specific ESG factors to take into account vary depending on the category, geographical exposure and activity of the issuer in question, it can be said in general, non-exhaustive terms that:

_ a given state's debt is sustainable only if all the conditions for lasting growth are met: an educated,

trained population, high-quality infrastructures and controlled environmental impacts;

_ a company will only be profitable in the long term if it:

- anticipates its future needs in terms of key skills and trains its employees accordingly;
- puts in place the governance mechanisms needed to carry out its business efficiently; and
- controls the costs associated with the consumption of natural resources and anticipated future environmental regulations (physical and transition risks).

THE CHARTER'S 5 VALUES AND 18 CRITERIA



Rule of law and human rights

_ Non-discrimination and promotion of equal opportunities

_ Freedom of opinion and expression and other fundamental rights

_ Responsible supply chain management

1



Social progress

_ Responsible career management and forward-looking job strategy

_ Fair sharing of added value

_ Improvement of working conditions

_ Impact and social added value of the product or service

2



Democratic labour relations

_ Respect for union rights and promotion of labour-management dialogue

_ Improvement of health and safety conditions

3

Lastly, in analysing issues on a whole-portfolio basis, a universal investor such as ERAFP can only insist on the necessity of adopting a cross-cutting approach. For example, the resources that countries need to create the conditions for future growth depend partly on their ability to collect taxes from companies. Similarly, a territory can only attract companies if its population is well educated and trained. Lastly, the quality of life within a country cannot be assessed

without taking into consideration the environmental impacts of the economic players that do business there.

SELECTION OF THE MAIN CRITERIA

ERAFP's SRI Charter, which was drawn up at the instigation of its board of directors, is based on French public service values. It is applied to all of the Scheme's

investments and broken down into more than 18 evaluation criteria adapted to the specific features of each category of issuer. While each issuer's individual context systematically dictates the analysis of these criteria, the Scheme considers some to be key and therefore attributes more weight to them, regardless of the issuer's geographic location or activity. The most important criteria (in bold in the table below) must therefore always be assigned the same value.



Environment

- **Environmental strategy**
- Environmental impact of the product or service
- Control of environmental impacts
- **Control of risks associated with climate change and contribution to the energy transition**

4

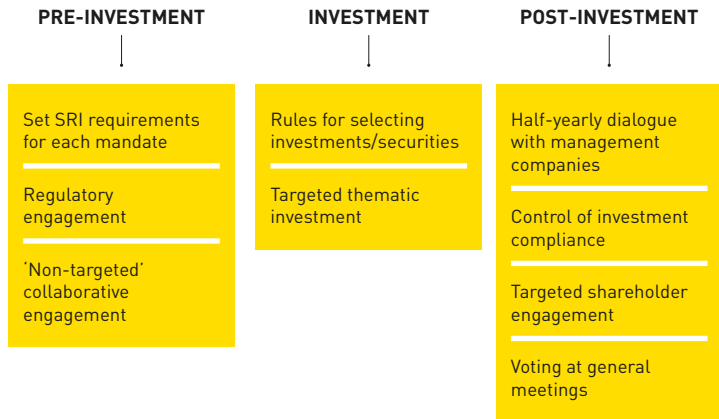


Good governance and transparency

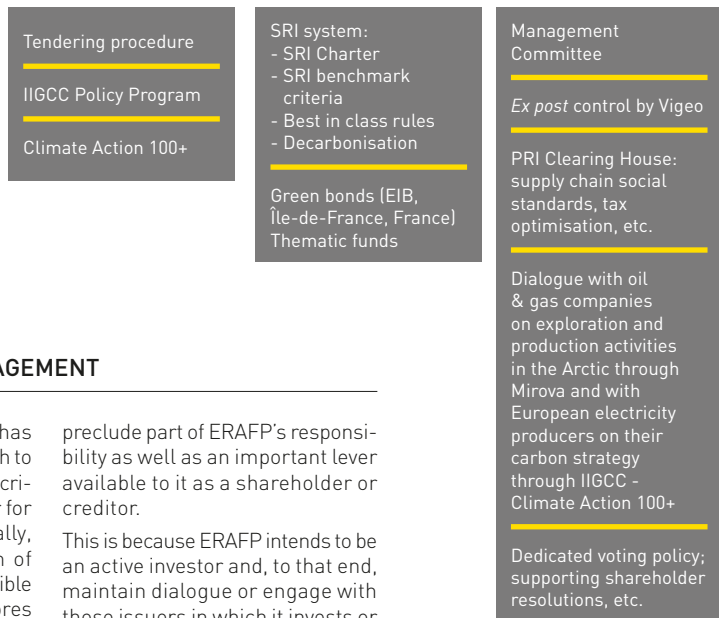
- **Management/corporate governance**
- Protection of and respect for customer/consumer rights
- **Fight against corruption and money-laundering**
- Responsible lobbying practices
- Tax transparency and accountability

5

Investment process



Examples



BEST IN CLASS AND ENGAGEMENT

As mentioned above, ERAFP has selected a best in class approach to take into consideration the ESG criteria underlying its SRI Charter for all its investments. Operationally, this principle takes the form of detailed rules that make it possible to determine, based on the scores that issuers obtain for ERAFP's SRI criteria, the issuers that can be considered as the best in their category.

For large listed companies, for example, the best in class principle is applied by performing two successive screenings.

If this SRI approach were limited to the application of quantitative rules established to define an eligible investment universe, it would

preclude part of ERAFP's responsibility as well as an important lever available to it as a shareholder or creditor.

This is because ERAFP intends to be an active investor and, to that end, maintain dialogue or engage with those issuers in which it invests or with the authorities that define its investment framework. Accordingly, in 2012 ERAFP adopted shareholder engagement guidelines, which it updates yearly. They establish priority engagement themes for the year as well as the voting policy that ERAFP's delegated asset managers must apply at general meetings.

ERAFP's SRI strategy is summarised in the chart above.

CLIMATE APPROACH BASED ON TCFD THEMES



In 2019, ERAFP's climate approach took two major steps forward:

- _ Companies generating more than 10% of their revenues from activities related to thermal coal were excluded from the portfolio.
- _ A new indicator was incorporated into its best in class policy which now requires companies in sectors with major energy transition issues to adopt a strategy that conforms to the Paris Agreement targets.

In 2020, having joined the Net-Zero Asset Owner Alliance, ERAFP plans to work with the other members of the alliance to put the Alliance's three main action areas into practice. These are:


- _ Developing a rigorous methodology for measuring portfolio alignment with the Paris Agreement.
- _ Shareholder dialogue with companies to ensure that they are also moving towards carbon neutrality.
- _ Promoting public policies that promote the transition to a carbon-free economy.

ERAFP'S IMPLEMENTATION OF TCFD RECOMMENDATIONS

The TCFD's recommendations generally fall into four areas:

- _ Governance
- _ Strategy
- _ Risk management
- _ Indicators

At ERAFP, managing the impacts of climate change is the responsibility of the technical and financial department, which uses available resources and reports information to the board of directors through the CSPP.



GOVERNANCE

The TCFD's recommendations highlight the need for good governance structures to ensure effective oversight of climate-related risks and opportunities.

> Board of directors (based on the CSPP's work)

The board of directors:

- _ sets the general orientation of the SRI policy, including the Climate strategy (e.g. thermal coal exclusion policy);
- _ and ensures that it is effectively applied.

To enable it to be truly responsive, the board is kept permanently and fully informed on climate issues via its investment policy monitoring committee (CSPP). Each year, the SRI team reports to the board on the results of the analysis of climate change risks and opportunities in ERAFP's portfolio at a meeting of the committee. The agenda for each committee meeting also includes an update on the monitoring of collaborative

initiatives, so that the board is kept informed of key developments in ERAFP's shareholder engagement actions in respect of the climate.

Lastly, each year Management organises a training day or conference for directors on energy transition issues in order to enhance their knowledge in this area and promote dialogue and discussion.

> ERAFP's management

ERAFP's management plays a number of roles:

- _ it drafts proposed changes to the climate policy for submission to the board of directors;
- _ it ensures that its investment managers fully understand and apply ERAFP's climate approach and voting policy on climate-related shareholder motions;
- _ it ensures that the contracts signed with external climate services agencies are properly performed;
- _ it dialogues with companies on climate issues and participates in a number of joint climate initiatives;
- _ it reports to the board of directors and the CSPP on implementation of the climate approach, and assists directors with the preparation of their work.

> Climate service providers

In keeping with its commitment to the energy and ecological transition and its aim of complying both with regulatory requirements and with the TCFD recommendations, ERAFP awarded contracts in November 2019 to two consulting firms, S&P Trucost Limited and Carbone 4. Under these three-year contracts, the two service providers will help ERAFP to assess the exposure of its asset portfolio to climate change issues and support it in implementing its climate strategy.

> Asset management companies

Asset management companies with a mandate from ERAFP must:

- _ apply ERAFP's best in class SRI approach, in which climate issues play an important role;
- _ describe the process and results of the dialogue conducted with companies and other entities in the portfolio on climate-related risks and opportunities;
- _ provide details of votes on climate change resolutions;

- _ supply as a minimum the carbon intensity, carbon footprint or absolute emissions of the portfolio on an annual basis;
- _ set out the methodology used to calculate these indicators as well as the reasoning behind it, in particular 'the underlying assumptions and their limits'.

DATA PROVIDER	ASSET CLASS	INDICATORS
TRUCOST	Sovereign	Transition risks, alignment of the energy mix with a 2°C scenario
	Equities	Alignment with 2°C scenario, contribution to the energy transition, 'brown share', transition risks and physical risks
	Bonds	
	Convertible bonds	
CARBONE 4	Infrastructure	Absolute emissions, carbon footprint, transition risks, alignment with 2°C scenario, contribution to the energy transition, emissions savings, 'brown share', physical risks
	Private equity	Absolute emissions, carbon footprint, transition risks, contribution to the energy transition, physical risks
	Real estate	Absolute emissions, carbon footprint, transition risks, surface intensity, alignment with 2°C scenario, contribution to the energy transition, emissions savings, physical risks

STRATEGY

The TCFD and article 173-VI are aligned in this area, calling on companies to describe the risks to which they are exposed, how these risks impact their strategy and how they change their strategy accordingly (and notably how consistent the investment policy is with climate change mitigation objectives).

ERAFP's strategy is based on a twofold analysis of climate-related risks and opportunities:

- _ preliminary analysis, involving best in class screening prior to making an investment;
- _ post-investment analysis, which involves using climate analysis tools to identify the issuers presenting the greatest climate-related risks or opportunities and thus to prioritise shareholder engagement actions to be taken by ERAFP or its asset managers.

> Pre-Investment analysis


The consequences of climate change are probably one of the risk factors most likely to have a long-term impact on the value of ERAFP's assets. That is why, in breaking down the SRI Charter into more detailed issuer evaluation rules, ERAFP has integrated criteria designed to better determine the level of these issuers' exposure to the various facets of climate risk and enhanced them over the years.

In particular, under the 'environment' value of ERAFP's SRI Charter, the 'Control of the risks associated with climate change and contribution to the energy transition' criterion makes it possible to assess the commitments that issuers have made, the measures that they have adopted and the tangible results that they have achieved as regards containing and reducing the greenhouse gas emissions associated with their activity.

The listed and unlisted companies, countries and other issuers that score most highly on this criterion will probably be the best placed to cope with the adjustments needed as a result of climate change measures, such as more stringent regulations, the introduction of a carbon price, client and investor expectations and increased vigilance by civil society.

This criterion also makes it possible to assess the efforts made by issuers to anticipate and adapt to the effects and consequences of climate change. Finally, this criterion also makes it possible to assess the value of companies in sectors with significant energy transition issues that have laid down a strategy in line with the objectives of the Paris Agreement, and to exclude companies deriving more than 10% of their revenue from thermal coal.

Complementing the *ex ante* view of the investment policy provided by the best in class approach and especially the SRI ratings, climate analysis tools provide an *ex post* view of the allocation choices made.



In order to estimate the degree of control that issuers have over the physical risks associated with climate change (increasing scarcity of natural resources, especially water, increased occurrence of extreme weather events, impacts on biodiversity, etc.) ERAFP also uses a 'Control of environmental impacts' criterion, making it possible to assess the commitments made by issuers regarding the protection of water, the preservation of biodiversity and the prevention of pollution risks.

Conversely, ERAFP's SRI environment value criterion relating to the 'Product or service's environmental impact' makes it possible to promote companies that offer innovative solutions to sustainable development challenges, particularly in the area of the energy and environmental transition.

Monitoring an asset portfolio's consolidated average scores for these criteria can be a way of estimating that portfolio's exposure to climate change-associated risks. Such an indicator is difficult to interpret, however, and does not provide a detailed picture of the real impact of ERAFP's assets on the environment.

> Post-investment analysis

The search for a better understanding of a portfolio's degree of exposure to the transition risks associated with climate change has led ERAFP to acquire specific monitoring tools. In 2013, ERAFP was thus one of the first investors to quantify the greenhouse gas emissions caused by its investments, initially for listed equities, and to compare them with a standard market benchmark. Since then, ERAFP has taken a continuous improvement approach to its assessment of climate-related risks and opportunities, expanding the number of asset classes and indicators covered over the years.

Alongside the strategy set out above, which applies to 93%³⁷ of its investments, ERAFP also seeks to make a positive contribution to the energy transition through its themed investments in areas such as renewable energy, forestry and green bonds, as well as in climate-friendly thematic equity funds and in its low carbon investment mandate.

Since its inception, ERAFP has made it a point of honour to ensure that its investment activities are consistent with its commitment to a carbon-free economy. By joining the Net-Zero Asset Owner Alliance, an initiative supported by the United Nations, ERAFP is formalising its commitment to decarbonising its portfolio, with a view to achieving a carbon-neutral investment portfolio by 2050, thus confirming its energy transition ambitions.



UPDATE

ERAFP has been working since 2015 with French asset manager Amundi on a methodology geared towards significantly reducing the carbon footprint of the portfolio of around €2 billion in euro-zone equities that Amundi manages on under an index-tracking management mandate.

As well as best in class screening, data collected on companies' carbon intensity (CO₂ emissions per unit of revenue) is also screened: 5% of the most polluting companies worldwide and 20% of the most polluting companies in each sector are excluded from the portfolio. The decarbonised portfolio, whose tracking error is capped at 0.7%, has a performance similar to the underlying index, but its carbon intensity is around 40% lower.

³⁷ This figure corresponds to the percentage of investments subject to both ERAFP's SRI policy and the climate analysis performed by the climate service providers.

CLIMATE RISK MANAGEMENT

The TCFD insists on a description of the processes in place to target and manage climate-related risks.

> Operational implementation risk

_ In order to prevent misinterpretation of its climate strategy by asset managers, ERAFP's strategic management includes monitoring the actions taken by asset management companies to factor in climate-related risks. This monitoring is performed via the following control actions in particular:

- Controls before launching a mandate: ERAFP only selects asset management companies that are able to apply its SRI framework and whose offer demonstrates a perfect understanding of this framework;
 - During the course of the mandate, ERAFP checks that its SRI framework is properly applied by its asset managers, questions managers on how they manage, control and mitigate climate-related risks and encourages them to engage in dialogue with companies in the portfolio in order to promote greater transparency and increased availability of climate-related data.
- _ ERAFP mitigates the risk of a poor assessment of an issuer's climate profile by using many different sources of data:
- the non-financial rating agency, Vigeo, via its half-yearly and monthly reports and its continuous alert-based monitoring system;
 - climate service providers S&P Trucost Limited and Carbone 4, via their analyses of climate change-related risks and opportunities;
 - analyses by our asset management companies, via their reporting and discussions at management committee meetings;
 - collaborative climate initiatives in which ERAFP participates.

Since assessing the potential financial impact of climate-related risks and opportunities on an investment portfolio is an essential part of the TCFD framework, ERAFP has conducted such an exercise this year, albeit limited to the analysis of transition risks and physical risks. ERAFP intends to wait until the European green taxonomy is finalised before embarking on an assessment of climate-related opportunities.



> Transition risk

Transition risk encompasses political and legal risks, technology risks, market risks and reputational risks.

Carbon pricing mechanisms now seem indispensable to reducing greenhouse gas (GHG) emissions. More than fifty carbon pricing schemes are currently in operation, covering around 20% of global emissions. It is highly likely that other schemes will emerge in order to ensure achievement of the nationally determined contributions (NDCs) of the countries that have ratified the 2015 Paris Agreement. Higher carbon prices are likely to have direct financial consequences for companies whose core business produces GHG emissions.

Companies will also face indirect financial risks as higher carbon prices are passed on to their suppliers, who will seek to cover some or all of the cost by increasing their own prices in turn. Factors have thus been developed to estimate the proportion of additional costs that will be passed on from suppliers to companies.

In this environment, companies with higher earnings power will have a better chance of absorbing future cost rises due to carbon pricing or price hikes. EBITDA at risk³⁸ is a good indicator of a company's potential vulnerability. The bar chart below summarises the exposure of the global aggregate portfolio to an increase in carbon prices

under two price scenarios (intermediate and high carbon prices) based on the IPCC's representative concentration pathways (RCP 2.6 and 4.5).³⁹

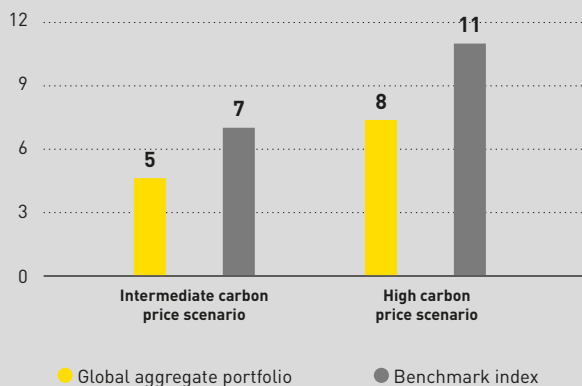
Total exposure reflects a portfolio-wide weighting of the EBITDA at risk of the companies that make up the portfolio.

³⁸ EBITDA at risk = (Future carbon costs)/EBITDA.

³⁹ Details of the IPCC representative concentration pathway (RCP) scenarios are presented on p.81.

WEIGHTED EBITDA AT RISK OF THE GLOBAL AGGREGATE PORTFOLIO IN 2030 [%]

Source — Trucost



5% of the weighted profits of the global aggregate portfolio would be 'at risk' if carbon prices increased in line with the intermediate carbon price scenario, compared with 7% for the benchmark index. Under the high carbon price scenario, 8% of weighted profits would be at risk for the portfolio, compared with 11% for the benchmark.

> The analysis shows that by 2030:

– If carbon prices increase in line with the “intermediate carbon price” scenario:

- If carbon prices increase in line with the ‘intermediate carbon price’ scenario, the EBITDA margin will fall by 0.81% for the global aggregate portfolio relative to current levels, compared with a 0.96% fall for the benchmark index;
- such an increase will lead to a 6.47% reduction in the average value of portfolio companies, measured by the ratio of enterprise value to EBITDA, compared with 9.09% for the benchmark index.

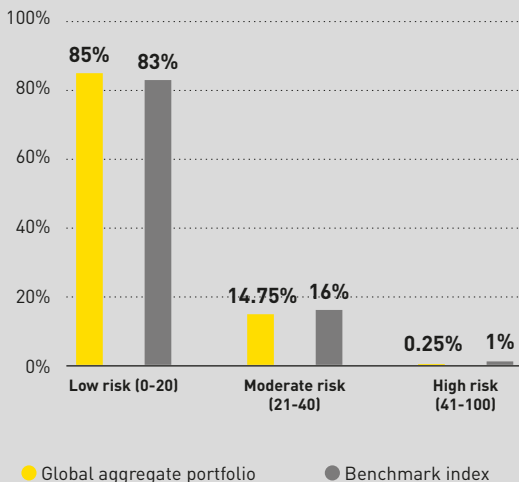
– If carbon prices increase in line with the “high carbon price” scenario:

- If carbon prices increase in line with the ‘high carbon price’ scenario, the EBITDA margin will fall by 1.34% for the global aggregate portfolio relative to current levels, compared with a 1.61% fall for the benchmark index;
- such an increase will lead to a 10.94% reduction in the average value of portfolio companies, measured by the ratio of enterprise value to EBITDA, compared with 11.91% for the benchmark index.

