

Environment Agency
Pension Fund

Active Pension Fund

Annual Report and Financial Statements for the year ending 31 March 2017



Environment Agency Active Pension Fund

Annual Report and Financial Statements 2016/17

Annual Report presented to Parliament pursuant to Section 52 of the Environment Act 1995

Accounts presented to Parliament pursuant to Section 46 of the Environment Act 1995 as amended by the Government Resources and Accounts Act 2000 (Audit of Public Bodies) Order 2003

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Chairman's statement

As Chairman of the Environment Agency's Pensions Committee, it is my pleasure to present this year's Annual Report and Financial Statements for the Environment Agency Active Pension Fund ('the Fund') for the year ended 31 March 2017.

2016/17 has been a challenging but highly successful year for **the Environment Agency Pension Fund (EAPF)**. We are part of the Local Government Pension Scheme (LGPS) and have around **£3.5 billion of assets** across our two Pension Funds. We have over 39,500 members and provide pension benefits for employees and former employees of the Environment Agency, Natural Resources Wales and Shared Services Connected Limited.

We are operating in a period of rapid change. These range from political, social and economic shifts that are impacting everyone to those more specific to us as a Fund, including organisational restructuring and the fundamental change to the delivery of investment services through the requirement to pool assets. Changes also include the rising level of awareness of the investment risks (and opportunities) from environmental, social and governance issues, most particularly climate change, reinforced through guidance from the Pensions Regulator and new LGPS Investment Regulations. The market has responded to this by both improving current products and bringing forward new ideas.

Our Investment Strategy, designed to both robustly manage risks and take positive opportunities, has **delivered 11.6% investment returns over the last 5 years**. Our successful financial performance is supported by our deep commitment to investing responsibly and we believe it is paramount in our ability to deliver sustainable, long term returns. We achieved a funding ratio of **103% at our March 2016 valuation**, which is a fantastic result. We have one of the **lowest total employer contribution rates** in the Local Government Pension Scheme (LGPS), with our employers remaining committed to ensuring the Fund maintains its good position going forward. This means we can minimise the requirements of the Fund so as not to divert valuable resources from front line work, whilst providing secure funding for our members. On a like-for-like standard assumptions basis across the LGPS, our valuation results put us **joint top on 123% according to the LGPS Scheme Advisory Board**.

Improving the Fund's already strong financial performance remains paramount for us as a Pensions Committee. I am therefore delighted to report that our investments delivered excellent performance during 2016/17. We achieved a very strong **investment return of 19.6%** and **increased the Active Fund's net assets by £545m to £3.3 billion**. The key factors for this were the weakness of sterling after the Brexit vote and strong equity market returns boosted by the signs of a broadening global economic recovery.

Over the last few years, we have taken several strategic actions to reduce equity risk, and recognise that the Fund may not perform as well relative to benchmarks in strongly rising markets, although absolute returns would be good. We saw this during 2016/17 where we underperformed our benchmark return of 21.2% by 1.6%. This was primarily down to the fact that the Fund has chosen managers with a deliberate tilt towards low volatility, high quality companies, with a view to reducing downside risk and volatility. Additionally, our best performing managers were Generation and Impax, arguably our most sustainable.

In addition, we continue to expand our investments in private debt and infrastructure, providing much needed capital for businesses and projects in the UK and elsewhere while generating good returns for the Fund and helping to shape a sustainable future.

We embed providing an excellent service to our members and employers in our day to day work. We have successfully retained our accreditation to **Customer Service Excellence (CSE)**, with the assessor noting a number of categories that received a 'compliance plus' accreditation. This work supports us achieving a **96% participation rate**, and employees rating their pension as their **top reward package benefit** in staff surveys.

Being **open and transparent** about the Fund, its benefits and how we invest is a core principle. Our Board and member representatives actively engage with our members and other stakeholders to ensure the Fund is aware and can respond effectively to all member and stakeholder concerns. We also actively use our website, newsletters and member webinars to engage directly. In autumn last year we ran a series of webinars which allowed members the opportunity to both learn more about the Fund and directly ask questions of the team.

How we manage risks associated with **climate change** was one of the topics covered in the webinars, with nearly 60% of participants agreeing or strongly agreeing it is an important risk for the Fund to consider. The Fund is currently ranked at **number 2 in the World Index** as part of the Global Climate 500 report and we have maintained our AAA rating for 4 years in a row. Our major development this year was the launch of the **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.

Our positive contribution to responsible investment received further global recognition during 2016/17. The French Ministry of Environment and 2° investing initiative awarded the EAPF, the **best reporting award for the assessment of climate risks**. We also won '**Best approach to Responsible Investment**' at the LGC Awards, maintaining our leadership in this area. We were shortlisted at the Pension Age awards for Best Pension Scheme Communications.

As part of a broader government initiative, we are preparing to pool our assets with 9 other LGPS funds and form part of the **Brunel Pension Partnership (BPP)**. The aim is to reduce the costs of running LGPS Funds, improve their performance, and create greater capacity for them to invest in infrastructure. Whilst not without its challenges, we see the creation of BPP Ltd as an **opportunity to innovate, demonstrate and promote responsible investment leadership**, not just across the LGPS but on a wider scale. This area continues to be a critical area of work for the Pensions Committee. The Fund has a legal duty to act in the best interests of its members and the Committee's top priority is to ensure that the pensions of our past, present and future members are secure and well managed. We expect a decision on our participation to be confirmed later in the summer of 2017.

This will be my final statement to you as Chair of the EAPF Pensions Committee, since I retire from the Environment Agency Board in July 2017. It has been a privilege and a pleasure to Chair the EAPF, and I would like to thank my colleagues on the Pension Committee, the staff in our excellent pension team, our employers and external contractors for all of their support and hard work. My successor as Chair will be our new Environment Agency Board member Joanne Segars, who brings a wealth of experience from her former role as the CEO of the Pensions and Lifetime Savings Association (PLSA). I wish her every success as the Fund continues to protect the interests of its members and invest responsibly, and prepares to join the BPP.



Dr. Clive Elphick
Chairman, Environment Agency Pensions Committee
28 June 2017

About the Environment Agency Pension Fund (EAPF)

EAPF background

With around 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.

LGPS regulations

The Scheme rules are contained in regulations made by Parliament after consultation with both employee representatives (Trade Unions) and employer representatives. The rules comply with the relevant provisions of the Pension Schemes Act 1993, the Pensions Act 1995 and the Pensions Act 2004.

The LGPS provides salary related defined benefits, which are not dependent upon investment performance. As it is a statutory funded pension scheme, it is a secure pension arrangement with rules set out in legislation made under Acts of Parliament (the Superannuation Act 1972 and Public Service Pensions Act 2013).

The LGPS is a registered public service scheme under Chapter 2 of Part 4 of the Finance Act 2004. It has achieved automatic registration by virtue of Part 1 of Schedule 36 of that Act (because the LGPS was, immediately before 6 April 2006, both a retirement benefits scheme approved under Chapter I of Part XIV of the Income and Corporation Taxes Act 1988 and a relevant statutory scheme under section 611A of that Act). The LGPS was contracted out of the State Second Pension (S2P) until 5 April 2016 and it provides benefits that are as good as most members would receive if they had been in the S2P.

The LGPS benefits are primarily governed by Local Government Pension Scheme Regulations 2013 (SI 2013/2356) and Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014 (SI 2014/525). These are subject to amendment over time.

