
Responsible Investment

For the year ended 31 March 2018



Responsible Investment

Introduction

Last year we commented on a rapidly changing world. It seems that rapid change continues and indeed should be expected. Whether social, political, technological or even climatic change - all continue to bring opportunities and risks but most importantly demonstrate the need for a robust approach to responsible investment across all asset classes which considers how these changes may have a financial impact on the Fund. Whilst the focus of responsible investment activity looks at our assets, we are increasingly using the same disciplines to look at our liabilities, particularly when thinking about long term issues such as climate change.

How we integrate responsible investment (RI) into the work of the fund is illustrated throughout our Annual Report and Financial Statements as it is embedded in our governance, our approach to risk and how we deliver our investment strategy on a day to day basis. This report aims to provide a summary that demonstrates our delivery as a responsible investor, which to us means that we;

- Consider a wide range of issues e.g. environmental or social impacts and what financial impact they could have both in the short and long term as a result of our investments.
- Look to work with and influence others.
- Act as good owners of the companies, assets and funds in which we invest.
- Operate in an open and transparent way.

Whilst we have summarised our key achievements in responsible investment during the year, we encourage you to review the responsible investment section of our website which includes our policies, voting records, regular updates on engagements with companies and a dedicated section on climate risk.

The focus of the last 12 months has been the establishment of Brunel Pension Partnership (Brunel) as well as supporting the roll out of pooling more broadly. For example, the EAPF, as part of Brunel, help set up and coordinate the Cross Pool (RI) Group's purpose of providing practical support and tools to assist nominated leads to co-ordinate the implementation of the consideration of RI (including ESG integration and stewardship), risks and communications for the pool and the Funds within each pool.

Industry Engagement and Contribution on Responsible Investment

We have been active in our support for the work of the Financial Stability Board's Task Force on Climate-related Financial Disclosure (TCFD). The Task Force, initiated by the G20 Finance Ministers and Central Bank Governors and established in December 2015, was asked to design a set of recommendations for consistent "disclosures that will help financial markets participants understand their climate related risks".

We report in line with the Task Force on Climate-related Financial Disclosure (TCFD) recommendations which are structured around four thematic areas that represent core elements of how organisations operate:

- **Governance** - The organisation's governance around climate-related risks and opportunities
- **Strategy** - The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning
- **Risk Management** - The processes used by the organization to identify, assess, and manage climate-related risks.
- **Metrics and Targets** - The metrics and targets used to assess and manage relevant climate-related risks and opportunities

One of our key policy commitments is to continue to engage with companies, regulators, policy makers and other intermediaries to demand higher disclosure standards and increased transparency for, and by, investors.

We have shown direct support (i.e. contributing to the TCFD consultation in 2017) and through active participation in industry initiatives of which we are members of (e.g. the supporting statement of Accounting For Sustainability (A4S) in December 2017). We promote the TCFD recommendations, which can be found on the TCFD website (www.fsb-tcfid.org/), both in conversations with companies and with organisations across the investment industry. We also show our support by aligning our reporting to the TCFD recommendations and this year we were pleased to be able to also report our TCFD support via our annual Principles of Responsible Investment (PRI) reporting. Our progress against the TCFD recommendations and our wider work are summarised below:

Areas of Focus	Outcomes
<p>Governance:</p> <p>Policy to Address the Impacts of Climate Change</p>	<p>We published our Policy to Address the Impacts of Climate Change in October 2015 and updated it in 2017 to demonstrate to our members we have a credible plan to deliver strong long term financial returns as the impacts of climate change materialise. We believe financial risk and opportunities will come from the physical impacts, regulation and policy alongside increased competition from alternatives and technological innovation.</p> <p>We have set ourselves a global leading objective ‘to ensure that our Fund’s investment portfolio and processes are compatible with keeping the global average temperature increase to remain below 2°C relative to pre-industrial levels, in-line with international government agreements.’</p> <p>In the policy we identified that our biggest barrier to our ability to achieve our objective was the availability of accurate disclosure of material climate risk information to support informed investment decision making.</p> <p>Progress against the policy is reported in our Annual Report and Financial Statements approved by the Environment Agency Pensions Committee (as well as the Audit, Risk and Assurance Committee).</p> <p>The Chief Pensions Officer is the principal lead in the assessment and management of climate related issues.</p>
<p>Strategy:</p>	<p>Climate related risk and opportunities have been part of our equity strategy since 2005 and fully integrated into broader strategic asset allocation from 2010, when we partnered with other asset owners globally, as part of the Mercer-led research, considering the implications of climate change scenarios on strategic asset allocation. This was further enhanced in 2014 with the follow up study Investing in a Time of Climate Change. This study provided four climate change scenarios and looked at impact across different asset classes over 10 and 35 year time horizons. Our tailored report is publicly available on the climate risk area of our website.</p> <p>As a result of this project, the Pensions Committee has extensive training and engagement on the outcomes of the study. In 2018 so far, we have worked with Mercer and others partners to further develop the research so that it remains current and reflects and supports the growth in climate knowledge globally.</p> <p>We have been progressively integrating the assessment of the effect of the impacts of ESG issues into our investment strategy for over a</p>

	<p>decade. These impacts can arise from multiple factors, for example emissions and water security. Each year, increasing scientific analysis of the impact on the world and in the financial markets allows us to develop this work, share it and continually improve.</p> <p>We integrate the research included in the Investing in a Time of Climate Change study into our own review of our strategic asset allocation (SAA) that informs the development of a robust portfolio, where the investment strategy is positioned to reduce risk and maximise investment opportunities presented by climate change.</p> <p>Our strategy has a particular focus on identifying financial opportunities arising from technological changes and innovations that provide competition and substitution. One example is identifying opportunities from investing in real assets covering real estate, infrastructure, forestry and agricultural land for which we used Townsend Group (15% strategic asset allocation). The mandate places a high priority on long term responsible investments that meet our financial targets, with a preference to invest positively in real assets such as energy efficient buildings, renewable energy projects, public transport, water treatment facilities, eco-friendly farming, and sustainable forestry.</p>
<p>Risk Management</p>	<p>The fund is committed to working with others to engage with companies to mitigate and or adapt to climate change. Our primary programme will be based on the Transition Pathway Initiative. However, we also work collaboratively with many other organisations to encourage positive action. We have highlighted these Industry Collaboration activities throughout the report.</p>
<p>Monitoring and Metrics</p>	<p>The Pension Committee and Investment Sub-committee receive reports to enable them to monitor climate related issues every quarter. Whilst the majority of the resources allocated to climate issues are captured as part of staff time or integrated into standard work items, for example fund manager monitoring, there are specific budget allocations to climate change for carbon metrics reporting and the Transition Pathway Initiative (TPI) (further details are set out on page 34).</p> <p>The Fund uses a range of tools to help us establish the level of risk relating to climate change issues. These are more developed and quantitative in some asset classes more than others. In listed equities and bonds, fossil fuel exposure analysis and carbon footprinting provides us with useful information on the absolute exposure and the relative carbon intensity of holdings and summarises the indicators that underpin the reporting against the targets in our climate change goals. Further details on carbon metrics and targets are set out on page 36.</p> <p>For private market (unlisted) investments, we place an emphasis on guidelines and the pre-investment due diligence process. We positively invest in funds which either focus on low carbon solutions e.g. energy efficiency or have policies and processes that are more robust than the industry norm to manage climate related issues e.g. water stress. For example, in real estate we require our funds to participate in the Global Real Estate Sustainability Benchmark (GRESB). In 2017, 14 of 15 funds received Green Star status. We continue to work with our managers and the industry to explore effective solutions suitable for investing in private markets.</p>