EXPOSURE OF THE AGGREGATE PORTFOLIO TO PHYSICAL RISKS

[% OF PORTFOLIO VALUE]

Source – Trucost



The risk score is less than or equal to 20 (low risk) for 85% of the value of the global aggregate portfolio. This is higher than the low-risk proportion of the benchmark (83%).

The risk score is less than or equal to 40 (high risk) for 0.25% of the value of the global aggregate portfolio. This is lower than the high-risk proportion of the benchmark (1%).

> Low scenario (RCP 2.6)

This scenario assumes that policies are implemented that are considered sufficient to reduce greenhouse gas emissions in accordance with the Paris Agreement target of limiting climate change to 2°C by 2100. This scenario is based on OECD and IEA research.

> Intermediate scenario (RCP 4.5)

This scenario assumes that policies will be implemented to reduce greenhouse gas emissions and limit climate change to 2°C in the long term, but with delays in taking measures in the short term. In relation to transition risks, the intermediate carbon price scenario is also based on OECD and IEA research as well as on the viability assessments of nationally determined country contributions carried out by Ecofys, Climate Analytics and New Climate Team. It is assumed that countries whose national contributions are not in line with the 2°C target in the short term will increase their climate change mitigation efforts in the medium to long term.

> High scenario (RCP 8.5)

This scenario reflects the full implementation of nationally determined country contributions under the Paris Agreement, based on OECD and IEA research.

*The scenarios have different implications for physical and transition risks. For transition risks, a high carbon price implies that **policies are implemented that are considered sufficient to reduce greenhouse gas emissions in accordance with the Paris Agreement objective of limiting climate change to 2°C by 2100** (Low scenario, RCP 2.6). For the analysis of physical risks, a high-risk scenario is based on the high scenario (RCP 8.5) described above.*

> Physical risk

The physical risks precipitated by climate change will have a tremendous impact on financial markets. Severe disruptions could materialise globally due to commodity shortages, price fluctuations, or damage and loss of infrastructure.

Physical risks are a combination of localised risks (relating to sites) and risks relating to the value chain of affected businesses. S&P Trucost Limited has developed a methodology based on data from more than 500,000 assets linked to more than 15,000 companies. These assets are assessed based on their exposure and vulnerability to seven physical risks (water stress, fires, floods, heat waves, cold waves, hurricanes and rising water levels). Evaluations are performed on the basis of three climate scenarios (low, moderate and high levels of global warming), that are in turn based on the IPCC's representative concentration pathways (RCP 2.6, 4.5 and 8.5).

Companies are rated from 1 to 100 for each of the seven risks in all three scenarios. The lowest rating is 1, while a rating of 100 indicates the highest possible exposure and vulnerability to a given risk. The average of the seven scores is then calculated to obtain a composite physical risk score at company level.

ERAFFP's global aggregate portfolio scores 11.6 in the high-warming scenario for 2050.

In accordance with the TCFD’s recommendations, ERAFP has decided to use the weighted average carbon intensity method. In the course of its continuous improvement approach, ERAFP has also enhanced this measure by including an analysis of indirect emissions (scope 3), along with changes in this indicator over time, in the context of this report.

INDICATORS

Driven by its conviction that what is not measured cannot be managed, ERAFP was one of the first investors to calculate and publish its carbon footprint, in its 2013 public report.

> Carbon intensity

Since 2015, ERAFP has used the method that measures the investor’s carbon risk on the basis of carbon intensity.

ERAFP’s approach consists in considering that a portfolio’s exposure to climate risk is reflected by the average carbon intensity (normalised CO₂ emissions by revenue) of its constituent companies or countries, weighted by their respective weights in the portfolio. This measure, while providing no information on indirect CO₂ emissions or those attributable to ERAFP’s investments, circumvents the biases linked to measuring investor responsibility⁴⁰ and can be applied to all asset classes. In addition, the fact that it takes

Calculation of carbon intensity as a weighted average

MEASUREMENT OF THE INVESTOR’S CARBON RISK EXPOSURE

At issuer level: factoring in of carbon intensity, in terms of CO₂ emissions per unit of either revenue (companies) or GDP (countries)

Portfolio level aggregation: average carbon intensity of issuers weighted for their respective proportions of the portfolio

Normalisation (unit): CO₂ emissions per unit of revenue (weighted average) or GDP

account of a company’s size means it can be used to assess operational efficiency as well as the exposure of the portfolio to the most carbon-intensive companies.

ERAFP has carried out an historical analysis of this indicator to find out whether the trend in the portfolios is towards rising or falling GHG emissions.⁴¹

Since the bulk of GHG emissions from certain key sectors fall under scope 3,⁴² ERAFP determined that it was necessary to factor in these indirect emissions in order to achieve a proper assessment of the risk linked to climate change. However, in the absence of a comprehensive measurement and reporting standard, and in view of the problem of double and triple

⁴⁰ The fact that the share of a company’s CO₂ emissions attributable to an investor changes according to the market capitalisation, the level of debt or the company’s financial structure more generally, independently of the emissions themselves, is one of the main biases.

⁴¹ The historical analysis covers the period 2015-2019 for the equity and corporate bond portfolios and 2016-2019 for convertible bonds, which were not covered by the climate analysis in 2015.

⁴² Scope 1 concerns direct emissions from the combustion of fossil fuels, such as gas, oil, coal, etc. Scope 2 covers indirect emissions related to the consumption of electricity, heat or steam required to manufacture a product. Scope 3 concerns other indirect emissions, such as the extraction of materials purchased by the company to manufacture a product or the transport-related emissions of employees and of customers who buy the product. This is the largest share of a company’s emissions.

⁴³ The *Representative Concentration Pathways* scenarios (RCP 2.6, 4.5 and 8.5) are detailed on page 79.

counting and the small proportion of companies publishing their emissions, ERAFP has decided to look at two measures:

- _ analysis of scope 1 emissions and direct suppliers;
- _ analysis of emissions for all scopes.

Lastly, although this measure is highly suited to ERAFP's best in class approach in that it identifies the best-performing issuers in a sector in terms of carbon efficiency, it has certain limitations, such as a lack of visibility on the contribution to the energy transition (the 'green share') and a lack of more qualitative and forward-looking dimensions (alignment with a 2°C scenario).

> Alignment with a 2°C scenario

The degree to which portfolios and benchmarks are aligned with the objective of limiting global warming relative to pre-industrial levels was assessed by examining the consistency of the carbon trajectories of the companies that make them up with the trajectories assumed by a variety of warming scenarios.

Methodology for calculating sector trajectories

The Paris Agreement target implies that annual global net CO₂ emissions will have to be reduced to zero by 2050, with this effort being split between different industries according to specific sectoral 'trajectories'.

In accordance with the recommendations of the Science-Based Targets initiative (SBTi), the trajectories used in this report will follow the Sectoral Decarbonisation Approach (SDA) for sectors with homogenous production and the GHG Emissions per Value Added Approach (GEVA) for the remaining sectors in the portfolio.

PORTFOLIO

Sectors	Sectors with homogenous, carbon-intensive production for which a specific decarbonisation trajectory exists Electricity generation, cement, steel, air transport	Sectors with various types of production for which no distinct decarbonisation trajectory exists Other sectors
Method	SDA The SDA methodology is based on the application of the IEA's 2°C scenario, which posits, for certain business sectors, '2°C trajectories' between 2010 and 2050, including targets for absolute carbon intensity levels by 2050 (tCO ₂ /unit of activity), as well as annual rates of reduction of that carbon intensity.	GEVA The GEVA method assumes that all the different sectors of the economy must reduce their emissions at the same pace. Unlike the SDA methodology, the unit-of-added-value approach is based on an economy-wide scenario and emissions intensity is measured against a financial rather than a physical baseline. Each company's transition trajectories are then measured in terms of carbon per unit of added value, adjusted for inflation. These results are then compared with the global decarbonisation trajectories that would satisfy a given global warming scenario.
Scenarios	International Energy Agency (IEA) scenarios taken from <i>Energy Technology Perspectives</i> (ETP) 2017, providing SDA assessment parameters compliant with 1.75, 2 and 2.7°C global warming.	Representative Concentration Pathways (RCP) scenarios used in the IPCC's AR5 report, providing GEVA evaluation parameters compatible with global warming of 2, 3, 4 and 5°C (RCP 2.6, 4.5, 6.0, 8.5). ⁴³ For the 1.5°C scenario, an intensity reduction rate of 7% per year is used. This is the rate recommended by the SBTi.

Methodology for calculating issuer trajectories

Trajectories for issuers are calculated using both historical and forward-looking data. The historical data concerns greenhouse gas emissions and the company's activities and has been compiled since 2012. The forward-looking data depends on the sources available, which are listed below in order of use:

- _ Emission reduction targets reported by the companies.
- _ Failing that, data by asset for certain sectors.

_ Failing that, historical emissions trends for companies with the same commercial activities.

_ Failing that, historical average emissions trends within a sub-industry.

_ Failing that, emissions intensity is assumed to be constant.

The assessments are based on scope 1 and scope 2 GHG emissions.

For the purposes of this report, ERAFP uses carbon budget ratios to assess the alignment of an issuer or portfolio with these science-based trajectories.

Carbon budget ratio

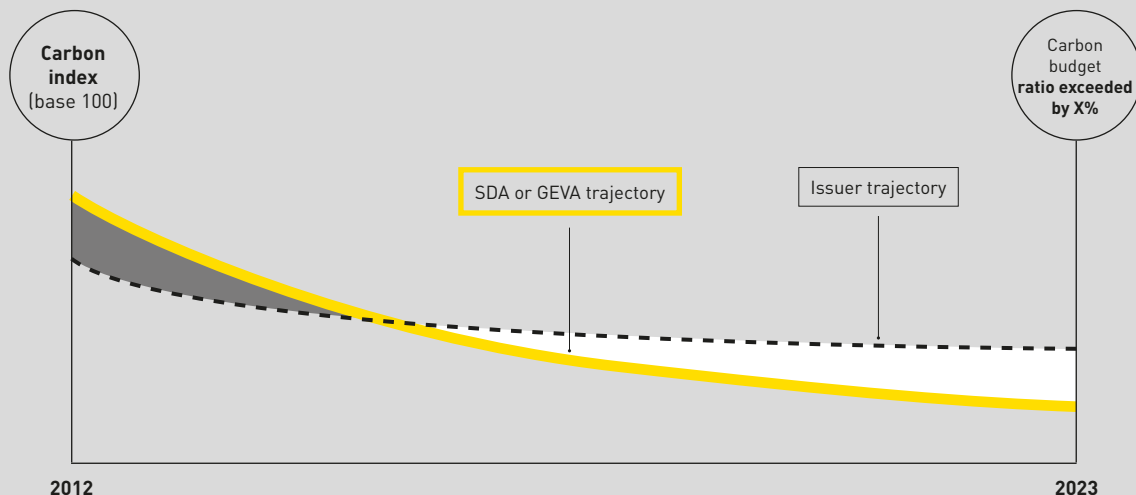
The carbon budget ratio assesses whether issuers' aggregate past and future emissions are in line with the greenhouse gas emissions trajectories required not to exceed 2°C of global warming. This makes it possible to determine whether, over the period 2012-2023, issuers will have issued more or less than in a 2°C scenario.

In the graph below, this is represented by the difference between the white area and the dark grey area in relation to the total carbon budget for the period.

BASIC PRINCIPLE FOR CALCULATING THE CARBON BUDGET RATIO

Source — ERAFP

- Carbon emissions not emitted vs. carbon budget of the 2°C trajectory
- Carbon emissions exceeding the carbon budget vs. the carbon budget of the 2°C trajectory



Advantages and limitations of carbon budget ratios

Advantages:

- _ The benchmark does not reflect companies' average performance but the performance expected for 2°C compatibility.
- _ The carbon budget ratio shows the remaining or exceeded carbon budget for each sector studied compared to a budget aligned with a 2°C scenario. It is based on an aggregate of issuers' past and future emissions. The indicator can thus be considered conservative insofar as a large proportion of issuers have not yet undertaken initiatives to meet the 2°C target.

Limitations:

- _ The method takes account of companies' published targets for carbon performance, but lacks a system for assessing their ability to keep to their commitments.
- _ The methodology is constantly evolving and needs to be further improved over time.

Analysing the alignment of portfolios with the climate objectives of the Paris Agreement is a new and complex exercise on which more methodological work needs to be performed. Given this, ERAFP has joined the Net-Zero Asset Owner Alliance in order to work with fellow members on developing a rigorous methodology.

> **Green share**

Focus on electricity generation

As explained above, ERAFP wishes to wait until the European green taxonomy is finalised before embarking on the development of an overall analytical methodology regarding climate-related opportunities for its portfolios.

However, given the crucial role that the electricity generation sector must play in the coming years to achieve the 2°C target, ERAFP has decided to assess:

- _ the output in GWh produced by the sector from fossil fuels, renewables or other energy sources (i.e. nuclear);
- _ the alignment of the energy mix of the portfolios with political global warming targets.

> **Brown share**

Focus on exposure to fossil fuels

To limit global warming to 2°C, the energy sector must make drastic changes, as only a third of the world's fossil fuel reserves and resources can be burned⁴³ (70% of the world's fossil fuel resources must remain unused before 2050, i.e.: a third of oil resources, 50% of gas resources and more than 80% of coal resources).⁴⁴

Industry experts refer to assets that may be unexpectedly or prematurely impaired, devalued or transformed into 'liabilities' as 'stranded assets'. The exposure of ERAFP's portfolio and benchmark indices to these assets can be analysed through their exposure to extractive companies and their reserves. Extraction activities include the following industries: open-cast extraction of bituminous coal and lignite, underground extraction of bituminous coal, extraction of crude oil and natural gas, extraction of natural gas in liquid form, oil and gas well drilling, extraction of bituminous sands and oil and gas support activities.

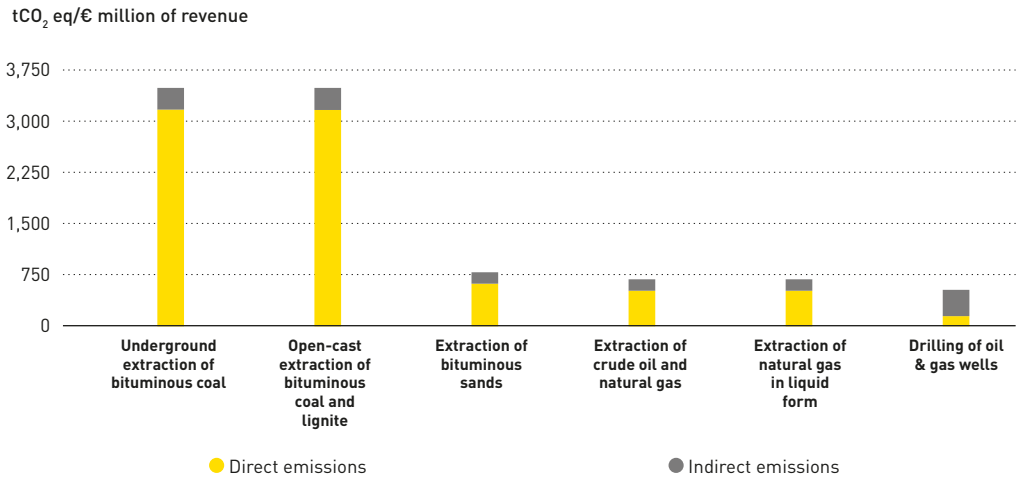
An issuer's excess, or carbon budget surplus, is expressed as a temperature to enable the issuer's performance to be compared to the 2°C and 1.5°C targets.

⁴³ International Energy Agency.

⁴⁴ 'The geographical distribution of fossil fuels unused when limiting global warming to 2°C' by Christophe McGlade & Paul Ekins, 2015.

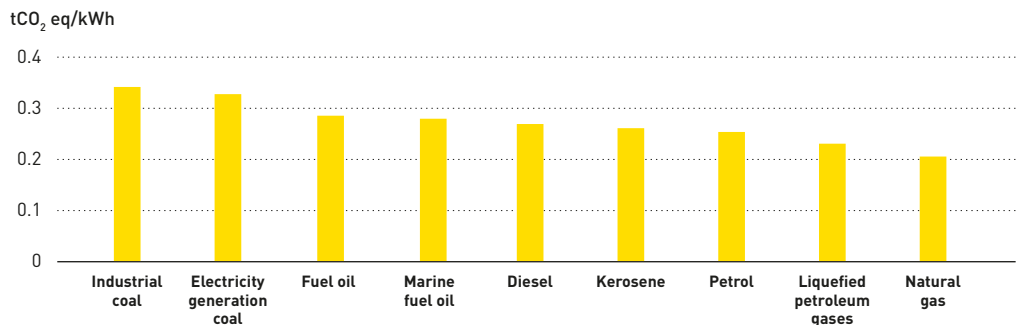
CARBON INTENSITY OF THE VARIOUS EXTRACTIVE SECTORS

Source — Trucost



EMISSIONS INCLUDING THE COMBUSTION OF VARIOUS FOSSIL FUELS

Source — Defra



These different types of extraction have a more or less significant climate impact. In terms of tCO₂/€ million of revenue (excluding use), coal extraction emerges as the most polluting industry.

If we include the use phase for these extractive industries, expressed in tCO₂/kWh, the differences between the various types of energy disappear but coal remains the highest emitter of CO₂.

While fossil fuels are still used throughout the economy today, some seem more easily substitutable than others in terms of use. In the electricity generation sector, for example, replacing fossil fuels and coal in particular – which still represented nearly 40% of energy consumption in 2017⁴⁵ – with non-fossil-based energy represents the first major challenge of the energy transition.

With this in mind, in 2019 ERAFP updated its best in class policy by requiring companies in sectors with a high energy transition impact to adopt strategies consistent with the objectives of the Paris Agreement – and by selling its interests in those without such a strategy and whose thermal coal-related activities account for more than 10% of their revenue.

ENGAGEMENT STRATEGY

Engagement refers to all forms of dialogue between one or more investors and one or more issuers. It may be collaborative, in other words led by a group of investors, or limited to exchange between a single investor and a single issuer. ERAFP tends to favour collaborative engagement, insofar as:

- _ a group of investors can exert more influence capitalistically on a company than one investor in isolation;
- _ the resources needed to carry out the engagement (research, time, etc.) can be pooled between the participants;
- _ it facilitates the sharing of good practice among investors.

The general meeting is an important date in the company calendar, providing an opportunity for dialogue with shareholders as it requires them to give their opinion directly on a certain number of agenda items.

Since 2012, ERAFP has formalised its engagement approach by adopting guidelines that define both priority engagement themes and its general meeting voting policy. Moreover, in updating its SRI Charter in 2016, ERAFP sought to formally strengthen its position as a committed investor. The updated SRI Charter explains that *"ERAFP is determined to support, on a long-term basis, those organisations in which it has decided to invest, by*

exercising its responsibilities as shareholder or stakeholder in such a way as to sustainably promote, within these entities, practices that respect the values it supports."

COLLABORATIVE INITIATIVES

In 2019, ERAFP continued its engagement initiatives on a number of environmental, social and governance fronts, via both collaborative initiatives and various investor networks and platforms. Every year, ERAFP defines four priority themes for its shareholder engagement guidelines.