The LGPS is a national defined benefit pension scheme providing final salary benefits in relation to membership up to 31 March 2014 and career average revalued earnings (CARE) for membership from 1 April 2014.

LGPS responsibilities

The regulations give specific responsibilities to scheme employers and pension fund administrators, each of whom must make decisions in relation to some matters and can exercise their discretion in relation to others.

The Environment Agency Board delegates responsibility for management of the Fund to a Pensions Committee. The Pensions Committee is assisted by our Pension Board which was created from 1 April 2015. Both employees and employers contribute to the LGPS, employees' contributions are fixed, while employers' contributions vary depending on how much is needed to ensure benefits under the Scheme are properly funded.

The Fund Actuary sets each employer's contribution rate as part of the actuarial valuation of the Fund's assets and liabilities, which takes place every three years.

Changes to the Local Government Regulations during 2016/17

There were no changes to the Local Government Pension Scheme Regulations 2013 during 2016/17.

Pensions Act 2014

During May 2014, the Pensions Act 2014 introduced a fundamental change to the provision of state pension in the UK alongside a number of significant changes for private pensions.

From 6 April 2016, the State Pension system in the UK has changed with the introduction of a new single tier State Pension. The new system will apply to individuals who reach their State Pension Age on or after 6 April 2016. The changes to the State Pension also herald the abolition of contracting out for Defined Benefit schemes such as the EAPF from April 2016.

The Act also legislates for the acceleration of State Pension Age from age 66 to 67 for both men and women between 6 April 2026 and 5 April 2028.

Other significant legislative changes affecting LGPS during 2016/17

The Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 SI 2016/946 came into force on 1 November 2016 and changed the provisions in relation to the management and investment of pension funds held and maintained by administering authorities under the requirements of the Local Government Pension Scheme Regulations 2013.

Pensions increase

LGPS pensions in payment and deferred benefits are reviewed under the provisions of the Pensions (Increase) Act 1971 and Section 59 of the Social Security Pensions Act 1975 and linked to the change in the Consumer Prices Index (CPI).

Our pensions in payment and deferred pensions received an increase from 10 April 2017 of 1.0% (6 April 2016: 0.0%).

The following table shows the rate of increases that have applied to pensions in payment and deferred pensions since 1992:

Year (April)	% rate of increase	Year (April)	% rate of increase	Year (April)	% rate of increase
1992	4.1	2001	3.3	2010	0.0
1993	3.6	2002	1.7	2011	3.1
1994	1.8	2003	1.7	2012	5.2
1995	2.2	2004	2.8	2013	2.2
1996	3.9	2005	3.1	2014	2.7
1997	2.1	2006	2.7	2015	1.2
1998	3.6	2007	3.6	2016	0.0
1999	3.2	2008	3.9	2017	1.0
2000	1.1	2009	5.0		

Pension Fund membership

Unless they have elected in writing, all full and part time employees, whether permanent or temporary (over 3 months), become active members of the Fund. The 12 months ended 31 March 2017 have seen a 4.5% increase in the Fund's active members (2016: increase of 0.4%). There was an increase of 3.0% in deferred members (2016: increase of 2.9%) and 5.9% increase in pensioners (2016: increase of 5.5%).

Movement in number of members and pensioners

	Active members	Deferred members	Current pensioners	Total
At 1 April 2016	10,732	7,121	6,063	23,916
Adjustment for late notifications	10	77	25	112
Revised opening balance	10,742	7,198	6,088	24,028
Add:				
New active members	1,138			1,138
New deferred members		322		322
New pensioners			449	449
	1,138	322	449	1,909
Less:				
Deferred benefits	(322)			(322)
New retirement pensions	(269)	(103)		(372)
Deaths in service	(7)			(7)
Refunds of contributions	(54)			(54)
Options pending	(15)			(15)
Transfers out	(3)	(70)		(73)
Deaths in deferment		(8)		(8)
Commutation of pension		(1)	(1)	(2)
Death in retirement			(100)	(100)
Suspended/Ineligible pensions			(15)	(15)
	(670)	(182)	(116)	(968)
At 31 March 2017	11,210	7,338	6,421	24,969

Age profiles of members and pensioners

Age profile of active members at 31 March	2017		2016	
	No.	%	No.	%
15 -19	11	0.1	7	0.1
20-24	311	2.8	153	1.4
25-29	802	7.2	740	6.9
30-34	1,440	12.8	1,438	13.4
35-39	1,872	16.7	1,855	17.3
40-44	1,735	15.5	1,718	16.0
45-49	1,761	15.7	1,694	15.8
50-54	1,592	14.2	1,520	14.2
55-59	1,095	9.7	1,034	9.6
60-64	506	4.5	492	4.6
65-69	80	0.7	77	0.6
70-74	5	0.1	4	0.1
Total	11,210	100.0	10,732	100.0

Age profile of deferred members at 31 March	2017		2016	
	No.	%	No.	%
20-24	10	0.1	18	0.3
25-29	242	3.3	305	4.3
30-34	801	10.9	873	12.2
35-39	1,380	18.8	1,304	18.3
40-44	1,329	18.1	1,326	18.6
45-49	1,432	19.5	1,403	19.7
50-54	1,266	17.3	1,106	15.5
55-59	734	10.0	646	9.1
60-64	137	1.9	131	1.8
65-69	7	0.1	8	0.1
70-74	-	-	1	0.1
Total	7,338	100.0	7,121	100.0

Age profile of current pensioners at 31 March	2017		2016	
	No.	%	No.	%
Child dependants	68	1.0	59	0.9
Pensioners and spouses				
Under 50	55	0.9	53	0.8
50-54	58	0.9	58	1.0
55-59	273	4.3	277	4.6
60-64	1,326	20.7	1,280	21.1
65-69	1,759	27.4	1,769	29.2
70-74	1,424	22.2	1,252	20.6
75-79	834	13.0	784	12.9
80-84	445	6.9	382	6.3
85-89	156	2.4	138	2.3
90-94	23	0.4	10	0.2
95-99	-	-	1	0.1
Total	6,421	100.0	6,063	100.0
Total membership	24,969		23,916	

Summary of active member retirements

	2017	2016
III Health Retirements (all ages) Tier 1	14	7
III Health Retirements (all ages) Tier 2	-	-
III Health Retirements (all ages) Tier 3	6	1
Early Retirements - efficiency/redundancy over age 55	74	32
Early Retirements - with employer consent	23	1
Flexible retirements - over age 55	37	43
Early Retirements - age 60 and under age 65	71	118
Normal Retirements - age 65	6	11
Late Retirements - over age 65	38	35
Total retirements	269	248

Pension Fund governance

Introduction

The Environment Agency is the administering authority responsible for maintaining and managing the Environment Agency Pension Closed and Active Funds (the Fund), which are part of the Local Government Pension Scheme (the Scheme) in England and Wales.

Flexibility is provided for each Administering Authority to determine their own governance arrangements relating to how they maintain and manage their Fund. Our Governance Policy provides high level information in relation to those arrangements and how we govern the Funds. This, and our other policies, can be found here: www.eapf.org.uk/trustees/governance-policies.

Objectives

Our main governance objectives are to:

- act in the best interests of the Fund's members and employers;
- have robust governance arrangements in place, to facilitate informed decision making, supported by appropriate advice, policies and strategies;
- understand and monitor risk;
- deliver our services through people who have the appropriate knowledge and expertise, and ensure that this knowledge and expertise is maintained within the continually changing LGPS and wider pensions landscape; and
- ensure those persons responsible for governing the EAPF have sufficient expertise to be able to evaluate and challenge the advice they receive, ensure their decisions are robust and well based, and manage any potential conflicts of interest.