Private Equity and TCFD recommendations

As part of the ESG survey for 2017, private equity managers in EAPF's private equity (PE) portfolio^[1] were asked about their alignment with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) for the first time.^[2] Their responses are summarised in Table 1 and below.

Table 1: Climate-related activities of private equity managers in EAPF portfolio

Climate policies and targets in place	39%
No climate activities	11%
Some climate activities in place	50%
CEO, CIO and other chief-level staff, Investment Committee responsible for climate-related issues	56%
Target low carbon or climate resilient investments	56%
Reduced portfolio exposure to emissions-intensive or fossil fuel holdings	39%
Use emissions data or analysis for investment decision making	28%
Execute scenario analysis	17%
Have process for climate-related risks integrated into overall risk management	33%
Engage with investee companies to encourage better disclosure and practices around climate related risks	22%

Source: private equity managers, Robeco Private Equity, PRI

Almost 40% of the analysed managers in the portfolio have already introduced climate related policies and targets. Half of the respondents report to have undertaken some activities to respond to climate change risk and opportunity, while two (mainstream buyout) managers currently perform no climate related activities. The Chief level staff and Investment Committees are most frequently responsible for oversight and implementation of climate related issues.

With respect to the activities undertaken to respond to climate change risk and opportunities, most of the surveyed managers - including all clean tech-focused - target low-carbon or climate resilient investments or reduce portfolio exposure to emissions intensive or fossil fuel holdings. Only 28% of the respondents currently use carbon emissions data or analysis in their investment decision making and 17% execute scenario analysis to manage emissions risks and opportunities.

Furthermore, one-third of the surveyed managers in the portfolio have already integrated their process for climate related risks into overall risk management. Only about one fifth currently engage with investee companies to encourage better disclosure and practices around climate related risks. The managers who don't engage yet will be asked through Robeco to start doing so in the near future.

[1] Excluding Targeted opportunities portfolio.

[2] 18 private equity managers were included in the survey, conducted by one of our fund managers. Excluded were the managers in the run-down mode that mostly manage down their portfolios. Half of the respondents focus on clean tech and resource efficiency related investments.

Our commitment to being open and transparent

The two primary limiting factors in our ability to provide reliable carbon metrics across the whole fund are the availability of consistent and comparable data and the resource time taken to pull all the information together.

We are however tireless in our efforts to work with others in addressing carbon related financial disclosures and that our own disclosures are market leading.

More information on our approach is available on our website, with updates in our newsletters and other media.

We are committed to being open and transparent - providing regular communications on our progress on delivering our commitments to responsible investment, climate change and stewardship.

We welcome feedback both our work and coverage of responsible investment in this report and other member communications (see inside back cover for contact details).

Industry Collaboration – Part 1

Transition Pathway Initiative (TPI)

TPI, co-founded by the EAPF and the Church of England National Investing bodies, is an asset owner-led initiative, supported by asset managers and owners worldwide. The combined investments of all the asset owners totals trillions of pounds. The initiative assesses how companies are preparing for the transition to a low-carbon economy.

The TPI involves the launch of a tool, developed with the Grantham Institute at the London School of Economics, which ranks companies by two measures:

- 1) How well their management is dealing with climate change risks
- 2) How effective they are at achieving carbon reduction

The PRI and the Transition Pathway Initiative (TPI) are delighted to announce a partnership that will see the PRI provide support and secretariat services to TPI.

To date, 138 companies across seven high-impact sectors (autos, cement, coal mining, electricity utilities, oil & gas, paper, steel) have been assessed with data provided by FTSE Russell and analysed by the London School of Economics Grantham Research Institute.

TPI is rapidly becoming the macro framework through which asset owners can assess how companies are transitioning to a low-carbon economy. One example of this is that the PRI will be providing a secretariat to support the work of the TPI as well as providing opportunities for PRI signatories to access TPI analysis. Nathan Fabian, PRI Director of Policy and Research said: "Support for asset owners to manage climate transition is among PRIs highest priorities. Partnering with TPI will help us to do a better job for our signatories."

The engagement programme, in combination with tool itself, will enable us to fulfil all our policy commitments relating to the companies in which we invest. This will be complemented by the engagement work led by our asset managers, Institutional Investors Group on Climate Change (IIGCC) and PRI which is also aligned to the TPI framework.

Our active ownership approach

To complement and support the implementation of our themes we work with our managers, specialist engagement provider Hermes EOS and other service providers. We are also members of the Local Authority Pension Fund Forum (LAPFF).

Hermes EOS and LAPFF set engagement priorities for the coming year which set out sector and country priorities, these will include issues such as human capital management, remuneration, tax transparency and cyber risk. These are just a few of a much longer list of issues. Quarterly reports from both Hermes EOS and LAPFF are available on our website.

All the assets of the Pension Fund are managed by external fund managers. This means that it is our external fund managers who make the detailed decisions as to which companies we invest in. This is important in avoiding conflicts of interest for our employers, but also gives us the flexibility to select the best managers for each set of assets. The skills needed to decide environmental and other issues vary from one asset class to another. We place a high importance, and indeed time and energy, in selecting good quality managers who deliver financially and can manage the wide variety of risks that come with making investments.

We believe that using the combined skills of ourselves, our managers and all these groups enable us to be confident that we are engaging on all material ESG risks to the Fund.

Industry Collaboration – Part 2

Investor Decarbonisation Initiative

We are pleased to support Share Action's latest initiative (previously the RE100 Investor Group) which advocates a full range of actions companies can take to align with the 2c limit set out in the Paris Agreement including the setting of bold and credible climate targets. RE100 (renewable electricity), EP100 (energy productivity) and EV100 (electric mobility) are presented as a 'toolkit' of energy commitments that companies can consider to reduce specific aspects of their carbon footprint and showcase their leadership.