BREAKDOWN OF COLLABORATIVE INITIATIVES SUPPORTED BY ERAFP, BY PRIORITY ENGAGEMENT THEME

1

Fight against climate change

- _ IIGCC/Climate Action 100+
- _ Mirova
- _ IDI/ShareAction
- _ PRI
- _ Net-Zero Asset Owner Alliance

2

Prevention of social risks in the supply chain

- _ PRI
- _ Mirova
- _ ICCR

3

Promotion of best governance practice globally, particularly in Asia

- _ Global Asset Owners Forum
- _ Asian Corporate Governance Association (ACGA)

4

Fight against aggressive tax avoidance practices

- _ PRI

For each priority engagement theme, ERAFP participates in at least one collaborative engagement initiative:

– **Fight against climate change:**

- the Mirova platform (Natixis Asset Management's dedicated responsible investment subsidiary) concerning hydrocarbon exploration in the Arctic region;
- the Investor Decarbonisation Initiative (IDI). Coordinated by ShareAction and led by the Climate Group and the Carbon Disclosure Project, IDI encourages listed companies to define their carbon emissions targets geared towards a 2°C scenario, based on the Science Based Targets initiative. The measures proposed to companies to reduce their emissions include eventually purchasing 100% renewable electricity and increasing their energy efficiency and electric vehicle fleet;
- the Institutional Investors Group on Climate Change (IIGCC)/Climate Action 100+ initiative, which aims to encourage European companies in the utilities and automotive sectors in particular to implement strategies to significantly reduce greenhouse gas emissions, develop a strong governance framework that takes into account climate change-related risks and opportunities, and improve reporting in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD);

- the initiative led by the United Nations' Principles for Responsible Investment (PRI) on the theme of climate change-related risks, particularly financial ones, in the oil and gas sector;
- the Net-Zero Asset Owner Alliance: this initiative, which ERAFP joined in early 2020, aims to achieve carbon neutrality by 2050 by developing a rigorous methodology for measuring alignment with the Paris Agreement, encouraging shareholder dialogue with companies and promoting public policies in favour of a decarbonised economy.

– **Prevention of social risks in the supply chain:**

- the initiative led by the Interfaith Center on Corporate Responsibility (ICCR) on the topic of human rights in the textile sector's supply chain;
- the initiative led by the United Nations Principles for Responsible Investment (PRI) on the topic of working conditions in the agricultural supply chain;
- the Mirova platform on the topic of environmental and social issues in the supply chain of the textile and IT industries.

– **Promotion of best governance practices globally, particularly in Asia:**

- the Asian Corporate Governance Association (ACGA) aims to improve governance practices at Asian companies. Given Asia's weak corporate governance record, the potential

to improve practices through shareholder engagement and ERAFP's exposure through two equity mandates, ERAFP felt it was appropriate to join this association,

- Global Asset Owners Forum (GAOF): initiative led by the Japanese pension fund GPIF aimed at developing collaboration between investors on ESG matters.

– **Fight against aggressive tax avoidance practices:**

- the PRI initiative on corporate tax responsibility supported by ERAFP since 2016. This has been a two-phase initiative: before 2017 member investors developed a guide on corporate tax responsibility, and since then the guide has been used as a basis for engagement with a sample of companies in the health and new information and communication technologies sectors aimed at improving corporate practices and transparency in this area.

Generally speaking, the objective of collaborative initiatives is to question issuers about their practices and ask them to explain and, if necessary, improve them.

In addition to written exchanges, the engagement coordinators organise meetings with willing issuers to explain the expected level of transparency and the best practice in their sector and to discuss the issuers' intended action plans for the coming years.



UPDATE CLIMATE ACTION 100+ INITIATIVE

Launched at the end of 2017, this initiative is led jointly by the PRI and the Global Investor Coalition on Climate Change, which brings together the four regional investor groups including IIGCC, the European Institutional Investors Group on Climate Change.

The initiative aims to work not only with more than 100 issuers identified as the world's largest emitters of greenhouse gases, but also with those with the greatest capacity to contribute to the energy transition through their emissions reduction strategy.

As a continuation of its pre-2017 engagement within the IIGCC, ERAFP actively participates in Climate Action 100+ shareholder engagement in the utilities and automotive sectors. It steers engagement in these sectors with two companies, in one case in conjunction with two other investors and in the other as a "support" investor. Of key importance in the energy transition, the utilities and automotive sectors – and more particularly the companies with which ERAFP engages – have started to take significant measures such as reducing their emissions and replacing fossil fuels and petrol vehicles with renewable energies and electric vehicles, etc., but still need to deploy considerable resources to achieve carbon neutrality by 2050.

INVESTOR STATEMENT

In 2019, ERAFP also endorsed several investor statements containing messages aimed mainly at companies, but also at regulatory and political bodies:

- _ it supported the investor statement coordinated by the Interfaith Center on Corporate Responsibility (ICCR) aimed at maintaining methane emissions regulation in the United States;
- _ it backed the PRI's investor statement on deforestation, calling on companies to step up their efforts to combat deforestation in the context of the proliferation of wild fires in the Amazon basin;
- _ it supported Mirova's statement in favour of gender equality in companies;
- _ Lastly, ERAFP signed the letter sent to the US Securities and Exchange Commission (SEC) signed by the Head of the PRI and aimed at maintaining shareholders' rights when submitting and voting on resolutions at general meetings, particularly for resolutions on ESG issues.

REGULATORY ENGAGEMENT

Dialogue can also be initiated with a regulatory authority to bring about change in the regulatory framework governing investors' activity – in which case the engagement is generally collaborative, as investors join forces to exert more influence on the regulator. Within the IIGCC, at COP 25 ERAFP confirmed its positions in favour of:

- _ continued efforts by governments to support and implement the Paris Agreement, including updating and strengthening nationally determined contributions;
- _ accelerating initiatives to steer investment towards the low-carbon transition;
- _ engagement to improve climate-related financial reporting frameworks.

LOBBYING BY ERAFP'S DELEGATED ASSET MANAGERS

ERAFP also encourages its asset managers to engage with issuers included in the portfolios that they manage for it.

With the implementation of ERAFP's SRI Charter, which was updated in 2016, ERAFP's delegated asset managers closely monitor controversial practices that issuers may be exposed to. As part of a shareholder engagement approach, ERAFP's delegated asset managers initiate dialogue with companies that are involved in proven breaches of international standards or have

questionable environmental, social or governance practices.

In addition to the commitment made as part of the monitoring of controversial practices, the managers may engage individually or collectively with issuers on one or more specific ESG themes, coordinating their efforts to press for increased transparency and a better ESG performance.

In 2019, the number of engagement initiatives in which ERAFP's delegated asset managers were involved increased considerably from 2018

(+41 for direct initiatives and +94 for collaborative initiatives)⁴⁶. Managers also took a leading role in collaborative engagement initiatives much more frequently, as they stepped up their level of activity. One asset manager initiated and ran an engagement campaign with many companies in the ERAFP portfolio on the theme of gender equality, for example.

TYPE AND THEME OF ENGAGEMENT

Source — ERAFP

TYPE OF ENGAGEMENT	NUMBER OF COMPANIES	
Direct engagement	332	
Engagement via a collaborative initiative	161	
Engagement via a collaborative initiative with a leadership role	79%	

ENGAGEMENT THEME	DIRECT ENGAGEMENT	COLLABORATIVE ENGAGEMENT
Environmental	19%	28%
Social	13%	53%
Governance	25%	6%
ESG	44%	13%
Number of companies that have made a formal commitment to change following the shareholder engagement procedure	97	

In terms of direct engagement with companies, the majority of initiatives simultaneously cover environmental, social and governance issues. Governance issues are the next most targeted. By contrast, collaborative commitments mainly focus on a single theme – primarily social and then environmental.

Meanwhile, the number of companies that have made a formal commitment to change or that have already made changes following engagement increased when compared with 2018 (97 companies in 2019 compared with 63 in 2018). Engagement therefore seems to be a lever for change that companies are taking increasingly seriously. Generally speaking, engagement outcomes are measured in the medium term as time is required to assess the initiatives' impact.

A VOTING POLICY THAT IS CONSISTENT WITH PUBLIC SERVICE VALUES AND DEMANDING OF LISTED ISSUERS

ERAFF updates its policy for voting at general meetings (GM) every year to draw lessons from each general meeting season and thereby gradually improve the policy's consistency and comprehensiveness.

While the equity asset management companies implement the policy on its behalf, ERAFF ensures that it is correctly implemented and positions expressed are consistent, by coordinating voting by its delegated asset managers for a number of companies. In 2019, this sample comprised 40 major French companies and 20 major international companies.

For the 40 French GMs that ERAFF monitors in depth, at around 6% the average rate of shareholder opposition to management-proposed resolutions remained low, essentially in line with previous years.

In this, France's sixth year of 'Say on Pay', the average rate of shareholder opposition to corporate officer remuneration resolutions for our sample stayed at around the same level seen since 2017 (87.2% approval rate in 2017, 86.8% in 2018 and 87.1% in 2019), while the average pay of chief executives rose sharply in the year. The average rate of shareholder opposition to

pay resolutions for the sample's highest-paid executives was higher, however.

On other governance issues, ERAFF welcomes in particular the stability of the proportion of women on boards of directors (45% in 2019, up from 36% in 2015) as well as that of independent directors (58% in 2019, up from 47% in 2015).

For the 20 international GMs that ERAFF monitors in depth, at 3.8% the average rate of shareholder opposition to management-proposed resolutions was slightly lower than that observed for the French sample, but unchanged from 2018.

While for international companies resolutions relating to remuneration policies continue to attract little opposition (3.4%) considering the pay levels seen in our sample, it is worth noting that average pay fell year on year⁴⁷.

Meanwhile, at 67% the proportion of independent directors remains higher abroad than that observed in France, whereas conversely, the process of improving gender balance on boards is at a less advanced stage, albeit improving (from 30% in 2018 to 35% in 2019).

Concerning more specifically voting in respect of shares held by ERAFF, the asset management

companies voted more frequently against the resolutions proposed. Indeed, ERAFF voted via its delegated asset management companies against 39.4% and 33.9%, respectively, of the resolutions tabled by the managements of the French and international companies that it monitors in detail. The main themes opposed concerned:

- _ executive pay;
- _ appropriation of earnings (dividend distribution) in cases where the company's proposal seemed irresponsible: distribution in excess of net income, excessive debt, imbalance between shareholders' and employees' remuneration, significant restructuring carried out during the year, etc.;
- _ the appointment of new directors or renewal of existing mandates if the board lacked independence or had a poor gender balance, or if certain directors held an excessive number of board appointments;
- _ the consolidated financial statements if country-by-country financial reporting is not published, as this results in insufficient detail on the geographic distribution of activities.

Lastly, in 2019 ERAFF voted in favour of 28 external resolutions for the monitored sample.



CLIMATE RESOLUTIONS

For the equity portfolio as a whole, delegated asset managers voted in favour of 14 climate-related shareholder resolutions on ERAFF's behalf.

⁴⁶ The results presented in the table on page 88 concern engagement relating to the equity, corporate bond and convertible bond portfolios.

⁴⁷ Calculation carried out on a sample of 20 international companies in 2018 and 2019, on an equal-sample basis.

FRANCE

	2019	2018	2017	2016	2015	2014	
ERAFP SAMPLE INDICATORS	Gender balance of boards	45%	45%	44%	41%	36%	31%
	Independence of boards	58%	56%	52%	51%	47%	46%
	Average pay of chief executive (€)	5,441,684	4,618,390	4,842,008	4,328,418	3,689,856	3,588,105

	2019	2018	2017	2016	2015	2014	2013	
OVERALL RESULTS	Resolutions monitored in detail by ERAFP	915	913	889	810	772	821	658
	Average adoption rate by GM of resolutions proposed by management	94.3%	93.6%	93.70%	94.5%	94.4%	93.6%	96.0%
	Resolutions (excluding shareholder/external resolutions) rejected by GM	1.0%	0.4%	1.7%	1.8%	3.6%	0.2%	0.2%
	Resolutions (excluding shareholder/external resolutions) adopted by less than 90% of the votes	19.4%	19.4%	19.1%	16.6%	16.9%	20.0%	13.0%
	Resolutions (excluding shareholder/external resolutions) adopted by less than 70% of the votes	2.9%	2.7%	2%	1.8%	5.5%	5.1%	1.0%

		2019	2018	2017	2016	2015	2014	2013
ERAFP VOTES	ERAFP votes in favour of a resolution (other than those submitted by shareholders)	61.6%	56.3%	56.8%	60.5%	67.7%	60.7%	62%
	ERAFP votes in favour of a dividend distribution	87.5%	87.5%	50%	51.4%	60.5%	43.6%	42.5%
	Average adoption rate by GM of resolutions concerning a dividend distribution	99.3%	99.2%	99.1%	99.1%	95.9%	98.8%	-
	ERAFP votes in favour of resolutions concerning executives' remuneration	7.6%	9.4%	8.3%	16.9%	16.5%	19.7%	-
	Average adoption rate by GM of resolutions concerning executives' remuneration	87.1%	86.8%	87.2%	90.8%	87.8%	89.5%	-
	ERAFP votes in favour of appointment or reappointment of directors	80.6%	67.3%	63%	67.6%	66.9%	71.8%	-
	Average adoption rate by GM of resolutions concerning appointment or reappointment of directors	94%	93.4%	92.4%	93.8%	94.8%	94.2%	-
SHAREHOLDER RESOLUTIONS	Shareholder/external resolutions tabled	8	6	3	10	9	9	6
	Shareholder/external resolutions adopted by the GM	0	1	0	0	0	0	0
	Shareholder/external resolutions supported by ERAFP	88%	67%	67%	70%	56%	77.78%	83.0%

INTERNATIONAL

	2019	2018	2017	2016	2015	2014	
ERAFP SAMPLE INDICATORS	Gender balance of boards	35%	29%	29%	29%	26%	25%
	Independence of boards	67%	65%	70%	63%	59%	64%
	Average pay of chief executive (€)	6,772,875	8,264,047	7,168,817	6,673,944	8,522,796	7,345,514

	2019	2018	2017	2016	2015	2014	
OVERALL RESULTS	Resolutions monitored in detail by ERAFP	305	253	241	245	196	287
	Average adoption rate by GM of resolutions proposed by management	96.2%	96.5%	94.4%	95.1%	96.0%	95.0%
	Resolutions (excluding shareholder/external resolutions) rejected by the GM	0.7%	0%	1.34%	0.44%	0%	0%
	Resolutions (excluding shareholder/external resolutions) adopted by less than 90% of the votes	7%	6.2%	10.4%	11%	11.5%	12.8%
	Resolutions (excluding shareholder/external resolutions) adopted by less than 70% of the votes	1.8%	0.83%	2.71%	2.63%	0.0%	4.9%

	2019	2018	2017	2016	2015	2014	
ERAFP VOTES	ERAFP votes in favour of a resolution (other than those submitted by shareholders)	66.1%	62.6%	42.2%	43.3%	58.9%	62.0%
	ERAFP votes in favour of a dividend distribution	86.7%	87%	53.3%	42.9%	54%	33%
	Average adoption rate by GM of resolutions concerning a dividend distribution	99.7%	97.7%	99.4%	98.8%	92.5%	99.5%
	ERAFP votes in favour of resolutions concerning executives' remuneration	0%	0%	5%	0%	0%	10%
	Average adoption rate by GM of resolutions concerning executives' remuneration	94.6%	90.2%	81.6%	85.8%	94.1%	92.6%
	ERAFP votes in favour of appointment or reappointment of directors	73%	51.5%	31.13%	42.68%	-	-
	Average adoption rate by GM of resolutions concerning appointment or reappointment of directors	94.4%	96.1%	93.3%	93.5%	-	-
SHAREHOLDER RESOLUTIONS	Shareholder/external resolutions tabled	28	12	17	16	13	4
	Shareholder/external resolutions adopted by the GM	1	0	0	3	1	0
	Shareholder/external resolutions supported by ERAFP	75%	67%	65%	81%	85%	100%

IN 2019, ERAFP SIGNED THE FRENCH PUBLIC SECTOR INVESTORS' CHARTER TO PROMOTE THE SUSTAINABLE DEVELOPMENT GOALS (SDG)

At the Climate Finance Day on 29 November 2019, ERAFP joined France's government and some of the country's biggest public financial institutions (CDC, AFD, BPI France and FRR) to formally mark the inclusion of the SDGs in its investment policy by signing the French public sector investors' SDG promotion charter.

ERAFP ALSO SIGNED THE TOBACCO-FREE FINANCE PLEDGE

On Thursday, 26 September 2019, one year to the day after the initiative's launch at the UN's New York headquarters, the French Public Service Additional Pension Scheme signed the Tobacco-Free Finance Pledge, an initiative led by Tobacco Free Portfolios, thus completing its withdrawal from the tobacco industry.

By joining a large group of international financial market players that advocate active divestment from tobacco companies, ERAFP contributes to the international standards underpinning its SRI Charter, as the World Health Organization (WHO) has identified tobacco as the leading cause of avoidable death.



UPDATE THE FIVE MAIN PRINCIPLES OF THE FRENCH PUBLIC SECTOR INVESTORS SDG PROMOTION CHARTER

1. Integrate the SDGs into its investment strategy: ERAFP will focus its action on priority SDGs.

2. Ensure that internal operations are SDG-compliant: adoption of internal operating principles compatible with the SDGs (responsible approaches in terms of employee management, premises, procurement, etc.).

3. Disseminate best practices to both staff and peers as well through deeper dialogue with companies and other stakeholders in respect of which the investor is a shareholder, creditor, representative or partner.

4. Assess the impact of its activities on the SDGs by including the results of its contribution to the specific targets set for the priority SDGs in its extra-financial disclosures. The methodology and indicators used must be stated.

5. Report on the implementation of the principles: ERAFP has committed to reporting on the principles' implementation and the results obtained.

IMPLEMENTATION OF THE INVESTMENT POLICY

For ERAFP, a 100%-SRI investor since its creation, socially responsible investment is a cross-cutting framework that concerns its whole investment policy. A detailed analysis of the portfolio enables assessment of this approach's results.

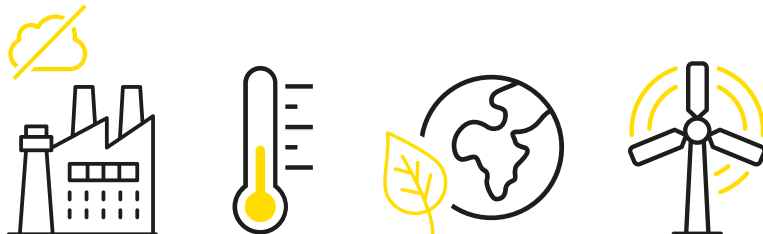
Asset class by asset class and mirroring the portfolio's financial profile, ERAFP measures issuers' consolidated ESG rating results and analyses changes therein over the year. It is worth noting that ERAFP's best in class approach remains selective in terms of issuers, as almost one third of the companies in the benchmark indices are excluded from the Institution's investment universe.

If available, the portfolio's climate change analysis is shown after its ESG rating. This analysis is based on the following indicators:

- _ carbon intensity;
- _ 2°C alignment;
- _ green share;
- _ exposure to fossil fuels.

The indicators used in connection with the 2°C alignment analysis, the carbon budget ratio and the portfolio 'temperature', the results of which are based on assumptions and a methodology subject to change over time, must be interpreted with caution.

Given that the bigger an asset class' weight in ERAFP's overall portfolio the more relevant SRI management of the investment policy becomes, this cross-analysis is less well developed for diversification asset classes that are still being constructed or have a limited pool of securities.



THE BOND PORTFOLIO

€14.6bn

at amortised cost

At 31 December 2019, the bond portfolio (excluding convertible bonds) totalled €14.6bn at amortised cost, representing 51.7% of ERAFP's total assets. It was split between fixed-rate sovereign and similar bonds (22.4% of total assets, or €6.3bn), inflation-indexed bonds (6.7%, or €1.9bn) and corporate bonds (22.6%, or €6.4bn).

At end-2019, the bond portfolio had generated unrealised capital gains equivalent to 5.8% of its amortised cost.