Regulatory background

The Local Government Pension Scheme (LGPS) is a statutory scheme, established by an Act of Parliament. The Local Government Pension Scheme Regulations 2013 and the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 outline the key responsibilities of administering authorities in managing the Scheme.

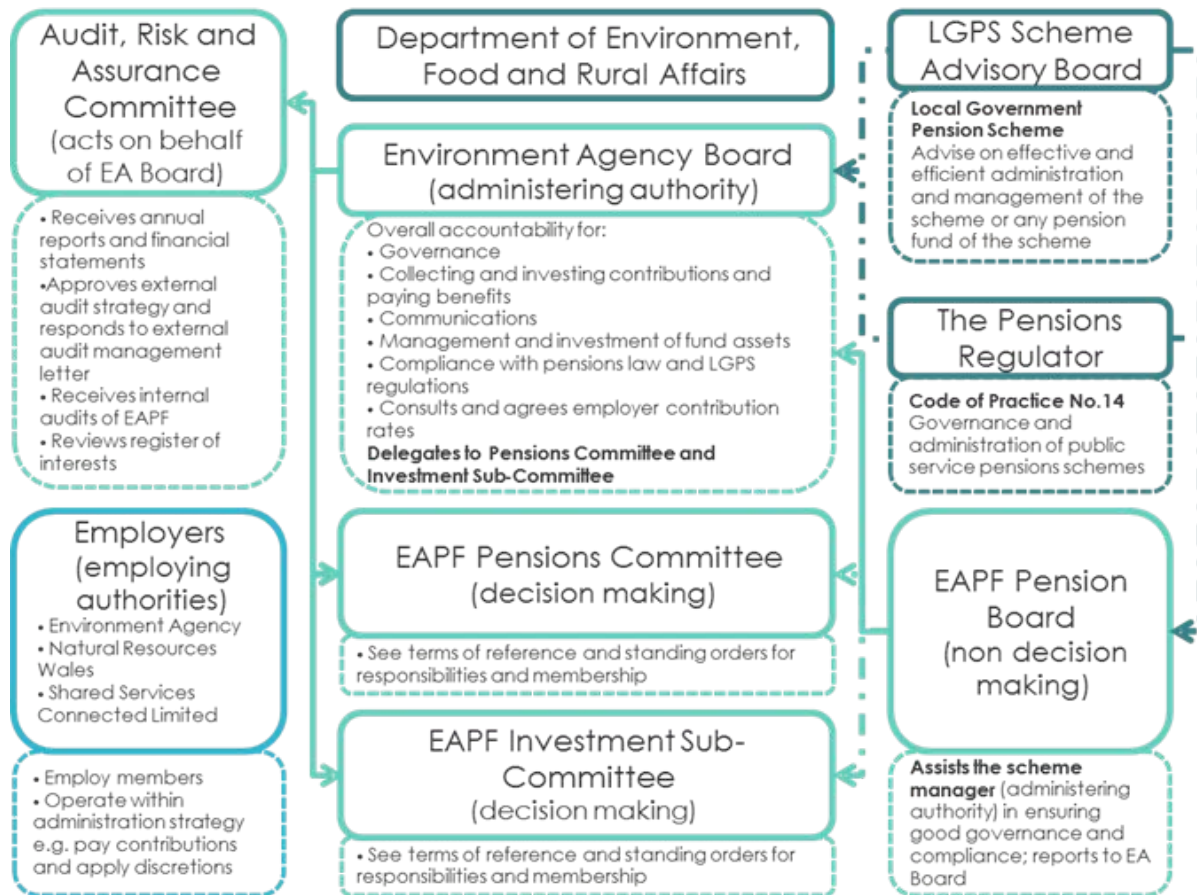
Our Governance Structure

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:



Key Governance Documents

The following are the key documents relating to the governance of the Fund. These can all be found here: www.eapf.org.uk/trustees/governance-policies

Title	Description
The Environment Agency's Framework Document - Schedule 7 (Pensions)	This is issued to the Environment Agency by Defra and sets out the Environment Agency's responsibilities with respect to pensions.
The Pensions Committee, Investment Sub-Committee and Pension Board Terms of Reference and Standing Orders	As defined by the Environment Agency Board, this details the delegated responsibilities of the PC, ISC and Pension Board as well as detailing the membership and meeting procedures such as frequency, quorum and reporting.
Committee and Board Operational Guidance	Approved by the Pensions Committee, this provides more information relating to how the PC and Pension Board will operate and items of business they may wish to consider.
Statement of delegation	The Environment Agency's Scheme of Delegation is approved by the Environment Agency Board. This prescribes the scope of the delegation of powers beyond those included in the PC, ISC and Pension Board Terms of Reference. In particular it details specific delegations to officers and the third party administrators relating to the management of the Scheme. The statement of delegation details the pension extract from the Environment Agency's Non-Financial and Financial Scheme of Delegation; day to day management by Pension Fund Management team; and employing authorities' responsibilities and discretions.
Governance Compliance Statement	As approved by the Pensions Committee, this is required by regulation 55 of the Local Government Pension Scheme Regulations 2013. It states how the EAPF complies with Secretary of State guidance. A copy of this can be found on page 21.
Training Policy	As approved by the Pensions Committee, this outlines the EAPF's approach to ensuring all key decision makers have the appropriate knowledge and skills.
Conflicts of Interest Policy	As approved by the Pensions Committee, this outlines how potential and actual conflicts of interest will be managed in relation to EAPF matters.

Committee members must declare any conflicts of interest prior to each quarterly meeting. These are recorded and held on the register of interest by our Secretariat. The Chairman reviews the register annually and a further review is undertaken by Internal Audit as part of their annual pension compliance review.

Monitoring governance of the EAPF

The Fund's governance objectives are monitored as follows:

Objective	Monitoring Arrangements
Act in the best interests of the EAPF's members and employers.	The PC, ISC and Pension Board include representatives from scheme members and employers in the EAPF with equal voting rights.
Have robust governance arrangements in place, to facilitate informed decision making, supported by appropriate advice, policies and strategies.	The Risk and Governance Adviser undertakes a regular review of the effectiveness of the EAPF's governance arrangements, the findings of which are reported to the PC and the Environment Agency Board. In line with the Regulations the Governance Compliance Statement will be filed with the Department for Communities and Local Government DCLG.
Understand and monitor risk.	A Risk Management Strategy is in place and integral to day to day management of the EAPF. An annual risk and compliance internal audit is carried out and reported to the Pension Board and Environment Agency Audit Risk and Assurance Committee. Ongoing consideration of key risks at PC and ISC meetings.
Deliver our services through people who have the appropriate knowledge and expertise, and ensure that this knowledge and expertise is maintained within the continually changing LGPS and wider pensions landscape.	Outsourced providers selected for their expertise, professional knowledge and capabilities to deliver quality and value for money services. Agreed measures, as part of robust contract management, are in place to ensure our objectives are achieved through third parties as appropriate. A Training Policy is in place together with appropriate measures to ensure its objectives are being achieved.
Ensure those persons responsible for governing EAPF have sufficient expertise to be able to evaluate and challenge the advice they receive, ensure their decisions are robust and well based, and manage any potential conflicts of interest.	A Training Policy and Conflicts of Interest Policy are both in place together with appropriate measures to ensure its objectives are being achieved.