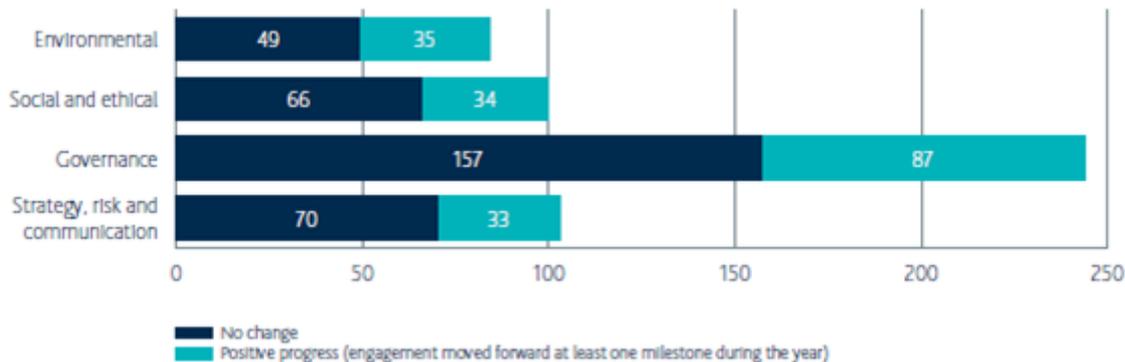
EAPF is the Secretariat for the UK Pension Scheme Responsible Investment Roundtable. The Roundtable is an initiative that brings together over 25 of the UK's largest asset owners to discuss RI implementation and to undertake common RI initiatives. Members include corporate, local authority, endowment and charity schemes. Project priorities in 2016-18 include engagement with asset managers, investment consultants and sharing knowledge and best practice particularly in the areas of climate change and human capital management.

As investors we own a portion of the companies we invest in. We can use our rights as owners to encourage companies to act more responsibly and improve their practices. Acting collectively with other asset owners increases the effectiveness of the engagement.

We use Hermes EOS, who pool the resources of other like-minded funds to create a strong and representative shareholder voice which makes company engagements more effective. They currently act on behalf of over 40 clients and £330.5 billion in assets under advice. We work with Hermes EOS' other clients to set the engagement priorities.

During the last year, Hermes EOS engaged with 415 companies in our portfolios on a range of 1,153 environmental, social and ethical, governance, strategy, risk and communication issues and objectives. Hermes EOS' holistic approach to engagement means that it typically engages with companies on more than one topic simultaneously. Engagement takes time and perseverance and setting clear milestones is vital. Hermes EOS made solid progress in delivering engagement objectives across regions and themes for EAPF. The following chart describes how much progress has been made in achieving the milestones set for each engagement.

Engagement progress during the year



Voting

The Fund believes that voting is an integral part of the responsible investment and stewardship process and as such is delegated to managers to vote all the Fund's shares at their discretion. We demand high standards in stewardship from our managers and their approach and associated policies are evaluated as part of the manager selection process. Voting reports are included in quarterly reports and voting execution is evaluated as part of on-going manager's monitoring. For environmental issues we have written specific guidance and reserve the right to direct the voting in accordance to these guidelines. For more information on our voting activity, please see our website.

One topic which impacts both our engagement and voting is disclosure and the ability to identify risks and opportunities in the companies in which we invest. The work is most developed in considering climate change, but we also look at other environmental impacts.

Carbon metrics and targets

In our policy we set ourselves three goals for 2020: to invest, decarbonise and engage.

At 31 March 2018, we are really pleased to report that 2 years ahead of schedule, the EAPF has met its climate change goals, having reduced its exposure to coal and oil and gas in its equity portfolios by 95% and 96% below the 2015 baseline. Our goals were to decarbonise the equity portfolio, reducing our exposure to 'future emissions' by 90% for coal and 50% for oil and gas by 2020 compared to the exposure in our underlying benchmark as at 31 March 2015.

Reduction in carbon footprint and reducing our fossil fuel exposure for both our active and combine equities

We have largely achieved this by a shift in our investment strategy in 3 ways:

- A move out of UK equities into global equities
- Less exposure to equities generally leading to a concentration in lower carbon portfolios
- Development of the Sustainable Enhanced Value Equities (SEVE) mandate

Of the equities that we are exposed to there has been a shift to more low carbon investments which you can see more detail on below. There has also been an impact of the exchange rate between the pound and the US dollar.

Climate goals	Progress
Invest 15% of the Fund in low carbon, energy efficient and other climate mitigation opportunities.	10% invested.
Decarbonise the equity portfolio, reducing our exposure to 'future emissions' ¹ by 90% for coal and 50% for oil and gas by 2020 compared to the exposure in our underlying benchmark as at 31 March 2015.	Coal is currently 95% less than our baseline. Oil and gas is currently 96% less than our baseline.
Supported progress towards an orderly transition to a low carbon economy through actively working with asset owners, fund managers, companies, academia, policy makers and others in the investment industry.	Active engagement across the industry with a strong focus on working collaboratively. More information on our website.

	Financed Future Emissions (FFE) Metric	Baseline (2015 Benchmark)	2015	2016	2017	2018	Relative Performance (2018 vs 2017)	Relative Performance (2018 vs Baseline)
Aggregate Equities	Absolute FFE, Total (tCO2)	14,849,897	8,112,662	4,166,915	4,150,377	699,891	83.14%	95.29%
	Of which coal (tCO2)	7,090,810	4,899,427	2,788,273	2,490,954	373,009	85.03%	94.74%
	Of which O&G (tCO2)	7,759,087	3,213,235	1,378,642	1,659,423	326,881	80.30%	95.79%
	FFE Intensity, Total (tCO2/£m)	9,634	5,263	3,199	2,536	475	81.27%	95.07%
	Of which coal (tCO2/£m)	4,600	3,179	2,141	1,522	253	83.37%	94.50%
	Of which O&G (tCO2/£m)	5,034	2,085	1,059	1,014	222	78.12%	95.59%
Aggregate Active Equities	Absolute FFE, Total (tCO2)	9,158,851	3,041,497	2,704,332	2,457,585	49,568	97.98%	99.46%
	Of which coal (tCO2)	4,288,835	2,159,857	2,023,392	1,897,364	0	100.00%	100.00%
	Of which O&G (tCO2)	4,870,016	881,640	680,940	560,221	49,568	91.15%	98.98%
	FFE Intensity, Total (tCO2/£m)	9,184	3,050	2,762	1,987	46	97.66%	99.49%
	Of which coal (tCO2/£m)	4,300	2,166	2,067	1,534	0	100.00%	100.00%
	Of which O&G (tCO2/£m)	4,883	884	696	453	46	89.74%	99.05%

We have used carbon footprinting for a number of years and found it an effective management tool. Footprinting, in combination with examining fossil fuel exposure, has informed our discussions with our asset managers and consultants, as well as product and benchmark choices. For example moving our entire 'market cap' weighted index investment to be invested using a low carbon benchmark², which takes carbon intensity and fossil fuel exposure into account in the amount held by the fund.