PUBLIC SECTOR BONDS

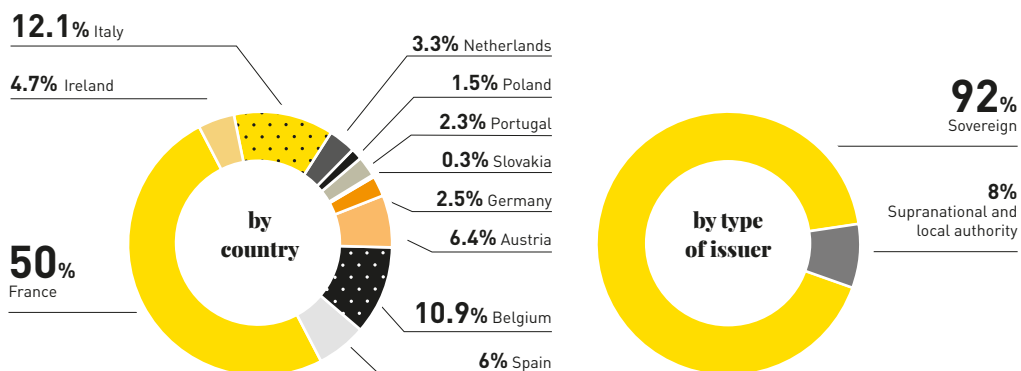
ERAFP manages all public sector bonds directly; their value at amortised cost at end-2019 was €8.2bn.

Sovereign bonds accounted for 92% of this portfolio, or around 27.5% of the Scheme's total investments. They include fixed-rate and inflation-indexed bonds issued by euro-zone sovereigns as well as bonds guaranteed by these sovereigns, such as those issued by Kreditanstalt für Wiederaufbau, the German national development bank.

The other public sector bonds are issued by OECD local and regional authorities and supranational institutions.

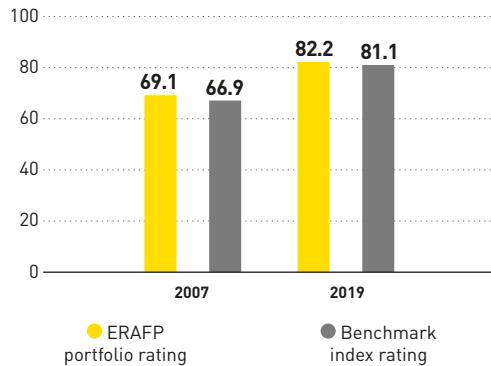
BREAKDOWN OF PUBLIC SECTOR BONDS AT 31 DECEMBER 2019 (AT AMORTISED COST)

Source — ERAFP



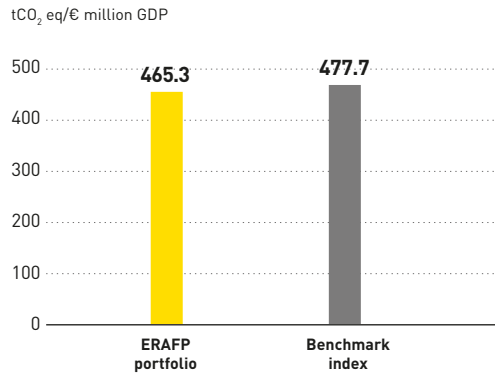
CHANGE IN THE AVERAGE SRI RATING OF THE SOVEREIGN BOND PORTFOLIO COMPARED WITH THAT OF THE INDEX

Source — Vigeo-Oekom, 31 December 2019



CARBON INTENSITY OF ERAFP'S SOVEREIGN BOND PORTFOLIO COMPARED WITH THAT OF THE INDEX

Source — Trucost, 29 November 2019⁴⁸



> SRI profile of public sector bonds

Sovereign bonds

All issuers in ERAFP's portfolio satisfy its SRI criteria, based on the Vigeo rating. Indeed, all the countries whose bonds are part of ERAFP's portfolio have obtained an average SRI score of more than 50/100, the minimum rating defined in ERAFP's SRI guidelines for this asset class.

The portfolio outperformed its benchmark index (by 1.1 points compared with 1.2 points in 2018).

The portfolio's outperformance on extra-financial criteria compared with its benchmark is attributable mainly to the portfolio's relative underweighting of securities issued by countries with a below-average SRI rating and credit quality.

The fact that there is a relatively strong correlation between the financial and extra-financial assessments of sovereign issuers supports this argument.

Note also that, given that the investment universe of euro-denominated securities issued by OECD countries is of limited size and its constituents' SRI profiles are relatively similar, the spread between the portfolio's and the index's average SRI ratings cannot increase significantly.

> Climate analysis of public sector bonds

The carbon intensity of ERAFP's portfolio is 2.6% lower than that of the benchmark index.

This positive difference is mainly attributable to the portfolio's over-

weighting of French government-issued securities. This relates to the fact that nearly three-quarters of the energy produced in France is from a low-carbon, nuclear source.

So while the share of renewable energies in its energy mix remains relatively low, France's ratio of greenhouse gas emissions to GDP is one of the euro-zone's lowest.

This situation puts the portfolio on track for a 2°C scenario. France was already aligned with the 2°C scenario in 2018, with an estimated temperature increase of 1.9°C. Overall, the portfolio's temperature increase is estimated at 2.4°C⁴⁹ vs. 2.5°C for the benchmark index (see part 2, p.53).

⁴⁸ The change of provider from last year makes it difficult to compare data with that of previous years.

⁴⁹ Calculated on the basis of each country's emissions targets and expressed as a weighted average of the portfolio's country weightings.



The share of fossil fuels is already lower than that required in the IEA's

2030 2°C scenario



GREEN SHARE

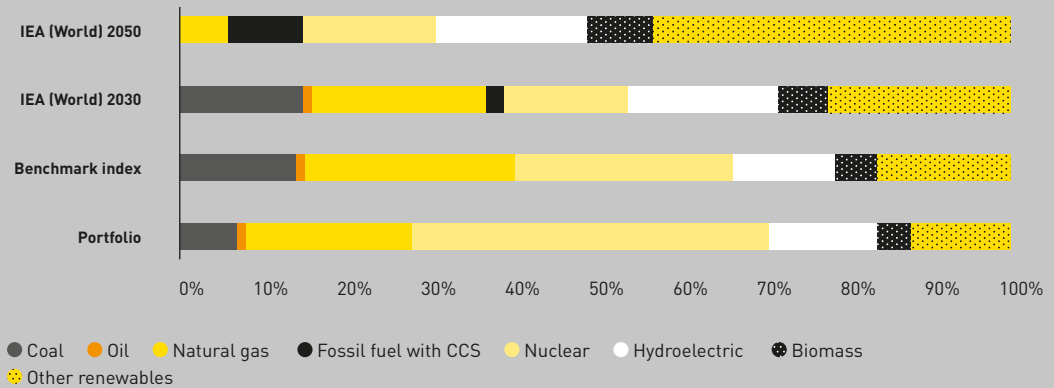
> Close-up on electricity production

The share of fossil fuels in ERAFP's sovereign portfolio's energy mix is already lower than that required in the IEA's 2030 2°C scenario⁵⁰. However, the proportion of renewable energies needs to increase.

⁵⁰ Data taken from the 2 DS scenario developed by the International Energy Agency in its Energy Technology Perspectives (ETP) report.

ENERGY MIX (EXPRESSED IN GWH GENERATED)

Source — Trucost, 29 November 2019



CORPORATE BONDS

> Euro-denominated corporate bonds

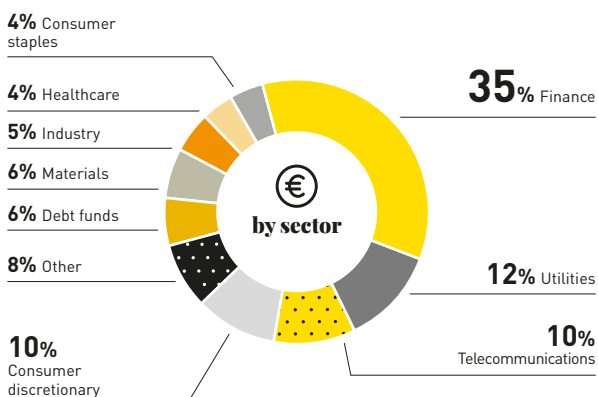
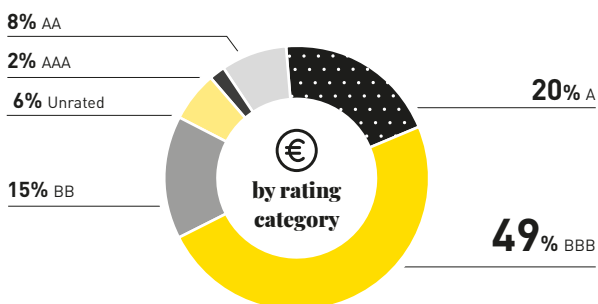
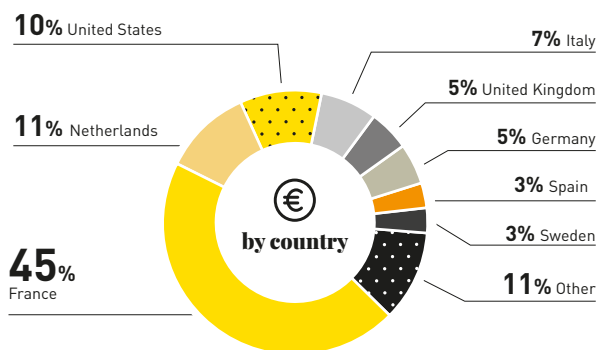
At the year-end, the 'euro credit' portfolio, consisting of euro-denominated corporate bonds, totalled €5.4bn at amortised cost, representing 19.3% of ERAFP's total assets.

The euro-denominated corporate bond management mandates entrusted to Amundi, La Banque Postale AM and Ostrum AM notably include loan securitisation fund investments in the amount of €337m (out of a total commitment of €449m).

In addition to delegated management, which remains preponderant, since 2015 ERAFP has held investments in external subordinated debt funds, which are now valued at €106m. It continued to diversify its bond investments within this framework by launching a €60m fixed-maturity high-yield bond fund, with the objective of gaining exposure to bond segments not covered by the mandates and which require active management. ERAFP also invested a further €115m in loan securitisation funds (with a total future commitment of €125m).

BREAKDOWN OF EURO-DENOMINATED CORPORATE BONDS BY SECTOR, COUNTRY AND RATING AT 31 DECEMBER 2019 (AT AMORTISED COST)

Source — ERAFP



> US dollar-denominated corporate bonds

The US dollar-denominated corporate bond portfolio totalled €932m at amortised cost at 31 December 2019, representing 3.3% of ERAFP's assets. This portfolio was managed under a mandate awarded to AXA Investment Managers Paris.

> Emerging country corporate bonds

In 2019, ERAFP continued its policy of diversifying its bond investments into emerging country corporate debt funds denominated in hard currencies such as the US dollar and the euro, investing some €352m, or 1.2% of its assets, therein.

In July 2019, ERAFP launched a dedicated Crédit EMD fund, consisting of US dollar-denominated bonds issued by emerging country companies, under the stewardship of the Aberdeen Standard Investments management company. By the year-end the Institution had invested a total of €140m in this fund, which is not hedged against currency risk.

Aberdeen Standard's investment philosophy is based on "bottom-up" management and in-depth financial and extra-financial analysis of portfolio securities.

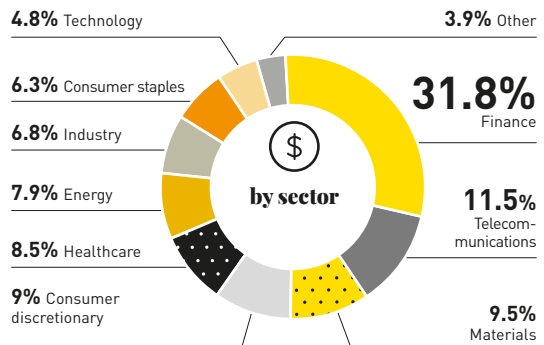
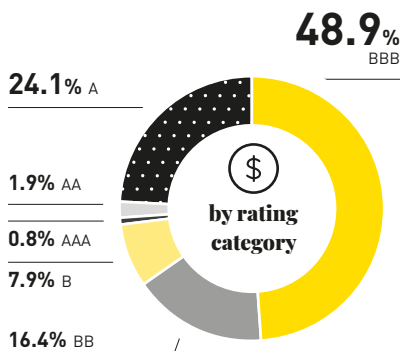


UPDATE
THE ENERGY TRANSITION
CHALLENGE IN EMERGING
COUNTRIES

ERAFP invested €50m in Amundi Planet Emerging Green One, the largest emerging market green bond issue to date with €1.42bn in AUM. The fund results from a partnership between Amundi and IFC, a member of the World Bank group, aimed at encouraging the creation of a high-quality green bond market – complete with support measures for issuers and attractive returns for institutional investors.

BREAKDOWN OF US DOLLAR-DENOMINATED CORPORATE BONDS BY SECTOR
AND RATING AT 31 DECEMBER 2019 (AT AMORTISED COST)

Source — ERAFP



SRI PROFILE OF CORPORATE BONDS

ERAFP's corporate bond portfolio⁵¹ has outperformed its benchmark index in SRI terms since 2017⁵². In 2019, the portfolio outperformed the index by 3.9 points.

Since 2017, the portfolio's rating has increased slightly by 0.6 points.

Note that ERAFP's US dollar-denominated corporate bond portfolio is at a disadvantage in relation to its benchmark index, which is composed wholly of investment grade securities, whereas ERAFP's portfolio is made up for around 25% of high-yield securities. Issuers of high-yield securities are generally less transparent on ESG themes than their investment-grade counterparts.

CLIMATE ANALYSIS OF CORPORATE BONDS

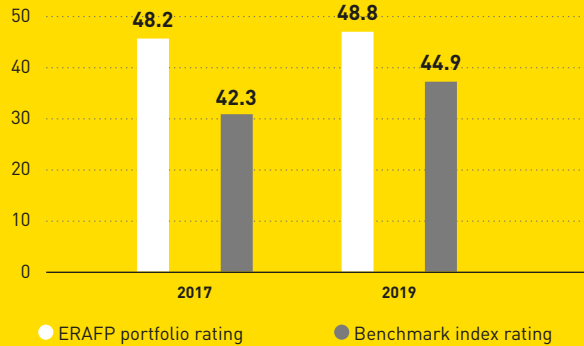
> Carbon intensity

In 2019, the corporate bond portfolio's carbon intensity⁵³, calculated as a weighted average, was 19% higher than that of the benchmark index.

However, the portfolio's carbon intensity continues to improve [-68 tCO₂ eq/€ million of revenue since 2015], leading to a narrowing of the gap in relation to the index.

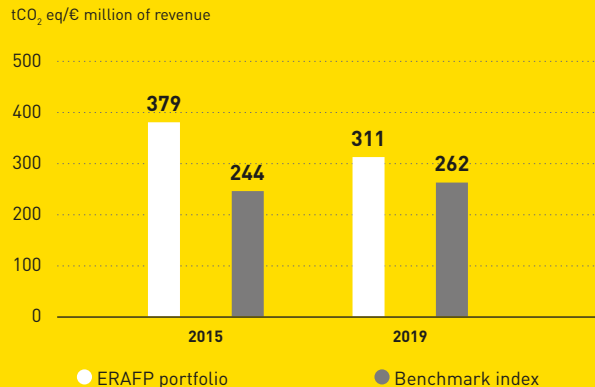
CHANGE IN THE SRI RATING OF THE CORPORATE BOND PORTFOLIO COMPARED WITH THAT OF THE INDEX

Source — Vigeo, 31 December 2019



CHANGE IN THE CARBON INTENSITY OF THE CORPORATE BOND PORTFOLIO COMPARED WITH THAT OF THE INDEX

Source — Trucost, 29 November 2019



⁵¹ Includes the consolidated portfolios of euro and US dollar-denominated corporate bonds.

⁵² Year of implementation of the corporate SRI framework amended in 2016.

⁵³ Direct emissions and direct suppliers.

**CARBON BUDGET RATIO AND TEMPERATURE EQUIVALENT OF THE CORPORATE
BOND PORTFOLIO COMPARED WITH THAT OF ITS BENCHMARK INDEX**

Source — Trucost, 29 November 2019

	CORPORATE BOND PORTFOLIO			BENCHMARK INDEX			
	Weight (%)	Carbon budget ratio (%)	Temperature in degrees Celsius (°C)	Weight (%)	Carbon budget ratio (%)	Temperature in degrees Celsius (°C)	
HOMOGENEOUS ACTIVITIES (SDA)	Electricity generation	9.5%	-10.4%	< 1.75°C	3.0%	-8.8%	< 1.75°C
	Cement	0.5%	2.7%	> 2.7°C	0.8%	4.9%	> 2.7°C
	Steel	0.8%	10.5%	> 2.7°C	0.2%	8.0%	> 2.7°C
	Air transport	0.0%	-	-	0.2%	7.5%	2-2.7°C
HETEROGENEOUS ACTIVITIES (GEVA)	Communication services	15.7%	42.5%	> 5°C	9.6%	38.5%	> 5°C
	Consumer discretionary	6.1%	-2.1%	1.5-2°C	11.0%	23.3%	> 5°C
	Consumer staples	4.9%	10.1%	2-3°C	9.1%	9.7%	2-3°C
	Energy	4.6%	56.0%	> 5°C	6.0%	62.8%	> 5°C
	Finance	29.2%	15.2%	> 5°C	30.9%	7.5%	2-3°C
	Healthcare	5.9%	-2.2%	1.5-2°C	7.4%	10.8%	3-4°C
	Industry	6.6%	27.8%	> 5°C	9.9%	27.2%	> 5°C
	Information technology	2.0%	3.2%	2-3°C	3.6%	34.2%	> 5°C
	Materials	6.4%	18.3%	> 5°C	4.2%	29.2%	> 5°C
	Real estate	4.1%	-9.3%	1.5-2°C	2.1%	23.0%	> 5°C
	Utilities	3.7%	96.6%	> 5°C	2.0%	70.8%	> 5°C

CARBON INTENSITY PERFORMANCE OF THE PORTFOLIO COMPARED WITH THAT OF THE INDEX

Source — Trucost, 29 November 2019

	SCOPE 1 AND DIRECT SUPPLIERS	ALL SCOPES COMBINED
Aggregate credit portfolio	311	1,276
Benchmark index	262	1,052
Relative performance	-19%	-21%

The performance gap continues to be mainly attributable to the strong overweighting of utilities in the portfolio compared with the index (5% in the index vs. 11% in the portfolio); on average this sector emits more greenhouse gases than others, automatically leading to a poor carbon intensity indicator performance.

Bond mandates are not suited to a benchmarked management approach and can therefore diverge significantly from the composition of the index used as a benchmark for SRI rating or carbon footprinting.

The carbon performance gap relative to the benchmark index persists if we add scope 3⁵⁴. The sector allocation effect remains negative for the portfolio for the utilities sector as the addition of emissions from indirect suppliers and linked to the use of products more than doubles the carbon intensity of both the portfolio and the index in this sector. Note that while they provide an overview of the entire value chain, results including scope 3 should be interpreted with caution as there is an increased risk of double counting emissions.

By contrast, the portfolio's utilities stock selection effect is positive regardless of the scope considered, on account in particular of an electricity production energy mix that is less carbon-intensive and more focused on renewables than that of the benchmark index – and a warming temperature of less than 2°C.

> 2° Alignment

The SDA method confirms the robust performance of the electricity production companies in the portfolio, which is already on course for alignment with a 2°C scenario. However, the warming temperature for the cement and steel sectors, which are less advanced in the transition, is currently above 2.7°C. Nonetheless, the gap with the carbon budget aligned with a 2°C scenario is not very significant (3% and 10%, respectively). The portfolio has no air transport investments.