Pension Board

From April 2015, the Department for Communities and Local Government (DCLG) introduced new governance arrangements for Local Government Pension Schemes. Each administering authority had to establish a Pension Board to provide oversight and assurance to the administering authority (scheme manager i.e. the EAPF Pensions Committee) of effective governance of their pension Fund.

The Environment Agency Pension Fund has a Pensions Committee supported by an Investment Sub-Committee. The terms of reference and standing orders for these committees were reviewed and updated when drawing up terms of reference and standing orders for the Pension Board.

We decided that as these bodies provide for the governance of the Pension Fund together that there would be just one set of terms of reference and standing orders. We believe that this makes it easier to understand how these bodies work together and what the roles and responsibilities of each body are.

Further information on our governance arrangements can be found here:

www.eapf.org.uk/trustees/governance-policies.

Role of Pension Board

The Pension Board is a non-decision making body responsible for assisting the administering authority in:

- (a) Securing compliance with the LGPS Regulations and any other legislation relating to the governance and administration of the Scheme, and requirements imposed in relation to the LGPS by the Pensions Regulator.
- (b) Ensuring the effective and efficient governance and administration of the LGPS by the Environment Agency Pension Funds.

The EAPF Pension Board meets quarterly and provides a governance overview including a review:

- of Risk Management and Risk Registers;
- of PC effectiveness outcomes and Pensions Regulator requirements;
- of customer service excellence; and
- of Pensions Committee meeting and Pension Board effectiveness.

A report is provided annually to the Environment Agency Board and Environment Agency Audit and Risk Assurance Committee on its responsibility for assisting the administering authority on securing compliance and ensuring effective and efficient governance and administration.

Membership

Membership of the Pension Board will normally be the members of the Pensions Committee less the 2 Executive Directors members of the Environment Agency and 2 Active Scheme Members. The Pension Board will normally be 10 remaining Pensions Committee Members as follows:

Employer Representatives

- 4 Non-Executive Environment Agency Board members (the Chair of the PC would normally be the Chair of the Pension Board otherwise another Non-Executive Environment Agency Board member).
- 1 Non-Environment Agency Employer Representative (or deputies).

Member Representatives

- Active Scheme Member Representatives.
- 2 Pensioner or 1 Pensioner and 1 Deferred Scheme Member Representatives.

Pensions Committee activities 2016/17

The Pensions Committee has provided a strong steer throughout the year on a significant number of large changes that will have a long term impact on the performance of the Fund. It has been essential that it has received and responded to quality information and made timely and strategic decisions in line with the foundation of the policies it has had in place:

- (a) LGPS Investment Pooling – the Government driven requirement for all LGPS Funds to pool assets so as to provide savings in investment management costs. The EAPF propose to pool with 9 other LGPS Funds, mainly from the South West of England ('Project Brunel'). This is a major project, with the EAPF taking some of the leading roles. This area has received significant Pensions Committee focus during 2016/17 and will continue to do so during 2017/18.

We anticipate the Pensions Committee and the Environment Agency Board will take a decision on the EAPF joining the Brunel Pension Partnership Limited (BPP Ltd.) during the summer of 2017. This will be a Financial Conduct Authority (FCA) regulated company with the Environment Agency becoming a shareholder in BPP Ltd. We are undertaking a significant amount of due diligence on this with suitable financial and legal assurance from advisers. BPP Ltd. is due to formally go live for transfer of assets from 1 April 2018.

- (b) Continuing development, engaging and promotion of our Responsible Investment Strategy and Climate Change Policy - these include key areas for engagement with stakeholders and have already achieved national and global recognition. We also co-founded the Transition Pathway Initiative (TPI).
- (c) Defra Corporate Service Review – We reviewed pension options and costs in detail to ensure that we protected the EAPF for past, present and future members. We reached agreement with Her Majesty's Treasury (HMT) and Defra during January 2017.
- (d) Conflict of Interests Policy and Reporting Breaches Procedure – these were further developed and implemented to capture EAPF and LGPS specific requirements.
- (e) Communications Strategy – developing the foundations for ongoing roll out of the EAPF digital engagement plan including audience segmentation and educating different target groups.
- (f) National Frameworks – as a Founding Authority, working with other LGPS administering authorities to establish national procurement frameworks including custodian and third party administration.
- (g) The Pension's Regulator Code of Practice for Public Service Pension Schemes – a detailed check against the Regulator's Code, which highlighted an extremely high level of compliance.

Pensions Committee membership, Chairman and members

The Environment Agency Board appoints members in accordance with our Governance Compliance Statement. Membership of the PC will normally be 14 including the Chair of the PC. Members of the PC will comprise:

- 4 Non-executive Board members of the Environment Agency, one of whom will be the Chair.
- 2 Executive members of the Environment Agency (being the Environment Agency Executive Director of Finance and the Executive Director of Resources and Legal Services).
- 1 Non-Environment Agency Employer Representative member.
- 5 Active Scheme Member Representatives.
- 2 Pensioners or 1 Pensioner and 1 Deferred Member Representatives.

Membership of the ISC will be appointed by the Environment Agency Board and will normally be 7 Committee Members as follows:

- Non-Executive Environment Agency Board members (one of whom should be nominated as Chair of the ISC by the PC).
- 2 from the Executive Environment Agency and Employer Representative members (or deputies).
- 3 Scheme Member Representatives (active, pensioner or deferred).

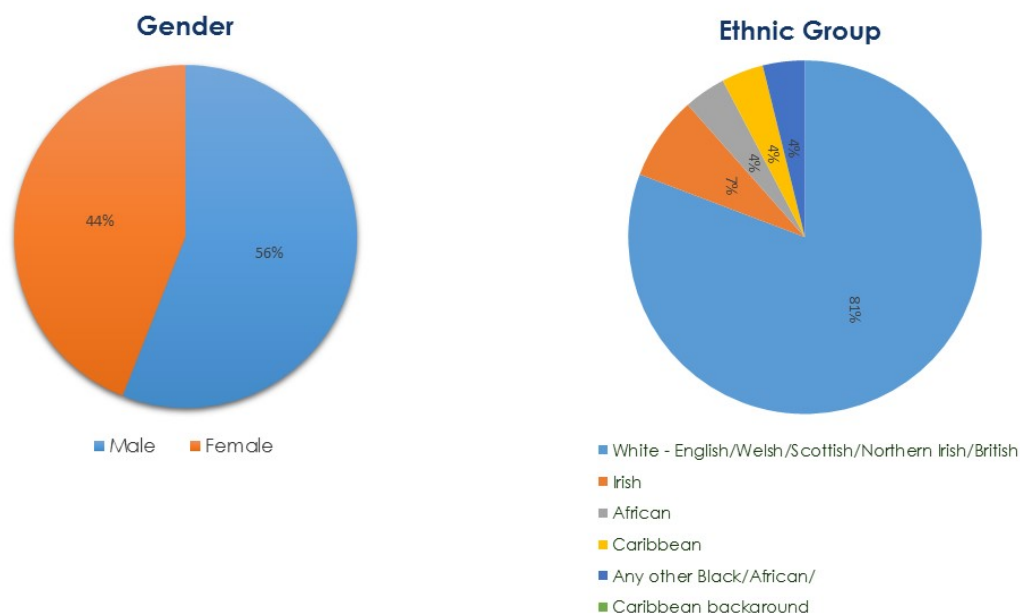
During the year, we had one change in our Board appointed members. Gill Weeks resigned from the Pensions Committee in July 2016 and was replaced by Maria Adebawale-Schwarte for a 3 year period to 31 July 2019. Dr. Clive Elphick's tenure as Pensions Committee Chairman will end on 31 July 2017. He has been replaced on the Environment Agency Board by Joanne Segars. Joanne will also replace Clive as Chair of the Pensions Committee from 1 August 2017.