We also look at wide range of other metrics to help inform strategic decision making, asset manager monitoring and our engagement and voting activities.

¹ 'Future emissions' is the amount of greenhouse gases that would be emitted should these reserves be extracted and ultimately burnt, expressed in tonnes of carbon dioxide equivalent.

² L&G GPBT MSCI World Low Carbon Target Index fund.

The table below provides year-on-year results from 2015 against a range of carbon metrics relating to the combined listed equities in the fund.

Group	Metric	2015	2016	2017	2018	2018 Benchmark	Relative Performance (2018 vs 2017)	Relative Performance (2018 vs Benchmark)
Carbon Emissions	Absolute Tonnes of Carbon (tonnes CO2e)	394,451	276,981	265,638	166,152	398,934	37.45%	58.35%
	Carbon Footprint (tonnes CO2e/GBPm revenue)	388	348	328	197	441	39.79%	55.25%
Disclosure Rate (Full and Partial)	Share of Scope 1 GHG emissions (%)	94%	92%	79%	70%	93%	-10.39%	-24.22%
Potentially Stranded Assets	Exposure (£)	32,153,258	15,558,369	21,328,765	9,685,159	41,447,062	54.59%	76.63%
	of which coal	7,634,724	3,824,902	4,656,107	1,856,688	7,934,821	60.12%	76.60%
Fossil Fuel Reserves	Financed Future Emissions	8,112,662	4,166,915	4,150,377	699,891	7,804,021	83.14%	91.03%
	of which coal	4,899,427	2,788,273	2,490,954	373,009	2,558,707	85.03%	85.42%
	Exposure (£)	20,535,623	9,151,558	13,617,344	5,971,084	28,843,631	56.15%	79.30%
Fossil Fuel Power Generation	of which coal	3,204,459	1,050,024	1,119,168	665,569	2,388,512	40.53%	72.13%
	Exposure (£)	11,617,635	6,406,811	7,711,420	3,714,075	12,603,431	51.84%	70.53%
Renewable Power Generation	of which coal	4,430,265	2,774,878	3,536,939	1,191,119	5,546,309	66.32%	78.52%
	Exposure (£)	5,120,654	8,424,963	9,069,070	7,010,785	3,329,300	-22.70%	110.58%
Impact	Total Owned Revenue	1,008,775,070	832,957,395	810,332,302	841,805,730	904,416,536	-3.88%	6.92%
	of which Fossil Fuels	39,328,372	23,248,544	15,576,385	8,229,487	25,237,467	47.17%	67.39%
	of which Coal Mining and Coal Power	10,470,401	6,256,967	3,753,544	1,310,716	5,796,910	65.08%	77.39%
	of which Fossil Fuel Power	10,762,952	6,374,058	6,526,505	2,748,687	10,560,890	57.88%	73.97%
	of which Coal Power	4,008,542	2,612,502	2,669,844	860,019	4,273,981	67.79%	79.88%
	of which Renewable Power	3,275,827	2,987,746	3,088,617	2,604,908	2,739,636	-15.66%	-4.92%

When looking at the data above, please note that this is only for our listed equities. It may appear we are underweight in renewable power generation, whereas, we have considerable exposure to this area primarily through our private market investments.

What the table does show is that some of the moves in our investments strategy may have resulted in a drop in the disclosure rate. This reinforces our commitment and work to encourage better disclosures on climate related financial risk both across geographies and in companies of all sizes.

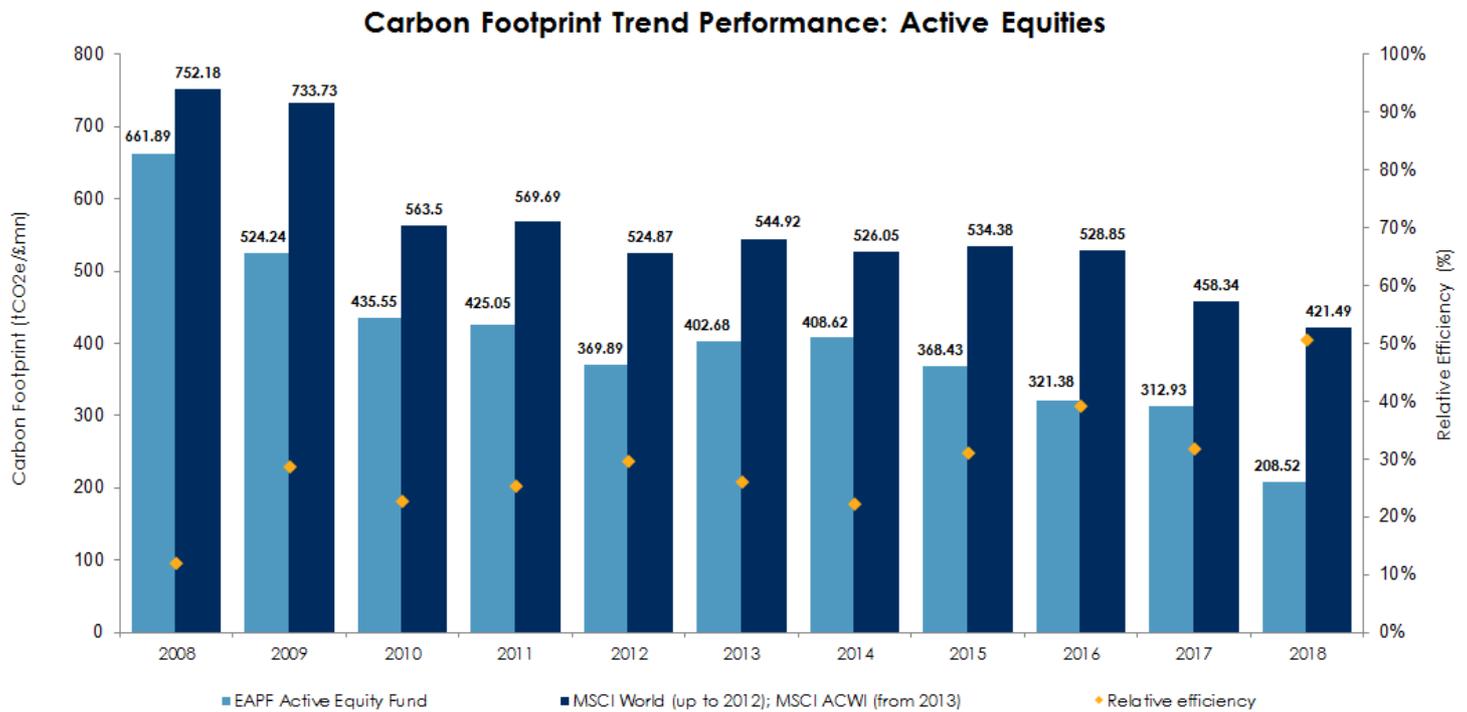
Carbon footprinting methodologies are however far from perfect and can be impacted by many other factors e.g. sector biases due the exclusion or inclusion of scope 3, high margin sectors look artificially more efficient, currency effects and changes in economic activity. Despite these challenges, the tool has helped us in consistently improving the overall carbon efficiency of the active equities and bonds held by our managers. **We have reduced our carbon footprint of our active equities by 68% since 2008.** The chart below illustrates the combined carbon footprint of all our active equities against a standard industry benchmark, which itself improved by 8% from last year.