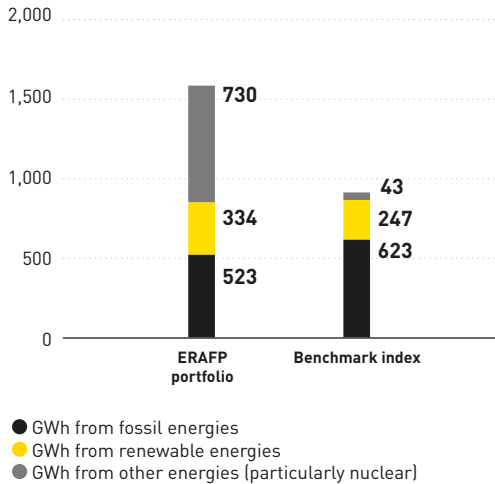
With regard to the carbon budget ratio and the temperature of sectors analysed using the GEVA method, the portfolio's healthcare, consumer discretionary and real estate

sectors, which are below 2°C, are well aligned. By contrast, the three sectors with the widest variances against the 2°C carbon budget are communication services, energy and utilities, which have a warming temperature of more than 5°C. This is attributable to the portfolio's investment in certain issuers from these sectors whose carbon intensity increased over the period 2012-2017 and is expected to continue rising between 2017 and 2023 – or to not reduce sufficiently to allow a trajectory compatible with a 2°C scenario. However, the data used is still mainly based on historical average trends and trajectories could improve if companies were to publish ambitious reduction targets. ERAFP is engaging with companies to that end through a number of collaborative initiatives (CA100+, Net Zero AOA, IDI, etc.).

⁵⁴ Includes indirect suppliers and use of products.

GWH RELATED TO ELECTRICITY PRODUCTION

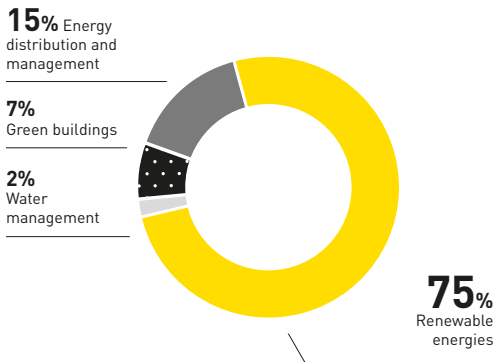
Source — Trucost, 29 November 2019



- GWh from fossil energies
- GWh from renewable energies
- GWh from other energies (particularly nuclear)

EMISSIONS AVOIDED BY PROJECT (%)

Source — Trucost, 29 November 2019



> Green share

Close-up on electricity production

Analysis of the portfolio's electricity-generating companies makes it possible to better understand the compatibility of their activities with international climate objectives aimed at limiting temperature increases to below 2°C.

As we have seen above, the 2012 to 2023 trajectory of the portfolio's electricity-producing issuers is compatible with a sub-2°C trajectory. The share of electricity production from fossil energies already complies with the share required to meet a 2°C scenario by 2030⁵⁵, while the share of renewable energies will have to increase by 25%. Note, however, that most of the electricity that portfolio issuers produce is already decarbonised, as 76% of it comes from nuclear energy.

Indeed, the portfolio mainly finances energy from decarbonised sources (334 GWh from renewables and 730 GWh mainly from nuclear), while the benchmark index mainly finances energy from fossil fuels (623 GWh for the index vs. 523 GWh for the portfolio).

Close-up on green bonds

ERAFP's corporate bond portfolio's investments include low-carbon projects categorised as green bonds. Of the 32 green bonds held in the portfolio, only 9 were analysable due to a lack of information from the other issuers. These 9 bonds have already made it possible to avoid 340 tCO₂/€ million invested.⁵⁶ They mainly concern renewable energy projects.

⁵⁵ Based on the 2DS scenario of the International Energy Agency.

⁵⁶ Analysis over the entire project life cycle.

> Brown share

Close-up on exposure to extractive industries

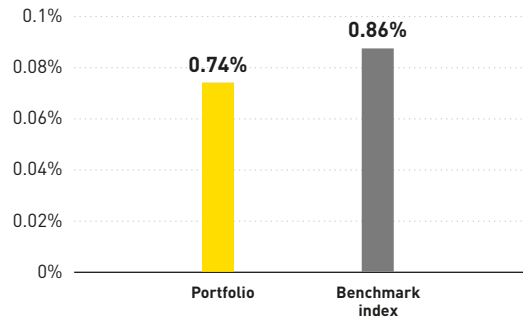
As explained above, to limit global warming to 2°C the energy sector must make radical changes, because most of the world's fossil fuel reserves and resources should not be exploited. ERAFP has assessed the exposure of the portfolio and its benchmark to extractive industries to estimate exposure to potentially stranded assets.

The corporate bond portfolio's weighted average share of revenue exposed to extractive industries was 0.74%.

This low exposure is better than that of its benchmark (0.86% of revenue as a weighted average). In terms of the type of extraction activities concerned, oil and natural gas extraction represents more than 88% of the total, while coal, the energy that emits the most, represents 12% of energy extracted. The portfolio has no exposure to bituminous sands.

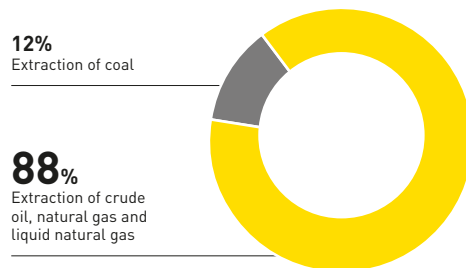
EXPOSURE OF THE CORPORATE BOND PORTFOLIO TO EXTRACTIVE INDUSTRIES (IN REVENUE)

Source — Trucost, 29 November 2019



SECTOR DISTRIBUTION OF THE PORTFOLIO'S EXTRACTIVE REVENUE BY PROJECT [%]

Source — Trucost, 29 November 2019



METHODOLOGICAL UPDATE

ERAFP has adopted a policy of divestment from issuers that generate more than 10% of their revenue from thermal coal and do not have a reduction action plan in line with the objectives of the Paris Agreement. The chart opposite shows that the portfolio's coal-related extractive revenue represents 12% of all revenue from extractive businesses. This does not mean that more than 10% of issuers' revenue comes from coal, but that 12% of the 0.74% of extractive industry revenue in the combined credit portfolio comes from coal.

THE CONVERTIBLE BOND PORTFOLIO

€781m

at amortised cost

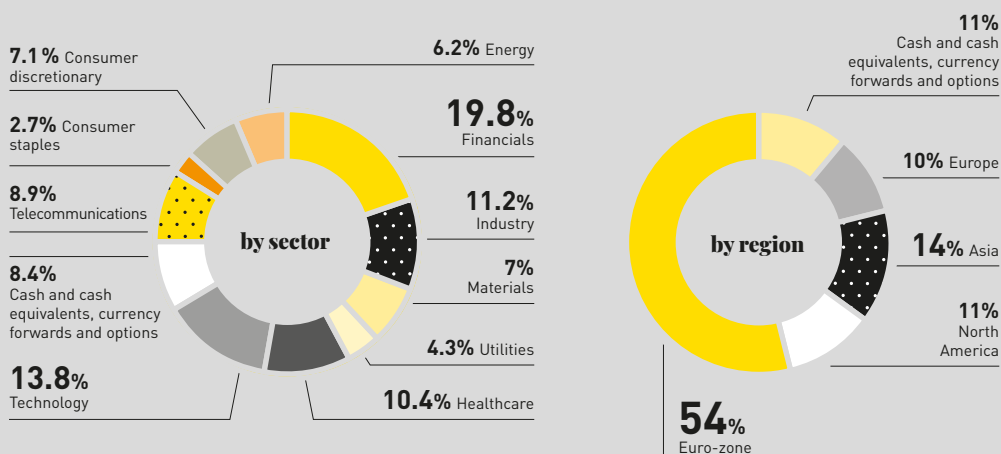


Put in place in 2012, ERAFP's convertible bond mandates have been awarded to Schelcher Prince Gestion (Europe) and Lombard Odier Gestion (International). At 31 December 2019, the convertible bond portfolio totalled €781m at amortised cost, representing 2.8% of ERAFP's total assets.

At the same date, it had generated unrealised capital gains equivalent to 11.1% of its amortised cost.

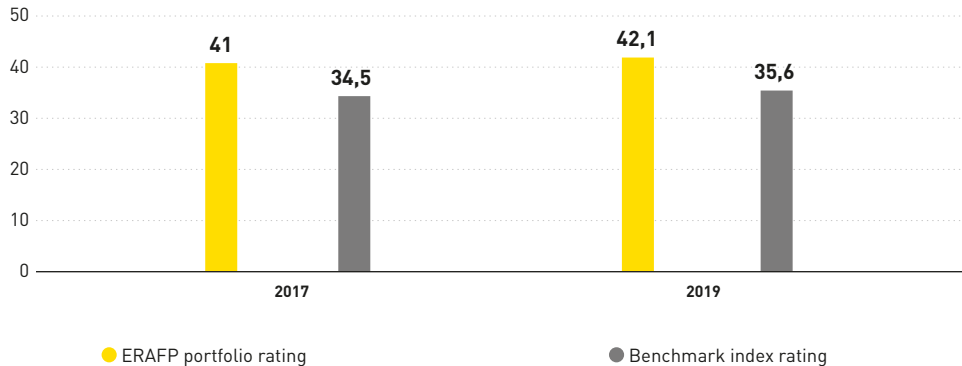
BREAKDOWN OF CONVERTIBLE BONDS BY SECTOR AND REGION AT 31 DECEMBER 2019 [AT MARKET VALUE]

Source — ERAFP



SRI RATING OF ERAFP'S CONVERTIBLE BOND PORTFOLIO COMPARED WITH THAT OF THE INDEX

Source — Vigeo, 31 December 2019



SRI PROFILE

The consolidated convertible bond portfolio⁵⁷ continues to outperform its benchmark index, indicating that the best in class SRI strategy has been applied correctly in these delegated management mandates.

There was an improvement in the international convertible bond portfolio's SRI performance compared with that of 2018 (41.1 in 2019 vs. 38.3 in 2018). The rating of the European convertible bond portfolio was unchanged from 2018 (44.2).

The rating difference between the European and international portfolios can be attributed to the strong contingent of North American and Asian issuers in the international portfolio. ERAFP's SRI guidelines place strong emphasis on the consideration of social criteria such as respect of union rights and the encouragement of labour-management dialogue, which European companies generally take more into account in day-to-day management than their US and Asian counterparts, enabling them to

achieve higher scores. Nonetheless, the portfolio's non-European issuers improved significantly and the spread between the two portfolios has narrowed. Moreover, the international bond portfolio outperformed its benchmark index by a greater margin than the European convertible bond portfolio (+1.6 points for the European portfolio vs. +9.5 points for the international portfolio), due to its broader, more heterogeneous investment universe and more impactful best in class approach.

⁵⁷_ Combines the two convertible bond portfolios, Europe and International.

CLIMATE ANALYSIS

> Carbon intensity

The result is presented on an aggregate basis for the two convertible bond portfolios – Europe and International. The consolidated convertible bond portfolio’s weighted average carbon intensity for scope 1 and direct suppliers was 1% lower than that of its benchmark index. The portfolio’s carbon intensity has been decreasing since 2016

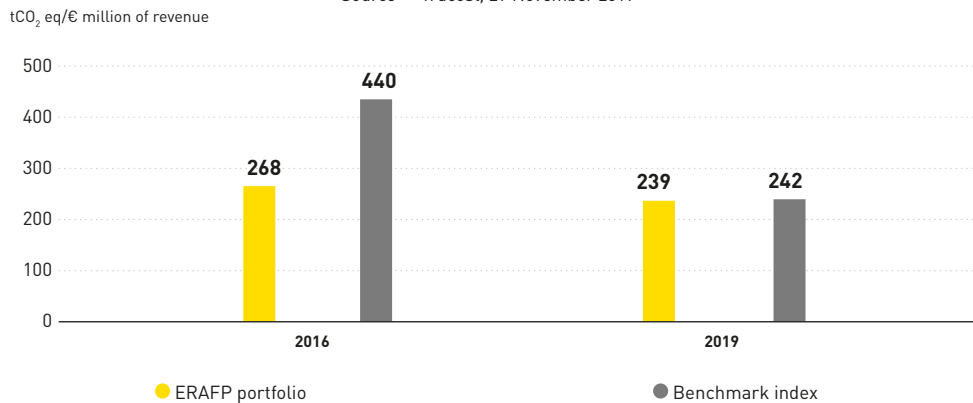
(268 tCO₂ eq/€ million of revenue in 2016 vs. 239 tCO₂ eq/€ million of revenue in 2019), in particular compared to last year (326 tCO₂ eq/€ million of revenue), thanks to a carbon intensity decrease in sectors with high carbon emissions, such as utilities, materials and energy.

If we add the scope 3 analysis, the positive gap with the benchmark index increases significantly.

This is attributable to the portfolio’s better stock selection for this scope, particularly in the information technology sector and, to a lesser extent, the industrial and utilities sectors. These results show the extent to which the integration of scope 3 can impact results.

CARBON INTENSITY OF ERAFP’S CONVERTIBLE BOND PORTFOLIO COMPARED WITH THAT OF THE BENCHMARK

Source — Trucost, 29 November 2019



CARBON INTENSITY PERFORMANCE OF THE PORTFOLIO COMPARED WITH THAT OF THE BENCHMARK INDEX

Source — Trucost, 29 November 2019

	SCOPE 1 AND DIRECT SUPPLIERS	ALL SCOPES COMBINED
Convertible bond portfolio	239	797
Benchmark index	242	1,634
Relative performance	1%	51%

CARBON BUDGET RATIO AND TEMPERATURE EQUIVALENT OF THE CONVERTIBLE BOND PORTFOLIO COMPARED WITH THOSE OF ITS BENCHMARK INDEX

Source — Trucost, 29 November 2019

	CONVERTIBLE BOND PORTFOLIO			BENCHMARK INDEX			
	Weight (%)	Carbon budget ratio (%)	Temperature in degrees Celsius (°C)	Weight (%)	Carbon budget ratio (%)	Temperature in degrees Celsius (°C)	
HOMOGENEOUS ACTIVITIES	Electricity generation	2.8%	-16.4%	< 1.75°C	3.1%	-8.8%	< 1.75°C
	Cement	0.0%	-	-	0.0%	-	-
	Steel	0.0%	-	-	0.0%	-	-
	Air transport	3.6%	14.2%	> 2.7°C	5.7%	14.8%	> 2.7°C
HETEROGENEOUS ACTIVITIES (GEVA)	Communication services	5.8%	48.0%	> 5°C	0.0%	-	-
	Consumer discretionary	6.9%	6.0%	2-3°C	8.4%	8.4%	2-3°C
	Consumer staples	6.0%	26.9%	> 5°C	6.7%	23.1%	> 5°C
	Energy	5,6%	58,9%	> 5°C	2,1%	87,5%	> 5°C
	Financials	14.4%	-15.1%	<u>1,5-2°C</u>	5,9%	-9,3%	<u>1,5-2°C</u>
	Healthcare	1.2.	-20.2%	< 1.5°C	0.0%	-	-
	Industry	14.2%	15.5%	> 5°C	18.3%	1.0%	2-3°C
	Information technology	12.5%	28.4%	> 5°C	19.8%	19.8%	> 5°C
	Materials	11.9%	26.8%	> 5°C	22.9%	26.3%	> 5°C
	Real estate	10.6%	17.4%	> 5°C	3.5%	12.8%	3-4°C
	Utilities	4.5%	37.0%	> 5°C	3.6%	31.9%	> 5°C

> 2°C Alignment

The SDA method confirms the good performance of the portfolio's electricity production companies, which are already on track for alignment with a 2°C scenario. By contrast, for the air transport sector, which is less advanced in the transition, the warming temperature is higher than 2.7°C.

As for the carbon budget ratio and the temperature of the sectors analysed using the GEVA method, the portfolio's healthcare and financial sectors, which are below 2°C, are well aligned. By contrast, the three sectors with the widest variances against the 2°C carbon budget are communication services, energy and utilities, which have a warming temperature of more than 5°C. This is attributable to the portfolio's investment in certain issuers from these sectors whose carbon intensity increased over the period 2012-2017 and is expected to continue rising between 2017 and 2023 – or to not reduce sufficiently to allow a trajectory compatible with a 2°C scenario. However, the data used is still mainly based on historical average trends and trajectories could improve if companies were to publish ambitious reduction targets. ERAFP is engaging with companies to that end through a number of collaborative initiatives (CA100+, Net Zero AOA, IDI, etc.).

> Green share

Close-up on electricity production

Analysis of the portfolio's electricity-producing companies makes it possible to better understand the compatibility of their activities with international climate objectives aimed at limiting temperature increases to below 2°C.

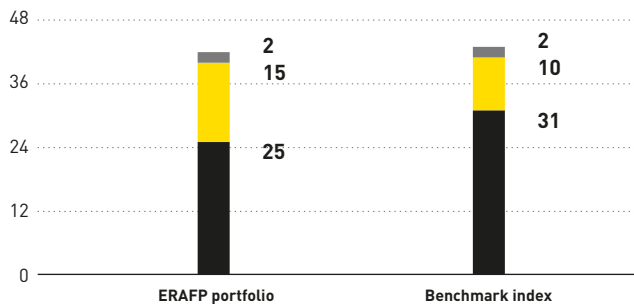
The portfolio finances more energy from decarbonised sources than the benchmark (15 GWh from renewables and 2 GWh mainly from nuclear vs. 12 GWh in total for the index) and less energy from

fossil fuels (25 GWh for the portfolio vs. 31 GWh for the index). The fossil-fuel electricity produced by the issuers in the portfolio comes only from gas, generally the least carbon-intensive fossil energy in the value chain.

As shown above, the 2012-2023 trajectory of the portfolio's electricity-producing issuers is compatible with a sub-2°C trajectory. To comply with a 2°C scenario by 2030, the share of fossil energies needs to decrease by at least 22% and that of renewable energies to increase by at least 11%.

GWH RELATED TO ELECTRICITY PRODUCTION

Source — Trucost, 29 November 2019



- GWh from fossil energies
- GWh from renewable energies
- GWh from other energies (particularly nuclear)

> Brown share

Close-up on exposure to extractive industries

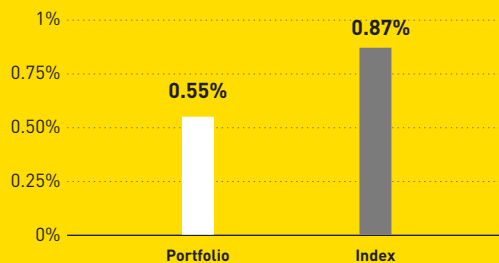
The convertible bond portfolio's weighted average share of revenue exposed to extractive industries was 0.55 %. This low exposure is better than that of its benchmark (0.87 % of revenue as a weighted average). In terms of the type of extraction activities concerned, oil and natural gas extraction represents 87% of the total and oil and gas support activities 13%, while coal, the energy with the highest emissions⁵⁸, is not included in the portfolio – nor does the portfolio have any exposure to bituminous sands.

The convertible bond portfolio has limited exposure to extractive industries.

58_ See p. 84.

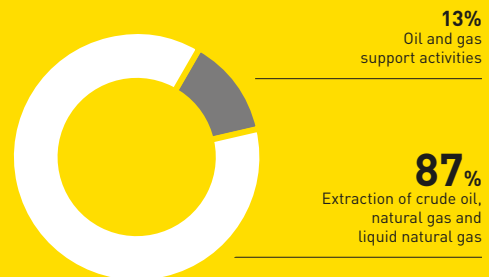
EXPOSURE OF THE CONVERTIBLE BOND PORTFOLIO TO EXTRACTIVE INDUSTRIES (IN REVENUE)

Source — Trucost, 29 November 2019



SECTOR DISTRIBUTION OF THE PORTFOLIO'S EXTRACTIVE REVENUE

Source — Trucost, 29 November 2019



THE EQUITY PORTFOLIO

At 31 December 2019, the equity portfolio totalled €8.2bn at amortised cost, representing 29% of ERAFP's total assets. It was split between European equities (23.8% of assets, or €6.7bn) and international equities (5.2%, or €1.5bn).