We had 1 change to our Executive member nominees during the year. Jonathan Robinson resigned from 31 August 2016 and was replaced by Ian Randall from 1 September 2016.

There were 2 changes to our Active member nominees during the year. Will Lidbetter replaced Simon Peate for a 3 year period to 31 July 2019. Jackie Hamer retired after 9 years on the Pensions Committee on 31 March 2017. She was replaced by Marion Maloney for a 3 year period to 31 March 2020. Marion has also replaced Jackie on the ISC and Will has replaced Jackie on the Pension Board.

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 below¹



¹ Diversity indicators relating to combined personnel within the Pension Committee, Pension Board and Officers.

Pensions Committee (PC), Investment Sub-Committee (ISC) and Pension Board (PB) membership

As at 31 March 2017	Membership	Date of appointment	Length of service	End of current appointment	Residual period of current appointment
Board members					
Dr. Clive Elphick	PC, ISC, PB	01/09/2012	4 yr 7 mth	31/07/2017	0 yr 4 mth
Emma Howard Boyd	PC, ISC, PB	18/10/2012	4 yr 6 mth	30/06/2019	2 yr 3 mth
Karen Burrows	PC, PB	08/02/2016	1 yr 2 mth	31/07/2018	1 yr 4 mth
Maria Adebawale-Schwarte	PC, PB	01/08/2016	0 yr 8 mth	31/07/2019	2 yr 4 mth
Gill Weeks	PC, PB	01/07/2015	1 yr 9 mth	31/07/2018	Resigned
Executive members					
Mark McLaughlin	PC, ISC	01/11/2009	7 yr 5 mth	N/A	N/A
Ian Randall	PC	01/09/2016	0 yr 7 mth	N/A	N/A
Kevin Ingram	PC, ISC, PB	07/07/2009	7 yr 9 mth	06/07/2018	1 yr 3 mth
Jonathan Robinson	PC	01/04/2012	4 yr 12 mth	31/08/2016	Resigned
Active members					
Jackie Hamer	PC, ISC, PB	01/04/2008	8 yr 12 mth	31/03/2017	0 yr 0 mth
Colin Chiverton	PC, ISC, PB	01/04/2013	3 yr 12 mth	31/03/2019	2 yr 0 mth
Ian Brindley	PC, ISC, PB	01/11/2014	2 yr 5 mth	31/10/2017	0 yr 7 mth
Dorothy Holding	PC	01/01/2015	2 yr 3 mth	31/12/2017	0 yr 9 mth
Will Lidbetter	PC	01/08/2016	0 yr 7 mth	31/07/2019	2 yr 4 mth
Marion Maloney	PC	15/12/2016	0 yr 4 mth	31/03/2020	3 yr 8 mth
Pensioner members					
Peter Smith	PC, PB	14/05/2015	1 yr 11 mth	13/05/2018	1 yr 1 mth
Deferred member					
Hywel Tudor	PC, PB	14/05/2015	1 yr 11 mth	13/05/2018	1 yr 1 mth

Committee member biographies

The biographies of Committee members included below demonstrate the past and current experience of the membership and form the basis for decisions on future training needs as part of our adoption of the CIPFA Knowledge and Skills Framework for LGPS funds.

Dr. Clive Elphick has been a member of the Committee since 2012 and chair of the Committee since 2015. He attended the Committee for about a year before becoming a member. He has undertaken and is continuing to undertake actuarial and investment training. Clive is a CIMA qualified accountant and a former Group Financial Controller of United Utilities Group plc. He has also chaired the audit committee of a Department of State for five years. Clive chairs the audit committees of National Grid Gas plc and of National Grid Electricity Transmission plc and is a member of the Shadow Oversight Board of the Brunel Pension Partnership. Clive has attended the three day LGPS Trustee Training Fundamentals course.

Emma Howard Boyd has spent her 25 year career working in financial services, initially in corporate finance, and then in fund management, specialising in sustainable investment and corporate governance. As Director of Stewardship at Jupiter Asset Management until July 2014, Emma was integral to the development of their reputation in the corporate governance and sustainability fields. Emma is currently Chair of the Environment Agency and serves on various boards and advisory committees including, ShareAction (Chair of Trustees), Future Cities Catapult (Vice Chair), Menhaden Capital PLC the Aldersgate Group, the 30% Club Steering Committee, the Executive Board of The Prince's Accounting for Sustainability Project and the Carbon Trust Advisory Panel. Her past board and advisory roles have included being a director of Triodos Renewables PLC; Vice Chair and Chair of UKSIF, the UK sustainable investment and finance association, and a member of the Commission on Environmental Markets and Economic Performance, set up by the UK Government to make detailed proposals specifically on enhancing the UK environmental industries, technologies and markets.

Karen Burrows joined the Pensions Committee in February 2016. She has a legal and commercial professional background and has held several general management roles. She started her career practising as a commercial lawyer for Linklaters. She joined BG Group Plc in 1985 and had many years of legal and management team experience with BG Group Plc from 1985 including being Deputy General Counsel for BG Group Plc from 1997 to 1999. Later roles included being Vice President and President of BG Canada, Vice President (South and East Asset) for BG Trinidad and Tobago and Commercial Director for BG Advance.

Maria Adebawale Schwarte is a place making and urban renewal strategist, focusing on place led prosperity, green spaces, cross-sector collaboration and philanthropy. She is the Founding Director of Living Space Project, an urban place making think tank and consultancy that works with charitable foundations, government, the social, community, public and private sector. Maria is also a philanthropy and grant making advisor, and has advised funding programmes run by the Big Lottery, NESTA, Artists Project Earth and Natural England. Maria has received training on many aspects of pension's management and investment, and has assisted in the development of an equitable investment portfolio for the Local Trust. Maria joined the Pensions and Investment Committee in 2016 when she was appointed on to the Environment Agency Board and is also a member of the Board's Environment and Business Committee.

Gill Weeks joined the Committee in 2015 having joined the Environment Agency Board in September 2014, she is currently Chair of the Environment and Business Committee. She is Area Board Member for Yorkshire and is lead Board Member for Waste and Process Industry. Gill has attended training events on the LGPS and will develop her knowledge on pension fund management over time. Gill joined the Board having spent 25 years in the waste management and resources sector becoming a renowned industry expert, she was awarded an OBE for services to the waste management industry in 2011. Gill has a Law degree, is a Fellow of the Chartered Institute of Waste Management and is a Chartered Environmentalist.

Mark McLaughlin is a CIPFA qualified accountant. He was a Director of Finance in Local Government and the Senior Civil Service before he joined the Environment Agency in 2009. Between 1998 and 2007 he was responsible for, and was Section 151 Officer for, two LGPS pension funds, the London Borough of Hammersmith and Fulham, and the London Borough of Enfield. Mark has been an active contributing member of the LGPS since 1987. In 2015 he was appointed Group Chief Finance Officer for Defra and retains management responsibility for the EAPF Pensions Team.