We have also carbon footprinted our entire equity portfolio which is currently 55.26% more carbon efficient than our custom benchmark and our active bonds which is 37.35% more carbon efficient than our bond benchmark. The composition of the custom benchmark has changed since 2017.

So, in total, **we carbon footprint 75% of our assets under management.** Currently we do not carbon footprint our exposure to sovereign debt, currency or our unlisted portfolio. However we do monitor developments in analytical tools and will look to use these if they are useful and cost effective.

Publishing our carbon footprint fulfils our commitment to the **Montréal Carbon Pledge**, where investors commit to measure and publicly disclose the carbon footprint of their investment portfolios on an annual basis.

EAPF Carbon footprint for combined active equities 2008-2018



Natural Capital - environmental footprinting

We undertake environmental footprinting of the active equities and bonds, which looks at companies' environmental impacts; for example, how efficient are they in the use of raw materials, water and energy, the waste produced and carbon emitted. The methodology calculates inputs via a company's supply chain and waste outputs based on publically available information.

The footprint for each equity manager, in relation to the Fund, is compiled by allocating a proportion of the environmental impact of each company, relative to the amount of stock that is held. For corporate bonds each holding's contribution to the environmental footprint of the portfolio is calculated on a capital ownership basis (the bond value as a proportion of enterprise value).

For 2018 our combined equities are 34.09% more environmentally efficient per million pounds invested than the composite benchmark. For our combined active bonds, environmental footprints are 16.62% more efficient.

Whilst environmental and carbon footprinting are useful, they are also limited in what they tell you about the full impacts of a portfolio. For example, the scope of the footprinting seeks to determine a company's operational environmental impact and use of resources within its upstream supply chain. However, any environmental impacts, and therefore any efficiencies or benefits, of the company's output during its 'in-use' phase are not currently captured within this scope. We are keen to progress the industries capacity to capture downstream or 'in-use' benefits across companies on a large scale. This will only be feasible when companies are able to robustly report on downstream impacts using methodologies such as Natural Capital Accounting (a process of calculating the total stocks and flows of natural resources and services).

We are supporting work of our sponsors in progressing work on National Capital Accounting practices and reporting as it will help us identify areas to positively support the allocation of capital to more sustainable business practices.

Industry Collaboration – Part 3

Banking on a Low Carbon Future an initiative of Boston Common Asset Management and ShareAction

Addressing the challenges of climate change requires urgent action, the mobilization of vast sums of private capital and a break from business as usual by companies. In 2017 Boston Common Asset Management in collaboration with non-profit ShareAction (whose research on 15 European banks supported our analysis) and other partners including Australian Ethical Investment and SHARE called for more robust and relevant climate-related disclosure by banks aligned with TCFD in four key areas. These included climate-relevant strategy and implementation, climate-related risk assessments and management, low-carbon banking products and services, and banks' public policy engagements and collaboration with other actors on climate change. This outreach was supported by an investor coalition of over 100 institutional investors with close to \$2 trillion in assets under management.

Future-Fit

The Future-Fit Business Benchmark is a free tool to help companies and investors transform how they create long-term value, for themselves and society as a whole. EAPF are founder investor member of the Future-Fit Development Council. Future Fit is an important initiative for how we will deliver on our policies relating to sustainable development going forward.

Contribution to the CDP Global Water Report 2017

Water risk is one of the top priorities for our pension fund, as we have considerable exposure to water in respect of policy, availability, quantity and quality. Comparable, high quality disclosure is essential for us to assess the level of potential financial risk to the fund and take appropriate action. In 2017, we targeted 160 of our portfolio companies to ask them to disclose water-related information via Carbon Disclosure Project (CDP).

In 2018 we are again working with CDP to encourage companies to disclose water-related information via CDP.

Social and sustainable investment

We set ourselves the target to maintain at least 25% of our investments in clean technology and other sustainable opportunities – far more than any other pension fund worldwide (AODP, 2017).

Investments include:

- Property opportunities targeting energy efficiency, urban regeneration and sustainability.
- Venture capital funding the next generation of technologies that provide new solutions – such as electric vehicles and LED lighting.
- Long term sustainable infrastructure, such as renewable energy and energy efficiency.
- Agriculture funds that aim to achieve the high standards in environmental and social management.
- Listed companies demonstrating best practice in sustainability, improving efficiency and reducing social and environmental impacts.