€8.2bn

at amortised cost

At 31 December 2019, ERAFP had outsourced the management of its equity portfolio, with the exception of direct investments in climate change reduction-themed funds (€79.3m) and emerging country equity funds (€78.8m).

As regards the rest of the portfolio, the two asset classes were split between 15 mandates, including 11 European equity mandates entrusted to Allianz, Amiral Gestion, Amundi, AXA IM, BFT – Montanaro, Candriam, EdRAM, Mirova, OFI AM and Sycomore (two mandates), and four international equity mandates entrusted to Natixis-Loomis and Robeco (North America) and

Comgest and Robeco (Pacific region).

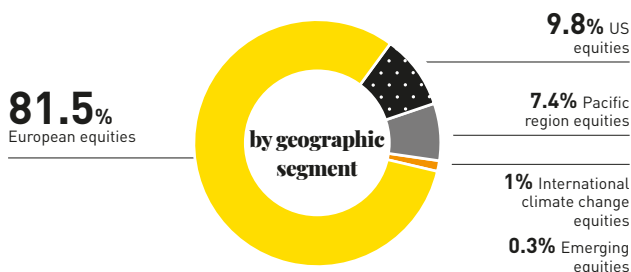
At end-2019, the equity portfolio had generated unrealised gains representing 47.2% of its amortised cost, an increase from 2018.

In terms of risk dispersion, investments are highly diversified across euro-zone and non-euro-zone

equities, with 17 countries and 11 sectors represented. The portfolio's biggest geographic exposure is France, at 46%, followed by Germany (16%) and the Netherlands (11%), while its biggest sector exposure is financials (18%) followed by industrials (15%) and materials (11%).

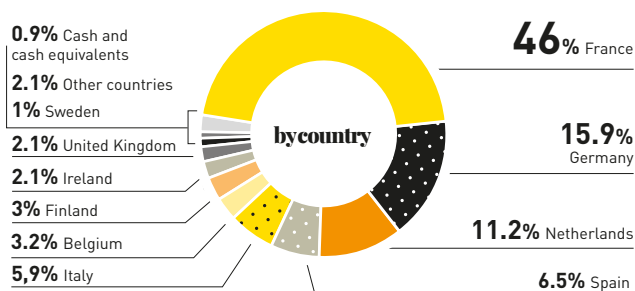
BREAKDOWN OF EQUITIES BY GEOGRAPHIC SEGMENT AT 31 DECEMBER 2019 (AT AMORTISED COST)

Source — ERAFP



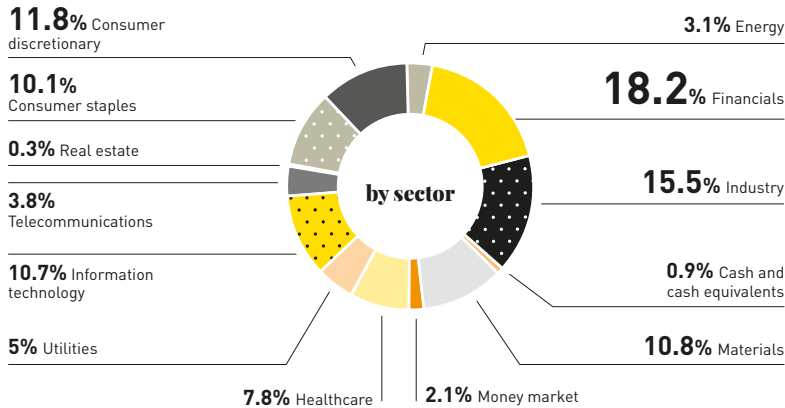
BREAKDOWN OF EUROPEAN EQUITIES BY COUNTRY AT 31 DECEMBER 2019 (AT MARKET VALUE)

Source — ERAFP



BREAKDOWN OF THE EUROPEAN EQUITY PORTFOLIO BY SECTOR AT 31 DECEMBER 2019 (AT MARKET VALUE)

Source — ERAFP



SRI PROFILE

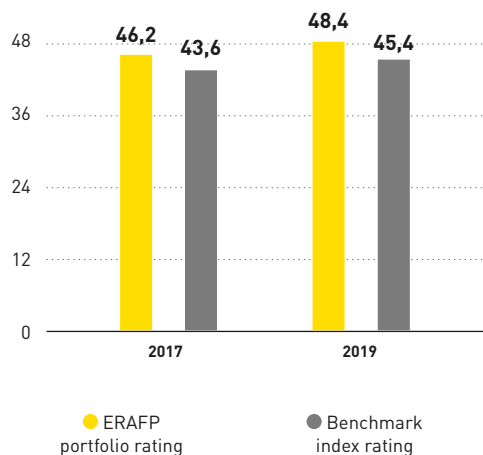
The consolidated equity portfolio's SRI rating has increased by more than 2 points since 2017⁵⁹. The fund's outperformance relative to its benchmark index also increased slightly, to 3 points.

In 2019, all equity portfolio SRI ratings increased compared to 2018. With the exception of the Pacific region equity portfolio, all the portfolios continue to outperform their respective benchmark indices in terms of SRI performance.

The underperformance of the Pacific equity portfolio is due in particular to the fact that one of the two mandates invests in smaller companies, for which less information is available for assessment purposes. Moreover, the portfolio is more exposed than the index to Japan, a country whose average SRI performance is weaker than that of the other countries included in the index. In this manager's case, the management process relies largely on dialogue with the portfolio companies aimed at increasing their transparency. For its part, ERAFP ensures through its regular meetings with managers that its expectations are duly taken into consideration.

SRI RATING OF ERAFP'S EQUITY PORTFOLIO COMPARED WITH THAT OF THE INDEX

Source — Vigeo, 31 December 2019



⁵⁹ Year of launch of last equity mandate.

CLIMATE ANALYSIS

> Carbon intensity

In 2019, the equity portfolio's carbon intensity, calculated as a weighted average for scope 1 and direct suppliers, was 18% lower than that of its benchmark index (230 tCO₂ eq/€ million of revenue vs. 279 tCO₂ eq/€ million of revenue).

This portfolio's carbon intensity is relatively stable over time, being the same as in 2015, but the gap with

the benchmark index has widened (from 12% in 2015 to 18% in 2019).

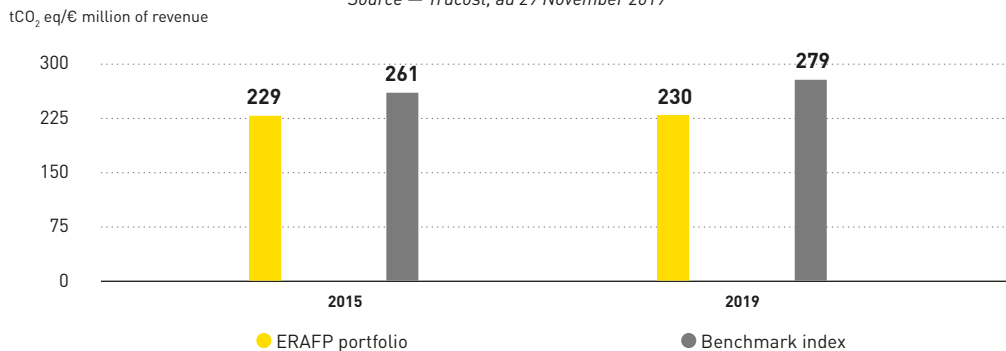
This performance gap is mainly attributable to an underweighting in utilities combined with effective selection of less carbon intensive securities in that sector, which improved the portfolio's total performance for the sector by 15.5% relative to the benchmark.

Effective stock selection in the materials sector also contributed to the portfolio's outperformance of its index.

If we add scope 3, the equity portfolio's outperformance relative to the index is reduced but the weighted average carbon intensity remains 4% lower. Sector allocation to utilities and materials remained positive.

CARBON INTENSITY OF ERAFP'S EQUITY PORTFOLIO COMPARED WITH THAT OF THE INDEX

Source — Trucost, au 29 November 2019



CARBON INTENSITY PERFORMANCE OF THE PORTFOLIO COMPARED WITH THAT OF THE BENCHMARK INDEX

Source — Trucost, 29 November 2019

	SCOPE 1 AND DIRECT SUPPLIERS	ALL SCOPES COMBINED
Combined equity portfolio	231	1,045
Benchmark index	279	1,087
Relative performance	18%	4%

**CARBON INTENSITY PERFORMANCE OF THE PORTFOLIO COMPARED
WITH THAT OF THE BENCHMARK INDEX**

Source — Trucost, 29 November 2019

	COMBINED EQUITY PORTFOLIO			BENCHMARK INDEX			
	Weight (%)	Carbon budget ratio (%)	Temperature in degrees Celsius (°C)	Weight (%)	Carbon budget ratio (%)	Temperature in degrees Celsius (°C)	
HOMOGENEOUS ACTIVITIES (SDA)	Electricity generation	3.2%	-11.4%	< 1.75°C	5.0%	-6.3%	< 1.75°C
	Cement	0.8%	25.4%	> 2.7°C	0.9%	18.8%	> 2.7°C
	Steel	0.0%	-	-	0.4%	9.3%	> 2.7°C
	Air transport	0.0%	1.3%	2-2.7°C	0.1%	4.8%	> 2.7°C
HETEROGENEOUS ACTIVITIES (GEVA)	Communication services	6.5%	22.7%	> 5°C	5.6%	26.6%	> 5°C
	Consumer discretionary	9.5%	68.2%	> 5°C	12.9%	48.2%	> 5°C
	Consumer staples	11.2%	13.9%	4-5°C	11.3%	16.0%	> 5°C
	Energy	4.4%	53.3%	> 5°C	5.8%	63.7%	> 5°C
	Financials	16.3%	47.5%	> 5°C	16.4%	28.3%	> 5°C
	Healthcare	8.6%	-4.5%	1.5-2°C	8.1%	1.9%	2-3°C
	Industry	14.8%	18.3%	> 5°C	14.4%	26.3%	> 5°C
	Information technology	12.0%	41.2%	> 5°C	10.4%	52.3%	> 5°C
	6% Materials	10.5%	17.1%	> 5°C	6.4%	23.8%	> 5°C
	Real estate	0.8%	-1.7%	1.5-2°C	1.2%	42.2%	> 5°C
Utilities	1.4%	65.4%	> 5°C	1.1%	47.8%	> 5°C	

> **2° Alignment**

As with corporate and convertible bonds, the SDA method confirms the robust performance of the electricity production companies in the portfolio, which is already on course for alignment with a 2°C scenario. However, the warming temperature for the cement sector, which is less advanced in the transition, is above 2.7°C. For the air transport sector, the budget gap with a 2°C scenario is only 1.3%. The cement and air transport sectors have little representation in the portfolio, however.

With regard to the carbon budget ratio and the temperature of sectors analysed using the GEVA method, the portfolio’s healthcare and real estate sectors, which are below 2°C, are well aligned. By contrast, the three sectors with the widest gaps with the 2°C carbon budget are consumer discretionary, energy and utilities, which have a warming temperature of more than 5°C. This is attributable to the portfolio’s investment in certain issuers from these sectors whose carbon intensity increased over the period 2012-2017 and is expected to continue rising between 2017 and 2023 – or to not reduce sufficiently to allow a trajectory compatible with a 2°C scenario. However, the data used is still mainly based on historical average trends and trajectories could improve if companies were to publish ambitious reduction targets. ERAFP is engaging with companies to that end through a number of collaborative initiatives (CA100+, Net Zero AOA, IDI, etc.).

> **Green share**

Close-up on electricity production

Analysis of the portfolio’s electricity-generating companies makes it possible to better understand the compatibility of their activities with international climate objectives aimed at limiting temperature increases to below 2°C.

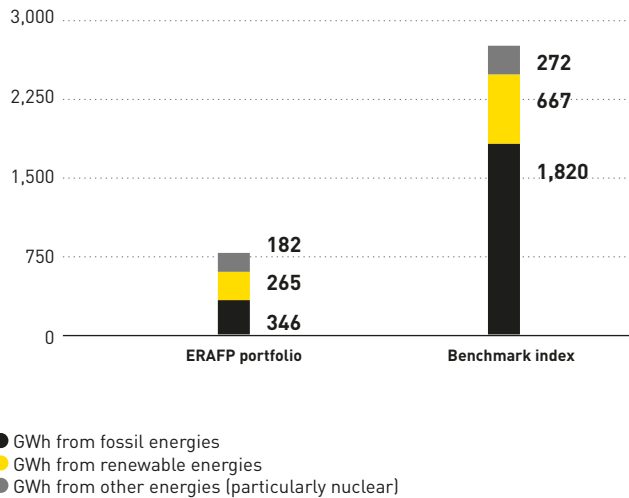
The portfolio finances more energy from renewable sources than the benchmark (33% vs. 24%) and less energy from fossil fuels

(37% vs.67%). As the weight of the electricity generation sector in the portfolio is lower than in the benchmark index, the number of GWh financed is higher for the benchmark index.

As shown above, the trajectory of the portfolio’s electricity-producing issuers is compatible with a sub-2°C trajectory over the period 2012-2023. To comply with a 2°C scenario by 2030⁶⁰, the share of fossil fuels needs to fall by at least 6% and that of renewable energies to increase by at least 13%.

GWH RELATED TO ELECTRICITY PRODUCTION

Source — Trucost, 29 November 2019



⁶⁰ Based on the 2DS scenario of the International Energy Agency.

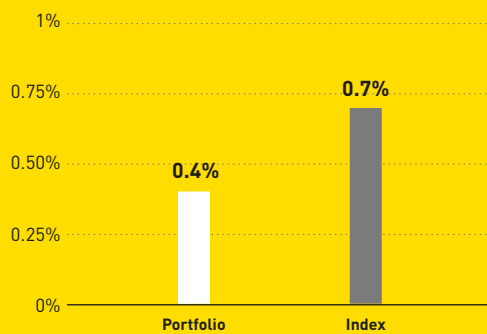
> Brown share

Close-up on exposure to extractive industries

The equity portfolio's weighted average share of revenue exposed to extractive industries was 0.4%. As with the other portfolios, this low exposure is slightly better than that of its benchmark (0.7% of revenue as a weighted average). In terms of the type of extraction activities in question, extraction of oil and natural gas represents 69% of the total, while coal, the energy that emits the most, represents only 3%. The portfolio has virtually no exposure to bituminous sands.

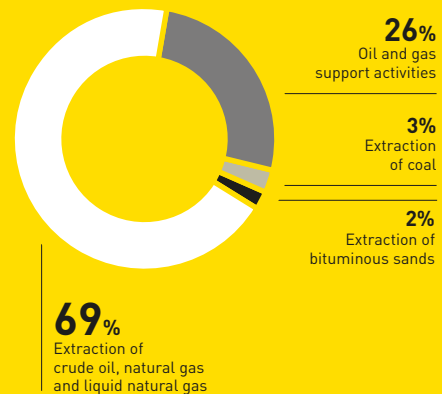
EXPOSURE OF THE EQUITY PORTFOLIO TO EXTRACTIVE INDUSTRIES COMPARED WITH THAT OF THE INDEX (IN REVENUE)

Source — Trucost, 29 November 2019



SECTOR DISTRIBUTION OF THE PORTFOLIO'S EXTRACTIVE REVENUE

Source — Trucost, 29 November 2019



THE DIVERSIFICATION PORTFOLIO

Amundi holds this mandate, which was first awarded in 2013, with the aim of maximising performance while complying with ERAFP's SRI Charter and optimising the risk-return ratio by implementing a diversified, flexible and dynamic asset allocation. The fund is managed using a risk budget, based on a fundamental approach, with no benchmark constraint. The risk budget for this fund was set at -25% for 2019.

At 31 December 2019, the multi-asset fund totalled €838m at amortised cost, representing 3% of ERAFP's total assets. It had generated unrealised capital gains equivalent to 20.5% of amortised cost, up from 2018.

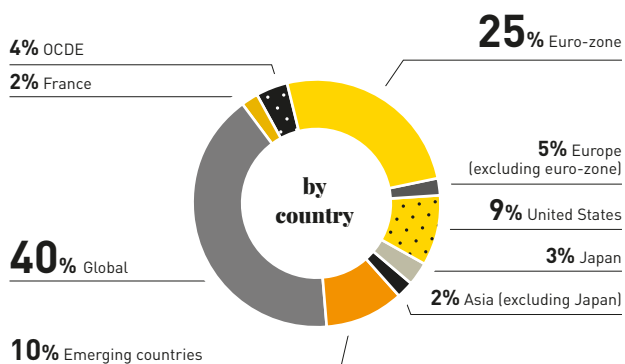
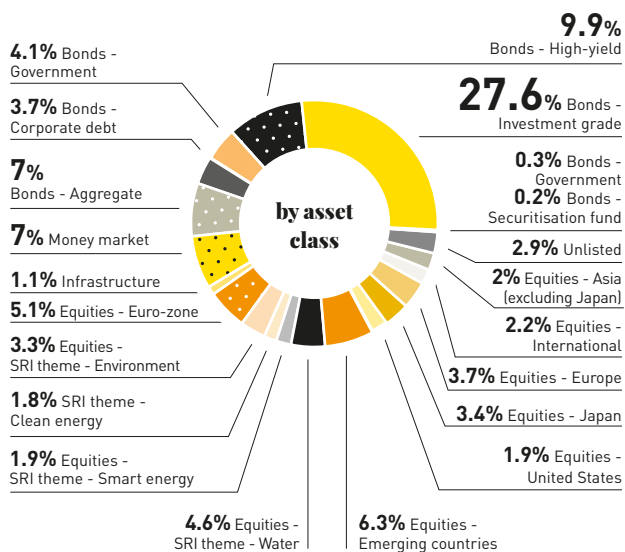
SRI PROFILE

ERAFP has developed specific provisions for applying its SRI guidelines to multi-asset fund management. It decided that the SRI eligibility of funds available for selection by Amundi would be determined based on:

- an analysis of the management process put in place: the only funds eligible are those selected through a best in class SRI approach or a particular environmental (reduction of climate change, protection of water resources, etc.) or social (healthcare, combating poverty, etc.) approach; or
- an analysis of the fund's SRI quality based on the SRI rating of each issuer represented in the fund.

BREAKDOWN BY ASSET CLASS AND REGION AT 31 DECEMBER 2019 (AT MARKET VALUE)

Source — ERAFP



THE PRIVATE EQUITY AND INFRASTRUCTURE PORTFOLIO

ERAFP uses two delegated management methods to invest in unlisted private equity and infrastructure assets.

As from 2015, it began to make direct investments in mutual funds, which at end-2019 amounted to:

- _ €334m in private equity funds (of which €158 m called);
- _ €175m in infrastructure funds (of which €112 m called), including €70m committed (of which €43 m called) to dedicated renewable energies and energy transition funds.

Starting in 2017, ERAFP has awarded unlisted asset management mandates in the following amounts:

- _ €300 million in the dedicated private equity fund, managed by Access Capital Partners, which has already made €253m of commitments (of which €124m called);
- _ €280m in the dedicated infrastructure fund (of which €40m dedicated exclusively to renewable energies), managed by Ardian France, which has already made €245m of commitments (of which €74m called).

The amounts invested in the unlisted portfolio at 31 December 2019 therefore totalled €464m (with ERAFP having committed €1.1bn in total), of which:

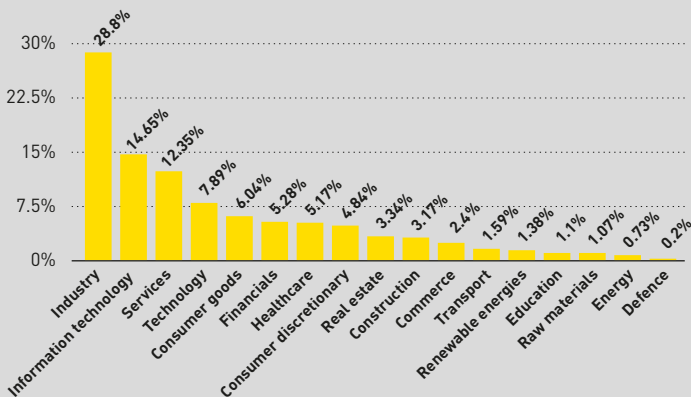
- _ €280m in private equity assets (€634m committed by ERAFP);
- _ €184m in infrastructure assets (€455m committed by ERAFP).