Kevin Ingram has been a member of the Fund since 2007. He is a qualified accountant (ACA) with a background in audit and financial management in both the public and private sectors. From 1 April 2013 Kevin has taken on the role of Executive Director of Finance and Corporate Services for Natural Resources Wales. Kevin has been a member of the Committee since 2009 and during this period has received training on the LGPS and pension fund management.

Jackie Hamer has been an active member of the Fund since 1985, and an active member nominee since 2008. She has undertaken training on a range of pensions issues, including outsourcing, bulk transfers, cost sharing, funding strategies, pooling, responsible investment and investment strategy, as well as the 3 day LGPS Trustee Training Fundamentals course. As a lead lay negotiator within UNISON Jackie also has significant involvement with pension issues within the trade union movement, and has dealt with pension issues on behalf of her members.

Colin Chiverton has been a member of the Committee since 2013. He is an Area Environment Manager in Thames Area and has been an active member of the LGPS for 28 years. Colin has attended many training events on the LGPS and completed the Pensions Regulator's Public Service training. He has developed his knowledge on pension fund investment and management. He is the Pensions Representative of Prospect Union's Environment Agency Branch.

Ian Brindley has been a member of the local government scheme since 1987, and a member of the Committee since 2014. He is employed by the Environment Agency as a team leader. He has received training in many areas of pensions and investment, completing courses provided by the Environment Agency, the Local Government Association, Unison and other third party providers. Ian is active in the responsible investment arena, engaging with companies to drive improvements in their environmental, societal, governance and financial performance. Ian has been treasurer of his local Unison branch since 1997.

Dorothy Holding holds MSc in Management Practice and is MCIPS qualified and has recently joined the Committee having been a Steward for a number of years and more recently a Pension Advisor. She previously worked for Dept. of Environment Property Services Agency in their Contracts Division and the NHS in Procurement and was an active Unison member whilst there. She joined the agency in 2009 and is a Senior Commercial Officer for Northern Ops working out of Richard Fairclough House.

Will Lidbetter has been an active member of the Fund since 1992, and an active member nominee since July 2016. He has attended the induction training events on the LGPS and a number of other courses and conferences. Will is currently a specialist in information sharing issues and Open Data. He leads on Pensions for the Unison Thames branch and has dealt with pension issues on behalf of his members.

Marion Maloney has been a member of the LGPS for 20 years. She is a contributing member representative of the committee since 2016 following open recruitment and joined the investment sub committee in 2017. She is employed by the Environment Agency as a Senior Adviser in Environment and Business working on energy issues. Previous to working for the EA, Marion worked for a number of public sector bodies in England and Brussels. She has attended a series of induction training events over the last year and will continue to develop her knowledge on pension management and investment.

Peter Smith is a qualified solicitor (retired) and his appointments included Chief Executive of Malvern Council and Regional Solicitor to the Severn Trent Water Authority. Peter entered The Salvation Army Training College in 1978 and was commissioned and ordained in 1980. Following church appointments, in April 1989 Peter was transferred to International Headquarters and became the Legal and

Parliamentary Secretary, a post which he held until retirement on 1 December 2009. In this capacity Peter advised The Salvation Army worldwide on a very wide range of legal issues and continued in the role of Director of Legal Services until February 2011. During this time Peter served as a Director/Trustee of The Salvation Army Trustee Company, The Salvation Army International Trustee Company and was a member of the Board of Management of The Salvation Army Housing Association. For many years Peter was a director and chairman of the financial mutual friendly society The Rechabites.

Hywel Tudor is a deferred member of the EAPF having previously worked for the NRA and Environment Agency in Wales. Hywel became a member of the Pensions Committee and Pension Board in 2015, and has since attended the three day LGPS Trustee Training Fundamentals course, and other pension training. A qualified accountant (FCMA, CGMA) with senior experience in the public, private and charity sectors, he is currently Director of Finance & Resources for the Arts Council of Wales. He is also a member of the Pension Trustee Board for the Arts Council Retirement Plan, a role held for over 15 years.

Committee training

As an administering authority of the LGPS, the Committee recognises the importance of ensuring that all staff and members charged with the financial management and decision-making with regard to the pension scheme are fully equipped with the knowledge and skills to discharge those responsibilities. The Pensions Committee seeks to ensure that its membership is both capable and experienced and provides training so the members can acquire and maintain an appropriate level of expertise, knowledge and skills.

We have a training policy which addresses the strategy for the Pensions Committee and senior officers responsible for the management of the fund. The strategy adopts the principles of the Chartered Institute of Public Finance and Accountancy (CIPFA) Knowledge and Skills Framework. The Pensions Committee's training policy was updated in March 2016. Following the implementation of the local Pension Boards CIPFA extended their framework to include the knowledge and skills required for the Pension Board members to exercise their functions under the Pensions Acts 2004 (as amended by the Public Services Pension Act 2013).

The training needs of Pensions Committee members and Pension Board members are assessed on an individual basis and take account of members' existing expertise and interests in specific areas. We also provide for our fund members knowledge of their Pension Scheme and run a series of webinar briefings for employees presented by Pension Fund officers, our third party administrator Capita and Human Resources (HR) staff.

In each year Pensions Committee members are expected to undertake two to three days' training aimed at building or refreshing their knowledge and skills in specific topics in greater depth. In 2015 we introduced an enhanced training log system that provides an individual certificate of Knowledge and Understanding. These certificates are published on our website and show the full training log throughout membership of the Pensions Committee for each individual member during the last financial year.

The key strategic training focus in 2016/17 for the Pensions Committee as a whole has been asset pooling and preparing for our participation in the Brunel Partnership. This continues to be a strategic focus in 2017/18.

Committee training log 2016/17	LGIM Fixed Interest Portfolio	LGIM LGPS Asset Pooling	Responsible Investor RI Europe Conference	LGPS Trustees Conference	CIPFA Local Pensions Board One Year On Seminar	Financial Times Investment Management Summit Europe	Brunel Pensions Partnership Engagement Day	LGPS Training Fundamental (3 days)	LGPS Ringling the Changes for Members	Aon Hewitt Pensions Conference	PC Training Day on Project Brunel
Environment Agency Board Members											
Dr. Clive Elphick Chair of Pensions committee										✓	
Emma Howard Boyd Chair of Investment Sub-Committee		✓	✓								
Gill Weeks		✓									✓
Karen Burrows		✓									✓
Maria Adebawale-Schwarte							✓	✓			
Executive members											
Mark McLaughlin		✓									✓
Ian Randall											
Peter Kellett											✓
Kevin Ingram Natural Resources Wales		✓									✓
Active member nominees											
Jackie Hamer		✓					✓				
Colin Chiverton		✓					✓				✓
Ian Brindley	✓	✓		✓			✓				✓
Dorothy Holding			✓								
Marion Maloney							✓	✓		✓	
Will Lidbetter						✓	✓	✓	✓		
Pensioner members											
Peter Smith		✓		✓	✓						
Deferred member											✓
Hywel Tudor		✓								✓	✓

Members' attendance at Committee and Board meetings through the year

During the past year the Pensions Committee met on eight occasions (including four extraordinary meetings). The Investment Sub-Committee met on four occasions and the Pensions Board met on three occasions.