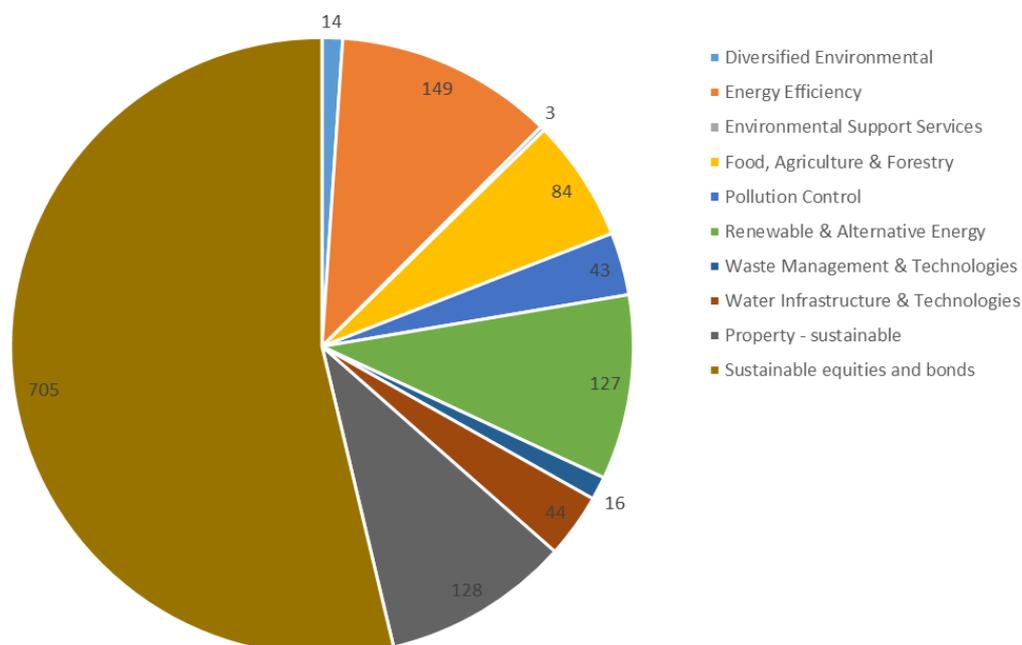
Social investment can be defined to include a wide spectrum of investment opportunities. The EAPF definition of social investment is an investment that addresses societal challenges but generates competitive financial returns. Societal challenges include all issues commonly regarded under social, environmental or governance headings.

Our wider definition of sustainable investments includes:

- Social investments and those with significant revenues (in excess of 20%) involved in energy efficiency, alternative energy, water and waste treatment, public transport
- Property, infrastructure, agriculture or forestry investments with a low carbon or strong sustainability criteria, and
- Companies (often equities and bonds) with a progressive environmental, social or governance practices that may enhance investor value.

The Fund has set itself the target to have over 25% of the Fund invested, across all asset classes, in such opportunities. Although we have exceeded our target (£1.3bn, 38%, as 31 March 2018) over the last few years we have retained it at this level because we use it more as a risk mitigation measure, rather than limiting what we do. The target does not constrain the Fund or artificially put pressure on it. The Fund commitment in absolute terms increases as the Fund assets grow each year. We are also conscious that as the Fund investment strategy evolves, particularly away from listed equity, a lack of transparency can make capturing the data to evidence our commitment more challenging. This is another reason why the fund is championing to improve transparency across the investment chain in all asset classes.

Clean Technology and Sustainable Investment (£m)



Our priorities for 2018/19

Working with Brunel to promote RI integration across our pooling partners and the industry

Through our role on the Brunel Client RI Sub-Group, EAPF will continue to work closely with Brunel and our pooling partners to promote the RI integration activities of both Brunel and EAPF across the industry as outlined in our RI Policy. This will bring the benefits of scale to our existing RI approach.

Transition Pathway Initiative (TPI)

We will further develop TPI and facilitate its promotion.

Reducing the impact of climate change

As well as progressing those initiatives mentioned above (e.g. TPI) we will further support Climate Action 100+ and assess other initiatives and actions we can take.

Focus on Plastics

There has been recent and broad press coverage on the 'misuse' of plastics. Each year at least 8 million tonnes of plastic are leaking into the ocean. EAPF is pledged to the UN initiative on Ocean plastics #CleanSeas. In January 2018 we wrote to all our fund managers outlining the issue with plastics and asking them to consider joining #CleanSeas, a number have subsequently done so.

We also signed an investor letter on plastics to the British Retail Consortium (BRC) prompting the BRC to adopt new standards covering plastic pellets. The plan is to incorporate these in existing standards governing plastic packaging.

Our action on plastics is one way that we **align with 'A Green Future'**. Defra recently published 'A Green Future: Our 25 Year Plan to Improve the Environment'. In so far as practicable, EAPF plans to align its investment and engagement activities with the Green Future Plan.

Water risk – promote risk identification and integration

Again in 2018/19 we will assist CDP water non-disclosure by leading on over 200 company engagements.

Human capital – promoting business case for diversity/ inclusion and consideration of the Living Wage

We will engage with our suppliers on the gender pay gap, particularly via our membership of the 30% Club.

Reporting in line with TCFD Recommendations

As part of our 'Policy to Address the Impacts of Climate Change', we have committed to supporting the recommendations of the Taskforce for Climate-related Financial Disclosure (TCFD). As part of this commitment, EAPF will report its activities in-line with the recommended framework of the TCFD within its annual report and accounts and encourage others to do the same.

Appendices

Appendix 1

EAPF background

With 5.1 million members, the Local Government Pension Scheme (LGPS) is one of the largest public service pension schemes in the UK. It is a nationwide pension scheme for people working in local government or working for other types of employer participating in the Scheme.

Employers in the Scheme include local authorities and public service organisations as well as other employers which provide the LGPS for their employees by becoming admitted bodies.

The Scheme is administered for participating employers locally through around 90 regional pension funds in England and Wales of which the EAPF is one.

On 1 April 2013, we became a multi-employer Fund, as we welcomed Natural Resources Wales as the new employer for former employees of Environment Agency Wales. In November 2013, Shared Services Connected Limited joined us following the outsourcing of the Environment Agency's HR and Finance Service Centres.