As the portfolio is in the course of being built up, the share of unrealised capital gains is limited, standing at 4.8% of assets at amortised cost.

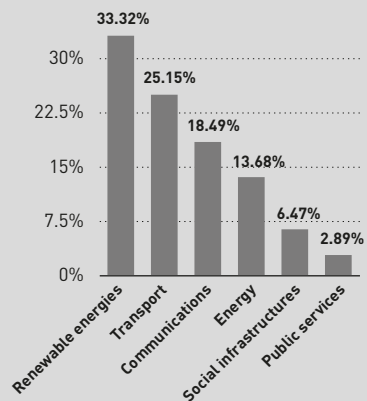
SECTOR BREAKDOWN OF PRIVATE EQUITY AND INFRASTRUCTURE FUNDS AT 31 DECEMBER 2019

Source — ERAFP

PRIVATE EQUITY



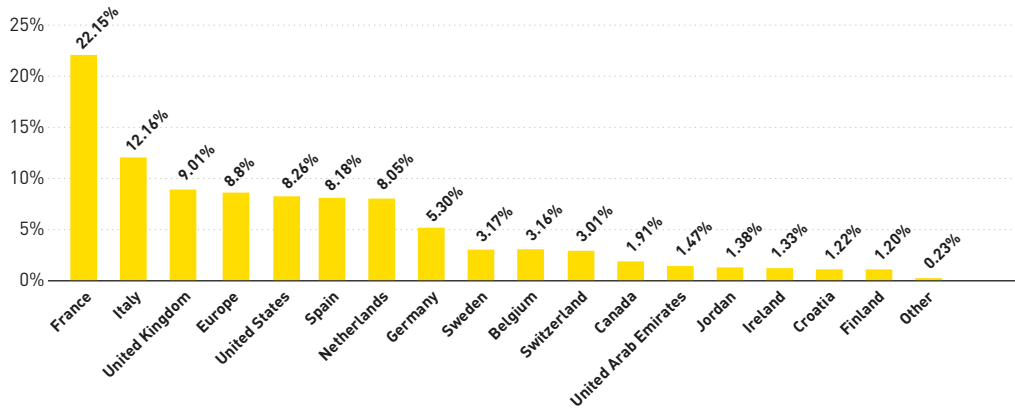
INFRASTRUCTURE



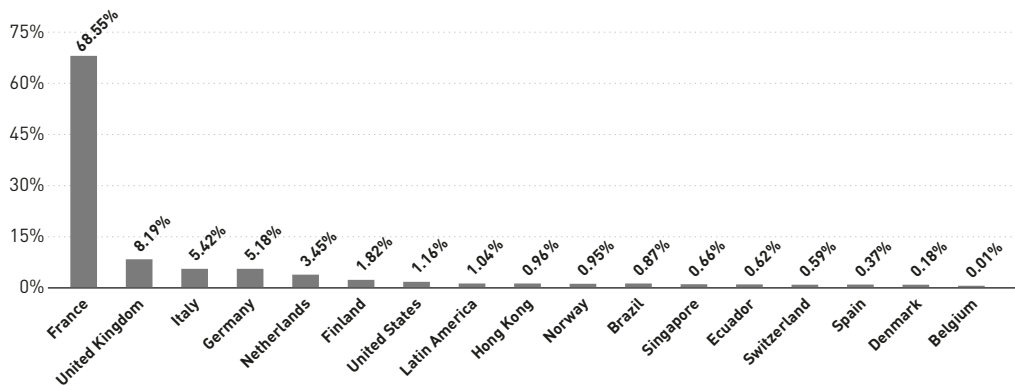
GEOGRAPHIC BREAKDOWN OF PRIVATE EQUITY AND INFRASTRUCTURE FUNDS AT 31 DECEMBER 2019 (AT AMORTISED COST)

Source — ERAFP

PRIVATE EQUITY



INFRASTRUCTURES



SRI PROFILE

In connection with its unlisted asset management mandate investments, ERAFP has developed SRI criteria for investing in private equity and infrastructure assets. The aim of these criteria is to adapt to the specific features of these asset classes while applying the five values of ERAFP's SRI Charter. Each criterion adapts the best in class principle to the specific nature of the asset class by incorporating a dynamic approach consistent with the investments' lifespan. Practically speaking, this means using the investment as a lever to encourage improvement in practices. Particular attention is also paid to managing the reputational risk arising from any controversial practices associated with portfolio companies or projects.

The facilities that ERAFP has helped finance generated 5,825 GWh of electricity in 2019, of which 3,958 GWh of wind power, 495 GWh of solar power and 157 GWh of biomass power.

As the delegated asset managers invest mainly through mutual funds, SRI analysis is based on two aspects:

- _ the SRI management process implemented by the target fund;
- _ ESG assessment and monitoring of portfolio lines in relation to ERAFP's SRI criteria.

In 2019⁶¹, all the managers selected for ERAFP's private equity fund signed ERAFP's delegated asset manager ESG clause. 23% of the management companies issued an ESG report (compared with 18% in 2018) and 43% had signed the PRI (compared with 38% in 2018).

Managers are also assessed on the basis of the ESG reporting of the companies in the underlying funds and their ability to meet the ESG criteria identified within the companies. Based on these criteria, the average ESG rating of the managers of the portfolio's underlying funds is 7.1/10 (based on the assessment of the delegated asset manager of ERAFP's private equity portfolio).

Facilities that ERAFP helps finance.



In terms of infrastructure investments, all the managers selected by the delegated asset manager of ERAFP's portfolio have a responsible investment policy. 88% of them are signatories to the PRI. Their average ESG rating is 83%.

As the funds that the delegated asset manager selects are mostly at the start of their investment period, information on the assessment and monitoring of portfolio lines remains limited.

The infrastructures of the underlying funds are assessed on the basis of 12 ESG criteria covering ERAFP's SRI framework. The fund managers are then assessed based on both the level of reporting on the underlying infrastructures and their ability to factor in ESG imperatives.

Based on the 2018 assessment covering the underlying assets of the six funds invested in at the 30 September 2018 reporting date, the average ESG performance of the 27 assets in the portfolio was 57.5.

ERAFP has carried out carbon footprinting for the private equity and infrastructure portfolio with the assistance of Carbone 4 since 2017. In ERAFP's view, the data collected and analysis carried out are not yet sufficiently robust for the related results to be publishable.

61_ Based on 2018 data.

THE REAL ESTATE PORTFOLIO

€3bn

at amortised cost

ERAFP's real estate portfolio comprises six diversified SRI asset management mandates:

- _ four French real estate mandates, two of which are managed on a diversified basis by AEW Ciloger (including ERAFP's headquarters building), one by La Française REM, and one in the residential real estate sector by Ampère Gestion;
- _ two European real estate mandates, one managed by AXA Real Estate IM SGP and the other by LaSalle IM.

At 31 December 2019, the real estate portfolio totalled €3bn at amortised cost, representing 10.6% of ERAFP's total assets. Unreleased commitments of €430m, pending future deliveries of buildings and cash calls by the mutual funds' currently in the investment phase, can be added to this amount. In 2018, the portfolio's unrealised capital gains increased to 9.1% of its amortised cost, despite the sustained pace of ongoing acquisitions, while the related costs negatively impacted asset yields. The real estate portfolio committed to investing €100m in the Fonds de logements intermédiaires subsidised middle income housing funds.

GEOGRAPHIC BREAKDOWN OF THE REAL ESTATE PORTFOLIO AT 31 DECEMBER 2019

Source — ERAFP

	COMMITMENT ⁶²	EXPOSURE ⁶³
France	69.7%	72.1%
Netherlands	7.1%	5%
United Kingdom	6.2%	4.8%
Germany	4.3%	4.5%
Spain	3.8%	4.2%
Finland	3.2%	2.7%
Europe	2.6%	2.6%
Czech Republic	2.1%	2.1%
Ireland	1%	1.9%

62_ The commitment represents the sum of the amount disbursed for the existing assets and the assets delivered, the acquisition price including taxes, costs associated with off-plan assets not delivered, the amount disbursed for funds no longer making calls and the amount of the commitment for the funds.

63_ The exposure represents the sum of the appraisal value of real estate assets and of the funds' underlying assets. It is calculated inclusive of debt.

SRI PROFILE

ERAFP has developed a demanding and innovative SRI process for real estate assets, adapting the five values of its SRI Charter to the asset class. It not only focuses on the real estate's environmental impact, but also integrates social progress, human rights, democratic labour relations and good governance criteria into its management.

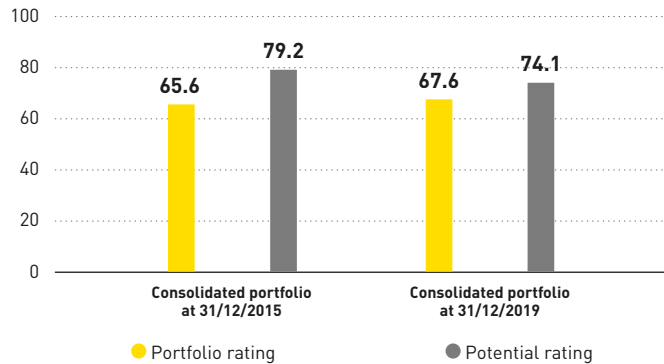
In this respect, taking these criteria into account along the entire management chain is of crucial importance.

This approach also aims to adapt the best in class principle to the specific nature of the real estate asset class by incorporating a dynamic approach consistent with the investments' lifespan. In practical terms, this is reflected in two types of SRI performance for the real estate concerned:

- _ a relative performance that compares the extra-financial characteristics of these buildings and their management (lease, use, maintenance) with those of other buildings of the same type (same usage and type of construction, equivalent location);
- _ a dynamic performance that aims to raise each asset to best in class status, using a potential SRI rating estimate at the date of acquisition.

CHANGE IN THE CONSOLIDATED REAL ESTATE PORTFOLIO'S AVERAGE SRI RATING

Source — asset managers, 31 December 2019



In summary, only real estate assets with a high SRI rating within their category at the time of acquisition, or those with strong improvement potential, can be selected for ERAFP's portfolio.

In 2019, the consolidated rating for ERAFP's five real estate portfolios was up slightly compared with the previous year (67.6 vs. 67.2). The potential rating was down slightly compared with 2018 (74.1 in 2019 vs. 75.4 in 2018), but the overall potential for improvement remains significant. As the real estate portfolio is in an expansion phase, its SRI ratings may change due to new acquisitions in the coming years.

Most (i.e. 68%) of the real estate assets in ERAFP's portfolio are certified⁶⁴ to standards of minimum environmental and social performance. Most certifications obtained or pending are BRE Environmental Assessment Method (BREEAM), High Environmental Quality (HEQ) and NF Habitat.

⁶⁴ Obtained or pending.

TRANSITION RISKS:

Source — Carbon 4, 31 December 2018

Absolute emissions (tCO ₂ eq)	Carbon footprint (tCO ₂ eq/€ million invested)	Carbon intensity (tCO ₂ eq/€ million of revenue)	Surface intensity (kgCO ₂ eq/sq m/year)
30,100	15	287	42

CLIMATE ANALYSIS

> Transition risks

A number of indicators are available for analysing the real estate portfolio's emissions (see above). The 2019 climate analysis⁶⁵ was carried out on four real estate portfolios⁶⁶. Regardless of the emissions indicator used, on average ERAFP's two French asset portfolios generated fewer emissions than the two European portfolios. This is attributable in particular to the difference in electricity mix between countries (France has one of the least carbon-intensive electricity mixes in Europe, while Germany, the Czech Republic and the Netherlands have some of the highest). It also reflects the fact that the majority of the portfolio's issues are concentrated on just a few assets. ERAFP tends to focus on these assets to improve their energy performance and, ultimately, the portfolio's overall performance.

Real estate portfolio emissions are broken down into several items: emissions related to a building's energy consumption, those related to its users' travel and those related to its construction. Emissions related to energy consumption represent the portfolio's largest source of emissions (around 50% of the total).

Overall, ERAFP's assets perform well compared with the average for the countries in which they are based. This is also true in comparison with the French and European averages.

ERAFP's real estate portfolio has a lower surface intensity than the European benchmark⁶⁷ for office assets (51 kg CO₂/sq m/year for the portfolio compared with 66 kg CO₂/sq m/year for the benchmark) and an almost identical surface intensity for retail assets (41 kg CO₂/sq m/year for the portfolio compared

with 40 kg CO₂/sq m/year for the benchmark). The French real estate portfolio's assets also have a lower average surface intensity than the benchmark⁶⁸.

> Contribution to the energy transition

ERAFP measures the contribution of its real estate portfolios to the energy transition by taking into account a green threshold and an average by sector and country. Assets considered to contribute to the energy transition are those situated above the sector or country average (0% contribution) and up to the green threshold (100% contribution). Taking as the green threshold the carbon performance (operational phase) required by the E+C label (future RE 2020)⁶⁹, the real estate portfolio's contribution to the energy transition is 49%.

⁶⁵ The climate analysis of the real estate portfolio is based on data as at 31 December 2018 as the 2019 results were not available when this report was drafted.

⁶⁶ The mandate managed by Ampère Gestion was still in the process of being implemented and mainly consisted of off-plan properties not yet built in 2018. The real estate climate data presented relates to 2018, as the 2019 data is not yet available.

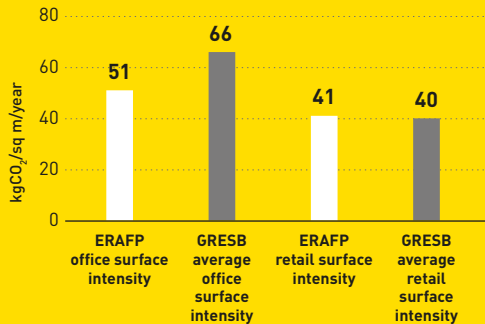
⁶⁷ GRESB: Global Real Estate Sustainability Benchmark, an organisation that helps real estate investors assess and monitor their investments' sustainability.

⁶⁸ Per the results of the Sustainable Real Estate Observatory (OID) barometer.

⁶⁹ Level C2 of the E+C label, i.e. approximately 20 kg CO₂ eq/sq m.

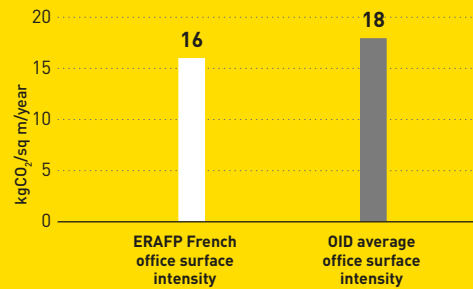
COMPARISON OF THE REAL ESTATE PORTFOLIO'S SURFACE INTENSITY WITH A EUROPEAN SAMPLE

Source — Carbon 4, 31 December 2018



COMPARISON OF THE FRENCH REAL ESTATE PORTFOLIO'S SURFACE INTENSITY WITH THAT OF A FRENCH SAMPLE

Source — Carbon 4, 31 December 2018



Of the assets that contribute to the energy transition, 18 are considered green (i.e. reaching or exceeding the green threshold represented by the E+C label's most demanding carbon performance level) and 6 contribute without being green.

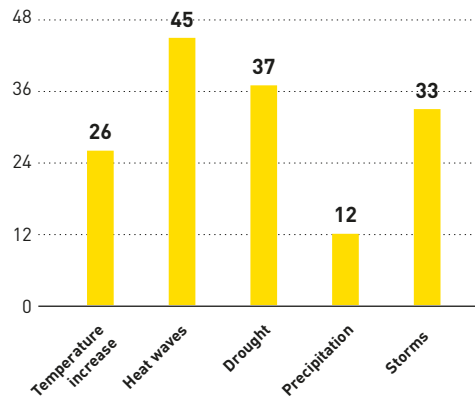
> Physical risks

In a median warming scenario (between 3°C and 4°C by 2050), risk scores are calculated by combining geographic exposure and sector vulnerability for five risks (temperature increase, heat waves, droughts, precipitation and storms).

The scores show that on average the portfolio is more exposed to heat waves (45/100) and droughts (37/100). This is notably due to the portfolio's high exposure to France, a country particularly prone to these risks.

ERAFP PORTFOLIO AVERAGE RATING BY RISK

Source — Carbon 4, 31 December 2018



APPENDICES

4

GLOSSARY

> **Benchmark index**

An index that is representative of the market(s) in which the fund is invested.

> **Best in class**

Approach used in socially responsible investing that consists of selecting those issuers considered to be the most responsible within a group of comparable issuers. For equities, this approach involves not precluding any single business sector automatically but favouring the companies in each business sector that have made the most progress as regards environmental, social and governance criteria.

> **Bond**

A bond is a security evidencing a debt issued by a State or a company and representing a long-term loan. The bond's holder receives income, also known as a coupon.

> **Corporate social responsibility (CSR)**

The CSR concept corresponds to the implementation of sustainable development practices at the company level. A socially responsible company integrates social, environmental and economic impacts into its decision-making processes, striving to minimise said impacts.

> **Discounting**

Method for calculating the present value of a future amount based on an interest rate (referred to herein as the discount rate).

> **Engagement**

This term describes the dialogue between an institutional shareholder (pension fund, investment management company, etc.) and an issuer, typically a company, for the purpose of improving the issuer's consideration of environmental, social and governance risk factors.

> **ESG**

Acronym referring to environmental, social and governance issues. FCP (collective investment fund) An FCP is a French mutual fund managed by a management company on behalf of unit-holders. It is not a legal entity.

> **Funded scheme**

A funded retirement scheme invests its paid-in contributions in financial assets, which are liquidated at the time of retirement to pay the accrued rights either as an annuity or in a lump sum. The payment depends on both the amount saved and changes in the value of the assets (typically equities and bonds) in which the funds were invested.

> **General indicative estimates for pensions (French acronym: EIG)**

Document sent to active contributors when they turn 55 and subsequently every five years. The EIG provides an estimate of the amount of their pension at the legal retirement age and at the full rate, relying on income projections prepared by the Pension Steering Committee (French acronym: COR).

> **Greenhouse gases**

Gases that are a source of global warming.

> **Individual statement of position (French acronym: RIS)**

Document sent to active contributors. Statements relating to the Scheme are sent along with those of the main pension scheme. The RIS includes information on the beneficiary's entire career, coverage periods and vested points. It can be issued at the beneficiary's request.

> **Intergenerational equity**

This concept aims to ensure an equivalent standard of living amongst individuals at a given point in time and relative to other generations at the same ages.

> **Life expectancy tables**

The TGF05 and TGH05 tables are forward-looking generational life expectancy tables. A life expectancy table is constructed for each birth year, which allows increasing life expectancy to be taken into account. All the tables have been drawn up based on an analysis of annuity holders' life expectancy performed by their respective insurance companies using data from INSEE. Two sets of tables have been drawn up: one for women (TGF05) and one for men (TGH05).

The life expectancy tables applied up to the end of 2006 had been drawn up in 1993. They were also forward-looking but had been constructed based solely on the life expectancy of French women. The change of tables was required by the increase in life expectancy, which has on the whole been stronger than anticipated in 1993.

> **Liquidation**

Set of procedures aimed at calculating and paying out benefits to a beneficiary.

> **Marketable security**

Security traded on the financial markets and evidencing a negotiable, associated claim or right (equities, bonds, etc.).

> Modernisation of Social Security Declarations GIP

Public interest group created to pool the paperless processing resources and expertise of social security organisations with the aim of simplifying the collection of employment data. It is made up of social security bodies (Acos, Agirc-Arrco, Cnav, Pôle emploi, etc.) and associate members such as employer organisations, employee unions, user representatives (Syntec Numérique) and accountants (Conseil supérieur de l'Ordre des experts-comptables).