Committee members	Pensions Committee meeting 8 in total	Investment Sub-Committee 4 in total	Pension Board meeting 3 in total	Total attendance
Board members				
Clive Elphick (Chair)	8	2	3	13
Emma Howard Boyd	6	4	1	11
Karen Burrows	7	-	1	8
Maria Adebawale-Schwarte	3/6	-	1/2	4
Joanne Segars (Observer)	2/2	1/1	-	3
Gill Weeks	2/2	-	1/1	3
Executive members				
Mark McLaughlin	5	-	-	5
Ian Randall	6/8	-	-	6
Kevin Ingram	5	2	3	10
Jonathan Robinson	1/1	-	-	1
Active members				
Jackie Hamer	8	4	3	15
Colin Chiverton	6	2	3	11
Ian Brindley	8	4	3	15
Dorothy Holding	-	-	-	-
Will Lidbetter	6/6	-	-	6
Marion Maloney	5/5	-	-	5
Danielle Ashton (Observer)	3/3	-	-	3
Pensioner Member				
Peter Smith	7	-	3	10
Deferred member				
Hywel Tudor	5	-	1	6

Professional advisers to the Committee

The Pensions Committee uses the services of the providers tabled below to make informed decisions.

Actuarial Adviser	Hymans Robertson
Bankers	National Westminster Bank Plc
Benefit Adviser	Hymans Robertson
Custodian	The Northern Trust Company
External Auditor	Comptroller and Auditor General
Governance and Risk	Aon Hewitt
Investment Adviser	Hymans Robertson
Independent Investment Adviser	Investment Adviser and Trustee Services Ltd
Legal Adviser	Osborne Clarke
Pensions Administrator	Capita Employee Services

Governance Compliance Statement

Introduction

Under Regulation 55 of the Local Government Pension Scheme Regulations 2013 (as amended) an administering authority must, after consultation with such persons as it considers appropriate, prepare, publish and maintain a Governance Compliance Statement.

This statement is required to set out:

- a) whether the administering authority delegates its functions, or part of its functions, under these Regulations to a committee, a sub-committee or an officer of the administering authority.
- b) if the authority does so
 - i) the terms, structure and operational procedures of the delegation
 - ii) The frequency of any committee or sub-committee meetings
 - iii) whether such a committee or sub-committee includes representatives of Scheme employers or members, and if so, whether those representatives have voting rights.
- c) the extent to which a delegation, or the absence of delegation, complies with guidance given by the Secretary of State and, to the extent that it does not so comply, the reason for not complying and
- (d) details of the terms, structure and operational procedures relating to the local pension board established under regulation 53(4) (Scheme managers).

The statement must be revised and published by the administering authority following a material change in their policy on any of the matters referred to above.

This Statement is made and approved by the Environment Agency Pensions Committee on 25 March 2015 and reflects the governance up to 31 March 2015.

The EAPF will have a local Pension Board from 1 April 2015 and the Governance Compliance Statement that is effective from 1 April 2015 was also approved by the Environment Agency Pensions committee on 25 March 2015. It will be reviewed at least annually to ensure it remains up to date and meets the necessary regulatory requirements. This includes the statements showing compliance with providing with the additional requirement:

- (e) details of the terms, structure and operational procedures relating to the local pension board established under regulation 53(4) (Scheme managers).

A current version of this Governance Compliance Statement will always be available on our website at www.eapf.org.uk and paper copies will be available on request.

Any enquiries in relation to this Governance Compliance Statement should be sent to:

Pension Fund Management
Environment Agency
Horizon House
Deanery Road
Bristol
BS1 5AH

Email: eapf@environment-agency.gov.uk

Statement

Full details relating to our governance structure can be found in the Environment Agency Terms of Reference and Standing Orders for the Pensions Committee, Investment Sub-Committee and Pension Board and explained in our Governance Policy. The key elements are summarised below:

Details to be provided	EAPF
Whether the authority delegates its functions, or part of its functions under these Regulations to a committee, a sub-committee or an officer of the authority.	All key pension fund management responsibilities are delegated to the Pensions Committee (PC) other than implementing the Fund's investment strategy which is delegated to the Investment Sub-Committee (ISC).
If the authority does so (i) the terms, structure and operational procedures of the delegation.	See the Terms of Reference for specifically delegated responsibilities. PC has 14 members and ISC has 7 members.
(ii) the frequency of any committee or sub-committee meetings.	The ISC and PC meetings are scheduled quarterly.
(iii) whether such a committee or sub-committee includes representatives of Scheme employers or members, and if so, whether those representatives have voting rights.	The EAPF has three employers. The PC includes 1 Non EA Employer Representative, 5 Active Scheme Member Representatives and 2 Pensioner or 1 Pensioner and 1 Deferred Member Representatives. The ISC includes 3 Scheme Member Representatives and potentially the 1 Non EA Employer Representative. All members have voting rights.
The extent to which a delegation, or the absence of a delegation, complies with guidance given by the Secretary of State and, to the extent that it does not so comply, the reasons for not complying.	See Compliance Statement below.
Details of the terms, structure and operational procedures relating to the local pension board established under regulation 53(4) (Scheme managers).	The Pension Board is a non-decision making body responsible for assisting the administering authority in: a) securing compliance with the LGPS Regulations and any other legislation relating to the governance and administration of the Scheme, and requirements imposed in relation to the LGPS by the Pensions Regulator b) ensuring the effective and efficient governance and administration of the LGPS by the Environment Agency Pension Funds. Membership of the Pension Board comprises of 10 members of the Pensions Committee which excludes the 2 Executive Directors members of the Environment Agency and 2 Active Scheme Members. Further information is in the Terms of Reference and Standing Orders and the Operational Guidance.

Statement of Compliance with Secretary of State Guidance

Compliance status – we are compliant with all 20 standards.

Statutory Guidance Governance Standards and Principles	Our compliance status	Evidence of compliance and justification for non-compliance
A – Structure		
a) The management of the administration of benefits and strategic management of fund assets clearly rests with the main committee established by the appointing council.	Compliant	The responsibilities of the Pensions Committee (PC) are set out in the Pensions Committee Terms of Reference and Standing Orders approved by the EA Board.
b) That representatives of participating LGPS employers, admitted bodies and scheme members (including pensioner and deferred members) are members of either the main or secondary committee established to underpin the work of the main committee.	Compliant	Our PC has 14 members, appointed by the EA Board and includes: 4 Non-Executive EA Board members 2 EA Executive members 1 Non EA Employer Representative 5 Active Scheme Member Representatives 2 Pensioner or 1 Pensioner and 1 Deferred Member Representatives 3 Scheme Member Representatives and the 1 Non EA Employer Representative are also members of the Investment Sub-Committee (ISC)
c) That where a secondary committee or panel has been established, the structure ensures effective communication across both levels.	Compliant	The Chair of the Pensions Committee reports to each EA Board meeting. Reports of the ISC meetings are available to all PC members. The Chair of the ISC provides a summary report and draft minutes to the following PC meeting.
d) That where a secondary committee or panel has been established, at least one seat on the main committee is allocated for a member from the secondary committee or panel.	Compliant	The membership of our ISC comprises members of the main PC.
B – Representation		
a) That all key stakeholders are afforded the opportunity to be represented within the main or secondary committee structure. These include:		