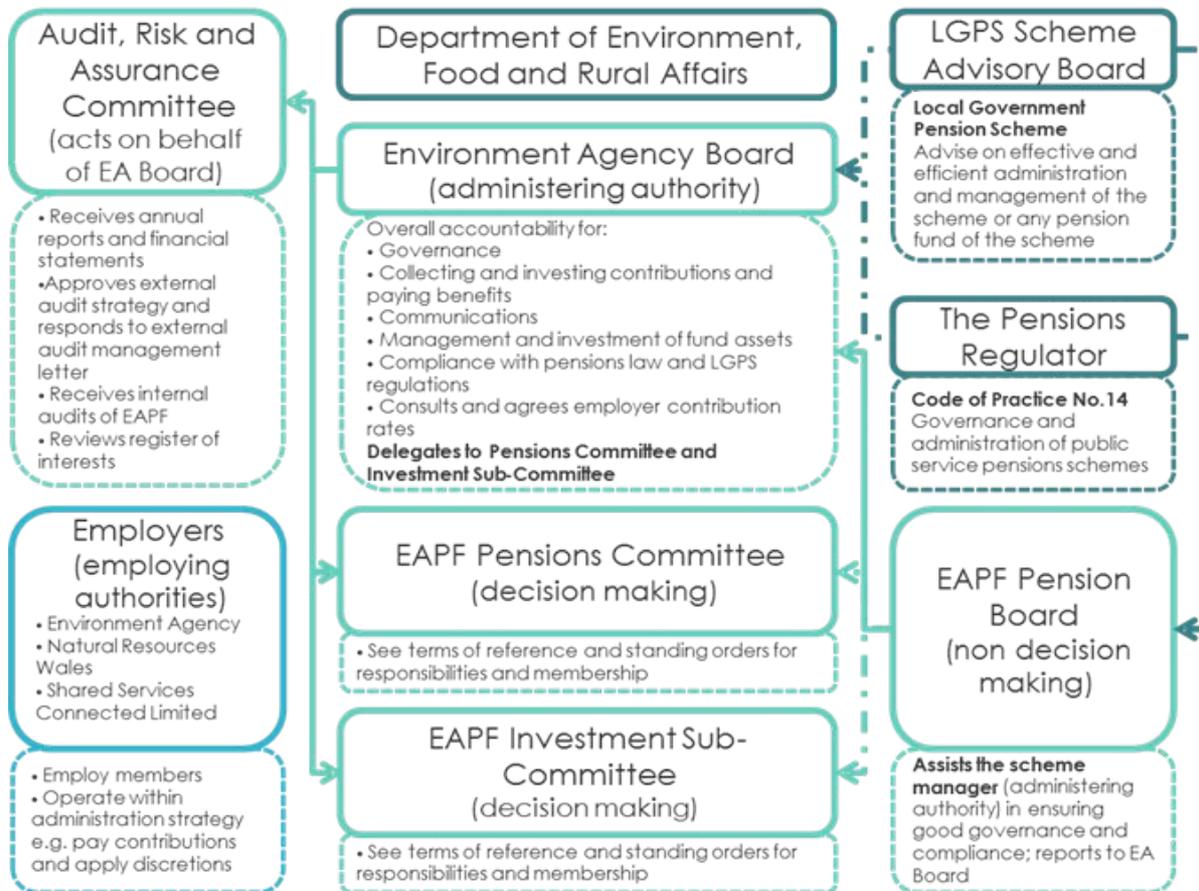
Our Governance Structure

The EAPF is one of around 90 Administering Authorities responsible for managing LGPS Funds in England and Wales. Our Funds were created at the time of the privatisation of the water industry in England and Wales in 1989 and was established as the National Rivers Authority Pension Fund.

The former Water Authorities Superannuation Fund was divided in three ways: company schemes for employees transferring to the new water companies; the Active Fund for employees joining the then National Rivers Authority (the predecessor to the Environment Agency); and the Closed Fund for deferred and pensioner members at that time.

The Active Fund inherited active members' accrued liabilities from its predecessor pension arrangements, but no pensioner or deferred pensioner liabilities. In 1996 it transferred to the Environment Agency and became the Environment Agency Active Pension Fund. The EAPF is now a multi-employer Fund: Environment Agency, Natural Resource Wales (NRW) and Shared Services Connected Limited (SSCL). It is open to all eligible Environment Agency employees. The EAPF is also responsible for administering some unfunded benefit payments.

The Environment Agency Board delegates the management and oversight of the Fund in the main to a Pensions Committee, an Investment Sub-Committee and a Pension Board. This governance structure and interaction with some other stakeholders is illustrated further in the following diagram:



Appendix 2

Investment Performance

For the 2017/18 financial year the Fund had a successful year, achieving an absolute return of 4.4% and outperforming its benchmark (after fees) by 1.9%. Over three years the Fund has returned 8.5%, 1.1% above its benchmark, which is a very strong result. 2017 was notable for strong global equity market returns, boosted by evidence of a broadening global economic recovery and tax reform in the US, very low equity market volatility and outperformance of 'growth' over 'value' stocks. However, the start of 2018 exhibited a reversal of these trends, driven by expectations of monetary tightening (interest rate increases) in the USA.

As explained above and in previous annual reports, we have taken several actions to reduce equity risk. Primarily, the Fund has chosen managers with a deliberate tilt towards low volatility, high quality companies, with a view to reducing downside risk and volatility. Several of our managers take a benchmark agnostic, long term, absolute return approach. Thus, we expect the Fund's performance to lag in strongly rising markets and outperform in more volatile conditions. Over the year our best performing managers were Ownership Capital and Generation, which both take a very long-term, sustainable approach to investing.

Our emerging market managers, Comgest and Stewart Investors, generated positive absolute returns over the year, but lagged their benchmarks. Our low volatility managers, Quoniam and Robeco, also lagged their benchmarks, although Quoniam performed well relative to its benchmark in early 2018 when markets fell, illustrating the ability of their low volatility strategy to reduce downside risk. There was a welcome return to form of Wellington (Total Return bonds) after a period of more mixed performance and Royal London (UK Corporate bonds) also generated a good outperformance. Our real assets mandate with Townsend did well, reflecting strong market conditions, as did our Private Debt portfolio. Our private equity managers underperformed the broader equity markets, however this is as expected for recent commitments, where it will take several years to reach the harvest stage and as such we need a longer time frame to evaluate these mandates properly.

Most of our managers have outperformed since inception, including Generation, and Ownership Capital (both sustainable global equities); both our emerging market managers Stewart Investors and Comgest; both our low volatility managers Quoniam and Robeco, our UK corporate bond managers, RLAM and L&G and our real assets manager Townsend.

Our low carbon equity index slightly underperformed the conventional index, which was expected as the oil price recovered, but remains ahead since inception. Indexed linked gilts had a mixed performance, falling in value ahead of the much anticipated first UK interest rate increase in 10 years, which occurred in November 2017. Since then index linked gilt values have partially recovered as moderating inflation reduced expectations for further rapid rate rises.