> Point

Unit for calculating the pension in certain schemes. The contributions make it possible to acquire (vest) points. The amount of the pension is equal to the points vested over the course of the beneficiary's professional career, multiplied by the value of a point at the time of retirement. Most supplementary pension schemes are based on points systems. Basic pension schemes tend to use the 'quarter' system.

> Premium

Premium applied to the amount of the future pension of a beneficiary who has reached the legal retirement age but chooses to continue working, even though he or she has satisfied the coverage period required to receive a full pension.

> PRI

Principles for Responsible Investment, a charter drafted under the auspices of the United Nations to which ERAFP adheres.

> Return

Ratio of the pension amounts received over the course of retirement to the contribution amounts paid in during the beneficiary's active working life.

> Reversion

Attribution to a deceased beneficiary's spouse (prior to or after the beneficiary's retirement) of a portion of the pension. The reversionary pension is based on the resources of the surviving spouse in the French general scheme for employees (*régime général des salariés*) and ancillary schemes.

> Share

Negotiable security that gives its owner fractional ownership of a company and certain rights: to oversee and control management and to receive a share of the distributed profit (dividend).

> SRI

Socially responsible investing is an approach aimed at integrating environmental, social and/or governance criteria into investment decisions and portfolio management.

> Sustainable development

The Brundtland Report, published in 1987 by the UN World Commission on the Environment and Development, defined sustainable development as "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*"

> Technical return

Ratio of the service value of a point to the purchase value of a point.

> Tracking error

Tracking error represents the volatility of performance variances between the fund and its benchmark index.

> UCI (undertaking for collective investment)

Term generally used to refer to a vehicle for the collective ownership of financial assets.

> Union Retraite GIP

French public interest group that includes 38 compulsory retirement schemes (CNAV, MSA, AGIRC, CNRACL, Ircantec, etc.) set up to create the individual information for beneficiaries on rights vested in all schemes in which they participate. The GIP provides an online universal pension simulator (m@rel) that covers 95% of the population.

MEMBERS OF ERAFP'S BOARD OF DIRECTORS

Qualified persons

Dominique Lamiot <i>Chairman</i>	Cécile Chaduteau-Monplaisir	Vincent Lidsky
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Representatives of central government employers

FINANCE Christophe Landour <i>Principal</i>	FINANCE Valérie Georgeault <i>Deputy</i>	DEFENCE Philippe Hello <i>Principal</i>	DEFENCE Alexis Wilier <i>Deputy</i>	EDUCATION Emmanuelle Walraet <i>Principal</i>	EDUCATION Lionel Leycuras <i>Deputy</i>
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Representatives of local and regional authorities employers

AMF Philippe Laurent <i>Principal</i>	AMF Jean-Claude Husson <i>Deputy</i>	ADF Martine Ouaknine <i>Principal</i>	ADF Arnaud Arfeuille <i>Deputy</i>	RÉGIONS DE FRANCE Jean-Luc Gibelin <i>Principal</i>	RÉGIONS DE FRANCE Laurent Burckel <i>Deputy</i>
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Representatives of public hospital employers

FHF Chantal Borne <i>Principal</i>	FHF Richard Tourisseau <i>Deputy</i>	FHF Gérard Vincent <i>Principal</i>	FHF Christiane Coudrier <i>Deputy</i>
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Representatives of active contributors

CGT Hélène Guerra <i>Principal</i>	CGT Didier Louvet <i>Deputy</i>	CFDT Michel Argiewicz <i>Principal</i>	CFDT Chantal Gosselin <i>Deputy</i>	FO Jean-Christophe Lansac <i>Principal</i>	FO Gilles Calvet <i>Deputy</i>
UNSA Frédéric Le Bruchec <i>Principal</i>	UNSA Christelle Gay <i>Deputy</i>	FSU Olivier Kosc <i>Principal</i>	FSU Serge Deneuveglise <i>Deputy</i>	Solidaires Christine Berne <i>Principal</i>	Solidaires Laurent Gathier <i>Deputy</i>
FA-F P Amar Ammour <i>Principal</i>	FA-FP Marie-Christine Ramon <i>Deputy</i>	CFE-CGC Philippe Sebag <i>Principal</i>	CFE-CGC Catherine Gilles <i>Deputy</i>		

STATUTORY AUDITORS' REPORT ON THE 2019 ANNUAL FINANCIAL STATEMENTS

Statutory auditors' report on the annual financial statements

ERAFP

Year ended 31 December 2019

To the supervisory authorities of ERAFP,

Opinion

In compliance with the engagement entrusted to us by the supervisory authorities, we have audited the accompanying financial statements of ERAFP for the year ended 31 December 2019. These financial statements were approved by the Board of Directors on 30 April 2020 based on the information available on that date in the context of the evolving health crisis associated with COVID-19.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Institution as at the end of that year and of the results of its operations for the year then ended.

Basis of opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the "Responsibilities of the statutory auditors for the audit of the financial statements" section of our report.

Independence

We conducted our audit in compliance with the independence rules applicable to us for the period from 1 January 2019 to the issue date of our report, and in particular we did not provide any services prohibited by the French code of ethics for statutory auditors.

Justification of our assessments

In accordance with the requirements of Articles L.823-9 and R.823-7 of the French Commercial Code relating to the justification of our assessments, we bring to your attention the following assessments, which, in our professional judgement, were the most significant for the audit of the financial statements for the period.

- Certain technical items among the liabilities in your Institution's financial statements, notably provisions, are estimated on a statistical and actuarial basis in accordance with regulatory procedures, as described in note "3.3.3. Scheme benefits and provisions" in the notes to the financial statements.

We assessed the assumptions and valuation procedures used to prepare these financial statements, and based on the information available, performed testing to verify the application of these procedures and the consistency of the assumptions made in the light of the Institution's past experience and its economic and regulatory environment. We also examined the appropriateness of the information provided in the notes to the financial statements.

- Financial assets are recognised and measured in accordance with the procedures set out in note "3.3.4. Investment transactions" in the notes to the financial statements. We assessed the valuation policies for these assets and, based on the information available to date, we performed testing to verify their application.

These matters were addressed in the context of our audit of the financial statements as a whole, as conducted in the conditions referred to above, and of forming our opinion thereon. We do not provide a separate opinion on specific elements of the financial statements.

Specific verifications

In accordance with professional standards applicable in France, we have also performed the specific verifications required by law and regulations.

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the management report of the Board of Directors approved on 30 April 2020 and the other documents on the financial position and the financial statements submitted to the supervisory authorities. With regard to events that have occurred and information that has emerged after the reporting date relating to the effects of the COVID-19 crisis, management has informed us that they will be provided to the supervisory authorities with responsibility for approving the financial statements.

Responsibilities of management and the persons charged with governance relating to the annual financial statements

Management is responsible for the preparation and fair presentation of financial statements that comply with French accounting principles and for such internal control as it determines is necessary for the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing ERAFP's ability to continue as a going concern, disclosing, as applicable, matters related to its continuation as a going concern and using the going concern basis of accounting unless it is expected to liquidate the Institution or cease its operations.

The financial statements have been approved by the Board of Directors.

Responsibilities of the statutory auditors for the audit of the financial statements

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions taken by users on the basis of these financial statements.

As specified by Article L.823-10-1 of the French Commercial Code (*Code de commerce*), our statutory audit does not include assurance on the viability of the Company or the quality of the management of the Company's affairs.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgement throughout the audit and furthermore:

- identifies and assesses the risks of material misstatement in the financial statements, whether due to fraud or error, designs and performs audit procedures in response to those risks, and obtains audit evidence that the auditor considers to be sufficient and appropriate to provide a basis for his/her opinion. The risk of not detecting a material misstatement resulting from fraud is higher than that for one resulting from error, as fraud may involve collusion, falsification, intentional omissions, misrepresentation or the overriding of internal control;
- obtains an understanding of the internal control systems relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;

- evaluates the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by management and the related disclosures in the financial statements;
- assesses the appropriateness of management's use of the going concern basis of accounting and, based on the evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Institution's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, attention must be drawn in the audit report to the relevant disclosures in the financial statements, or, if such disclosures are not provided or are inadequate, the opinion expressed therein must be modified or an opinion may not be issued;
- evaluates the overall presentation of the financial statements and assesses whether the financial statements represent the underlying transactions and events in a manner that results in fair presentation.

Issued at Paris-La Défense and Neuilly-sur-Seine, 7 May 2020.

The Statutory Auditors

Mazars

Grant Thornton
French member firm of Grant Thornton
International

 Signature numérique
de Pascal PARANT
Date : 2020.05.12
11:43:14 +02'00'



Pascal Parant

François Lembezat

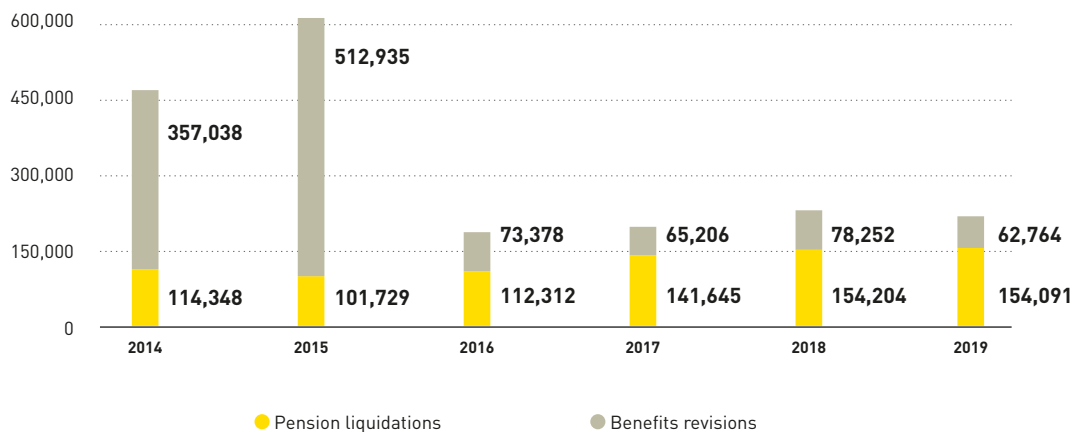


Brigitte Vaira-Bettencourt

HISTORICAL DATA

NUMBER OF PENSION LIQUIDATIONS AND BENEFITS REVISIONS, 2014 - 2019

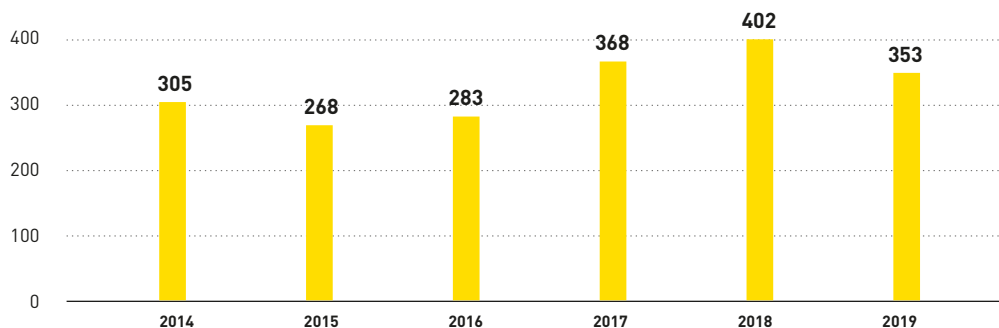
Source — CDC administrative manager



Note: from 2016, only revisions with an impact on rights are recorded

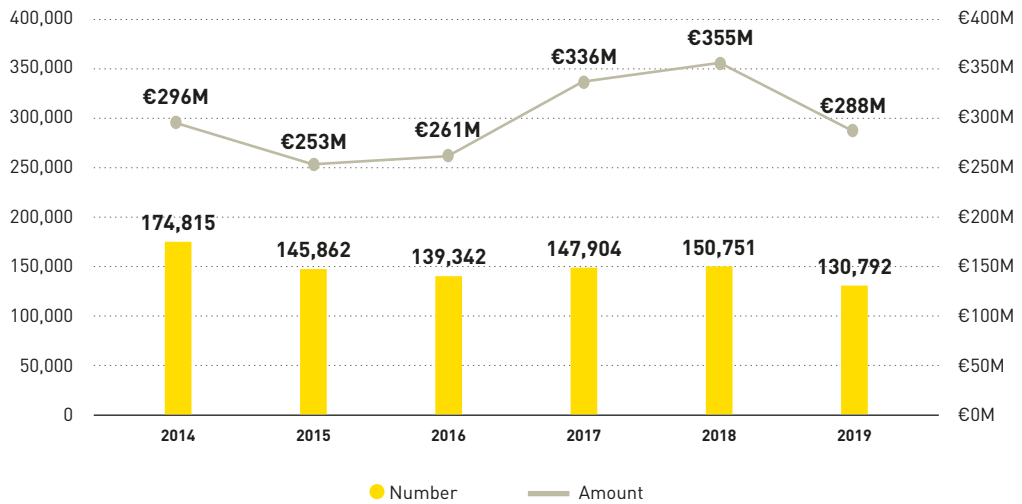
BENEFIT PAYOUT AMOUNT (IN MILLIONS OF EUROS)

Source — CDC administrative manager



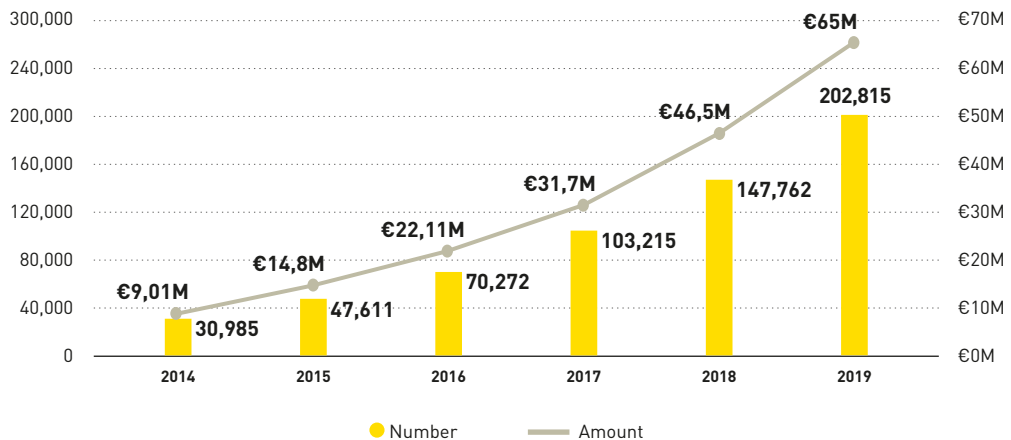
NUMBER AND AMOUNT OF ANNUAL LUMP SUM BENEFIT PAYOUTS (IN MILLIONS OF EUROS)

Source — CDC administrative manager



OVERALL NUMBER AND AMOUNT OF ANNUAL ANNUITY PAYOUTS (IN MILLIONS OF EUROS)

Source — CDC administrative manager



ERAFP'S INTERNAL CONTROL ORGANISATION AND RISK MANAGEMENT SYSTEM

SYSTEM

The purpose of internal control and the risk management system is to give the Scheme's and the Institution's supervisory and management bodies reasonable assurance that the following objectives are achieved:

- _ achievement of aims and objectives set, in compliance and consistently with the orientations defined by the Board of Directors;
- _ risk management;
- _ economical and efficient use of resources;
- _ reliability and integrity of accounting and financial information, and compliance with laws and regulations and with internal rules and procedures.

ERAFP's internal control organisation and risk management system are based on the following fundamental principles:

- _ segregation of duties: to reduce the risk of conflicts of interest and/or fraud, the commitment, settlement and control functions must be distinct;
- _ existence of several levels of control: distinction between first-level controls (carried out by the operational staff or their managers) and second-level controls (carried out by dedicated, hierarchically independent control staff);
- _ implementation of dedicated tools, specific committees and appropriate procedures.

ERAFP's internal control system includes:

- _ permanent control, which is ERAFP's responsibility;
- _ the control activities of the Board of Directors, which delegates the most detailed tasks to its specialised audit committee.

For ERAFP, the main players involved in monitoring the internal control and risk management system are:

- _ the internal control and operational risk department;
- _ the financial risk control department;
- _ the accounting agency.

The head of internal control and operational risk reports to the Deputy CEO, Administrative and Operations Director.

Since the end of 2019, the head of financial risk control has reported to ERAFP's Deputy CEO, Administrative and Operations Director.

These two departments are responsible for coordinating and supervising the first- and second-level internal control and risk management system, and work closely together on these matters.

The accounting agency's participation in ERAFP's internal control system is based on the fundamental principle of segregation of duties between authorising officer and accountant, pursuant to Article 191 of Decree no. 2012-1246 of 7 November 2012 on public budgetary and accounting management.

With respect to risk, ERAFP distinguishes between financial, technical and operational risks.

Financial risks include credit risk, market risk and asset-liability mismatch risk.

Technical risks include the risk associated with contributor demographics (including mainly longevity risk), economic and regulatory risks associated with the mandatory pension scheme sector, and model risk applied to tables and discount rate calculations.

Operational risks include human resources risk, accounting risk, legal and tax risk, information systems security risk, physical and environmental risks, fraud risk and administrative risk. By extension, compliance risk, ethics-related risk and image and reputational risk are also dealt with under operational risk.

ERAFP has entrusted certain activities to third parties:

- _ the management of financial assets, other than government bonds and direct investments in UCIs, is delegated to financial asset managers acting on behalf of third parties;
- _ the Scheme's administrative management is mandated by decree to Caisse des dépôts et consignations, which, under the authority and control of the Board of Directors, carries out tasks such as collecting contributions, maintaining individual retirement accounts, calculating rights, paying benefits, relations with beneficiaries and employers, and Scheme accounting.

The scope of control therefore covers:

- _ first: ERAFP, i.e. its own staff, processes and systems;
- _ second, and indirectly: the risks and controls of ERAFP's service providers and external agents, particularly the management companies and the CDC.

CHANGES IN RISK MANAGEMENT AND INTERNAL CONTROL IN 2019

There was progress in 2019 on several projects and initiatives that strengthen risk management and internal control:

- _ the risks and internal control committee continued to hold regular meetings. This committee, chaired by ERAFP's CEO and usually held three times a year, comprises the head of internal control and operational risk, the head of financial risk control and the other members of the Institution's management committee. In addition, a financial risk committee comprising the financial risk control department, the deputy directors and the technical and financial management teams meets prior to meetings of and reports to this committee;
- _ ERAFP's control plan has entered a continuous improvement phase. At the end of 2019, 90% of the planned controls were operational, the aim being to ensure the control plan's full deployment during 2020;

_ the updating of ERAFP's operational risk mapping in 2018 made it possible to establish action plans, which were monitored throughout 2019. Regular progress reports were made at meetings of both the management committee and the risk and internal control committee;

_ due to the increased diversification of the Scheme's portfolio and to better monitor market risk, the financial risk control department replaced the UBS Delta IT solution with the MSCI RiskMetrics solution and also initiated work to formalise the risk framework, which will continue in 2020;

_ as regards ALM work, in order to better take into account the specific demographics of the Scheme's contributors, the actuarial department of ERAFP's technical and financial management division has created experiential mortality tables specific to the Scheme, which were certified by the independent actuary before being adopted by the Board of Directors at its meeting of 15 October 2019; they were then used to calculate the technical reserves at the end of 2019.

ERAFP: AN INVESTOR RECOGNISED BY ITS PEERS

In 2019, the PRI ranked ERAFP among the leading proponents of ESG practices for its selection, appointment and monitoring of asset managers.

ERAFP: voted best pension fund in the “Equities” category at the IPE Awards

At the 19th IPE Awards ceremony held on 2 and 3 December 2019 in Copenhagen, ERAFP was recognised by its peers as a 100%-SRI long-term investor for its management of equities.

In 2015, ERAFP had received the prize for best SRI investment policy, and this new award confirms the overall quality of the fund’s management.



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