The total return of the Fund over the year and over three years to 31 March 2018 is as follows:

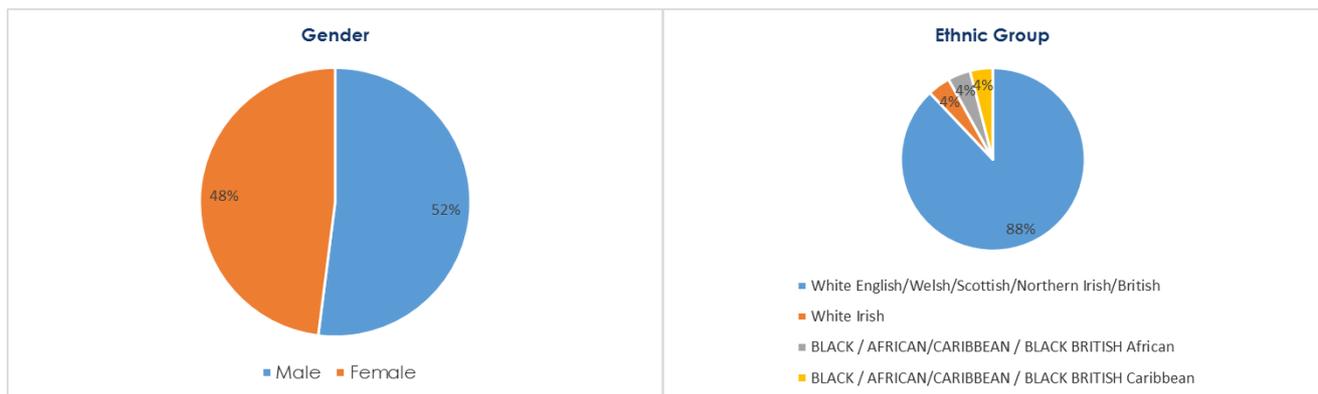
Financial Performance	2018 %	2017 %
1 year		
Fund performance	+4.4	+19.6
Benchmark performance	+2.5	+21.2
Active fund relative performance	+1.9	-1.6
3 year		
Fund performance	+8.5	+12.1
Benchmark performance	+7.4	+11.6
Active fund relative performance	+1.1	+0.5

Appendix 3

Diversity

The Fund is a member of the 30% Club Investor group, which promotes gender diversity on the boards and executive committees of [UK] listed companies, and promotes wider diversity and inclusion in the companies in which we invest.

To demonstrate best practice in the Fund's own approach we have disclosed our own performance on diversity below³.



³ Diversity indicators relating to combined personnel within the Pension Committee, Pension Board and Officers.

Appendix 4

Pension Fund investment

Investment strategy development and implementation

We aim to deliver a truly sustainable Pension Fund that delivers financially to meet the objectives of our scheme employers and members. The Committee has set the overall investment objective for the Fund after consideration of the actuarial valuation, contributions and the maturity profile of its liabilities.

The investment strategy, laid out in the Investment Strategy Statement in Annex 3, is then agreed by the Committee to meet this objective. The strategy remains focused on seeking to get maximum value from our assets within an appropriate level of risk while minimising risk, ensuring environmental, social and governance considerations are fully integrated, and furthering our commitment to responsible investment. It uses multiple levers to achieve this: active mandates, specialist benchmarks, detailed risk analysis, and a fully diversified range of assets across global markets.

For 2017/18, the Fund's investments were based on the investment strategy agreed in 2017 following the 2016 triennial valuation. This built on the strategy developed in 2015, which created a high level allocation to diversifying growth assets, recognising that there was a case for reducing equity risk, but that bonds, while low risk, were not attractive from a return perspective. The investment strategy framework sets ranges for allocation to three areas: bonds, equities and diversifying growth assets. This allows flexibility while limiting risk.

Our target allocation to diversifying growth assets (real assets, growth fixed income and private debt) was increased, funded through a reduction in our allocation to equities, with the disinvestment of the £124m Standard Life UK equity mandate. Equity futures were used to avoid cash drag, providing exposure to the global equity market over the 9 months it took for the UK equity mandate proceeds to be fully deployed into real asset and private debt investments.

In 2017/18 we sought additional private debt investments to meet our increased strategic target and provide diversification. We had already invested in three funds in this area: the Generation Credit Fund, the BlueBay Direct Lending UK Fund and Permira Credit Solutions III. We allocated to two new funds: Barings North American Private Lending Fund, which provides debt capital to medium sized companies across North America; and BlueBay Senior Loan Fund, which complements our existing BlueBay fund by lending to slightly larger companies in Europe. Both managers take the integration of ESG seriously and are signatories of the Principles for Responsible Investment.

Private debt funds lend directly to companies and projects. The opportunity has been created by the withdrawal of banks from much of corporate lending activity, which has led to significant demand from businesses to access alternative sources of lending. Although formal integration of ESG considerations is at an early stage in this sector, we feel it is an attractive area for responsible investment as it is about supporting real business to grow and employ people, and has limited exposure to high risk areas. We are looking to invest in further funds in this area during 2018/19 as we continue to believe it is an attractive area and we are below our medium-term target allocation.

We have made further progress on our real assets portfolio (property, infrastructure, forestry and agriculture) although, because we have increased our target allocation and it takes time for suitable investments in real assets to be identified and then invested in, actual investment is below target. However, investments and undrawn commitments now stand at £502m, or 14.7% of the Fund at year end, approaching the 15% medium strategic target with further investments already made in 2018/19.

Recognising continued high demand from investors for operating infrastructure projects, which has compressed available returns particularly for large, trophy assets, we reduced our portfolio target return slightly to enable more investment in lower risk/return opportunities, such as real asset debt, and focused

infrastructure equity investment more on construction-ready projects (often called 'greenfield' infrastructure). Highlights have been our investments in TH Global Real Estate Debt Fund II, targeting lending opportunities secured on good quality UK commercial real estate, and Infracapital Greenfield Partners, focused on the acquisition and development of a diversified portfolio of infrastructure assets in the UK and continental Europe, including an investment to finance new rolling stock to be leased on the West Midlands rail franchise.

Further de-risking of our portfolio was achieved near the end of the financial year through the divestment of the Union equity mandate with £125m proceeds invested into the Wellington Total Return bond fund. This is our growth fixed income strategy, which seeks to exploit a wide range of specific opportunities while avoiding significant exposure to long term interest rates and is expected to help maintain value ahead of future deployment of these proceeds into real assets and private debt.

We continued work on the implementation of our Policy to address the impacts of Climate Change. Analysis done in support of this policy highlighted the significant climate change impact of certain strategic investment decisions, unless mitigated, notably the high exposures resulting from allocations to UK equities and to 'value' equities. This analysis was a consideration in our decision to continue reducing our exposure to UK equities. It also led to our search for a manager to replace our passive 'value' equity mandate and provide what we term Sustainable Enhanced Value Equities to ensure our exposure to 'value' equities is compatible with our low carbon ambitions. Robeco was selected to manage a £150m mandate using quantitative investment techniques to provide a low carbon approach to 'value' investing, within a low cost, tax efficient, pooled fund solution.

To ensure the Fund is managed close to the investment strategy, officers and advisors hold monthly investment meetings. Any deviations in asset allocation are discussed and actions agreed. Cash is maintained within tight limits. In addition, to maintain the percentage of the quoted equity and bonds close to the target percentages, the Fund has a rebalancing programme that automatically brings the Fund back in line with the agreed allocation if market movements change the asset allocation within the Fund.