i) employing authorities (including non-scheme employers, e.g. admitted bodies);	Compliant	The employers of our Closed Fund members no longer exist. Our Active Fund has three employers – EA, NRW and SSCL. We have a non-EA employer member representing NRW and SSCL on the main PC and who may also be on the ISC.
ii) scheme members (including deferred and pensioner scheme members).	Compliant	The main PC has 7 scheme member representatives on it, including 5 active scheme member representatives and 2 pensioner/deferred member representatives, ideally one of each. Our ISC includes 3 scheme member representatives (active, deferred or pensioner).
iii) independent professional observers.	Compliant	Our independent investment adviser attends all ISC and PC meetings. Our other professional advisers also regularly attend our PC and ISC meetings.
iv) expert advisers (on an ad hoc basis).	Compliant	We invite our expert advisers to attend our PC and ISC meetings as needed. This includes our actuary, legal adviser, risk and governance advisor and investment consultants, pension fund administration consultants, and external auditors.
v) that where lay members sit on a main or secondary committee, they are treated equally in terms of access to papers, meetings and training and are given full opportunity to contribute to the decision making process, with or without voting rights.	Compliant	All members of the PC and ISC receive equal access to the papers and training and have full and equal speaking and voting rights in our meetings and decision making processes.
C – Selection and role of lay members		
a) That Committee or panel members are made fully aware of the status, role and function they are required to perform on either a main or secondary committee.	Compliant	New PC members receive an induction and appropriate training that details the role, function and activities of the PC and ISC. Our PC members understand that their primary fiduciary duty of care is our funds' beneficiaries and employers, in whose best interests they are required to act at all times, particularly in terms of investment and financial decisions. They also understand that they are not there to represent or promote their own personal or political interests, and that they must declare any self-interest or conflicts of interest of either a financial or non-financial nature arising from any other roles they may perform and abstain from participation in that item on the agenda. The EAPF has a Conflicts of Interest Policy which is made available to all PC members.
b) That at the start of any meeting, Committee members are invited to declare any financial or pecuniary interest related to specific matters on the agenda.	Compliant	Declaration of interests is a standing agenda item at the start of all PC and ISC meetings. A register of interests is also maintained and audited annually.

D – Voting		
The policy of individual administering authorities on voting rights is clear and transparent, including the justification for not extending voting rights to each body or group represented on main LGPS committees.	Compliant	Our PC makes decisions by discussion and by building and creating a consensus. All members have equal voting rights on our main PC and ISC.
E – Training, facility time and expenses		
a) That in relation to the way in which statutory and related decisions are taken by the administering authority, there is a clear policy on training, facility time and reimbursement of expenses in respect of members involved in the decision-making process.	Compliant	Our PC has a Training Policy which is reviewed regularly. We provide induction training. All members undergo further developmental, specialist, and/or 'top up' refresher training for 2-3 days each year during their terms of office. We maintain a log of all PC member training needs and training undertaken. Members of the main PC and the ISC are reimbursed the cost of travel and overnight hotel expenses. The cost of all PC and ISC training is met from the pension fund's budget.
b) That where such a policy exists, it applies equally to all members of committees, sub-committees, advisory panels or any other form of secondary forum.	Compliant	The Training Policy applies equally to all PC and ISC members.
F – Meetings (frequency/quorum)		
a) That an administering authority's main committee or committees meet at least quarterly.	Compliant	Our PC usually meets 4 times a year, for normal business and at least once for briefing or training. 8 of the 14 PC members (including at least 1 Board member, 1 EA executive member and 1 scheme member representative) constitute a quorum.
b) That an administering authority's secondary committee or panel meet at least twice a year and is synchronised with the dates when the main committee sits.	Compliant	Our ISC meetings are synchronised to meet 4 times a year before the PC so it can report to and make recommendations to the full PC. 4 members (including at least 1 Board Member, 1 EA executive member and 1 scheme member representative) constitute a quorum for the ISC.
c) That administering authorities who do not include lay members in their formal governance arrangements, provide a forum outside of those arrangements by which the interests of key stakeholders can be represented.	Compliant	We have 7 'lay' members on our main PC, comprising 5 active scheme member representatives and 2 pensioner/deferred member representatives. Due to the geographical spread of our organisation and fund membership across England and Wales we do not hold an AGM but do hold annual briefings which provide a forum for Fund members and stakeholders to be informed about the Fund, particularly about changes to the LGPS. All active fund members are invited to attend regional or webinar pension briefings each year. We also organise an annual briefing for deferred and pensioner members. The briefings

		are generally presented by Capita (Pension Fund Administrator), with administering authority or HR staff. PC members chair or attend some briefings.
G – Access		
a) That subject to any rules in the council's constitution, all members of main and secondary committees or panels have equal access to Committee papers, documents and advice that falls to be considered at meetings of the main Committee.	Compliant	All members of our PC and ISC receive the same agenda and papers containing information and advice for each meeting, unless there is a conflict of interest. Members of the PC who are not members of the ISC can request full ISC papers and they also receive summary reports of all meetings. All our PC and ISC members can ask questions of our professional advisers who attend the PC and ISC meetings.
H – Scope		
a) That administering authorities have taken steps to bring wider scheme issues within the scope of their governance arrangements.	Compliant	Our PC and ISC meetings all have agenda items on wider LGPS scheme issues, future challenges and risks to our funds, as well as information on our funds' recent financial and administrative performance. The ISC review their risks at all meetings. The PC carries out annual reviews of fund performance, key strategic risks, and our statutory governance, administration and communications policy statements. It also reviews its own effectiveness at the end of each meeting and annually.
I – Publicity		
a) That administering authorities have published details of their governance arrangements in such a way that stakeholders with an interest in the way in which the scheme is governed, can express an interest in wanting to be part of those arrangements.	Compliant	We publish our Governance Compliance Statement and all other key governance documents and policies on our website, and they are available in hard copy from our Pension Fund Management Team. The Governance Compliance Statement is also published in our Annual Report & Financial Statements. We have an agreed procedure for appointment of new employee, pensioner and deferred member nominees to our PC when vacancies arise working in conjunction with our Trades Unions and all employers.

Signed on behalf of the Environment Agency



Dr. Clive Elphick
Chairman
Environment Agency Pensions Committee
28 June 2017



Sir James Bevan
Accounting Officer
Environment Agency
28 June 2017

Responsible Investment

Introduction

2016/17 has brought home just what a rapidly changing world we live in. Whether social, political, technological or even climatic change - all 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 increasing using the same disciplines to look at our liabilities, particularly when thinking about long term issues such as climate change. A case study to illustrate the work we have been doing with our actuary is in the climate change section below.

How we integrate responsible investment 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.
- 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 do 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.

During 2016/17 we published a further three 'think pieces' that provide a deeper insight into how we approach RI either directly or through our partners. In addition to one detailing our approach to climate change, Kate Brett, from our investment consultant Mercer, provided a synopsis of our approach to Environmental Social and Governance (ESG) in fixed income. Also, Andreas Hoepner, Associate Professor of Finance, ICMA Centre, Henley Business School, has summarised his work on how financial data science (FDS) can help investors consider the perennial and thorny question as to whether ESG integration in investment processes can be beneficial to returns and risk of their portfolio.

Considering all the issues

We integrate management of Environmental Social and Governance (ESG) issues throughout the investment and funding strategy. This includes asset allocation, mandate design, risk management, fund manager appointment and monitoring, collaborative engagement and transparent reporting. Thinking about these issues at a strategic level is critical.

In 2016/17 we updated our Responsible Investment Policy largely to reflect pooling, our progress in delivery of our Policy to Address the Impacts of Climate Change, as well as to set new policy commitments to demonstrate best practice in diversity transparency (see page 14). We are delighted to have delivered against all areas of our RI Policy and these areas will remain the focus of the fund in 2017/18.

Box 1: Fighting anti-LGBTQ legislation

Equality, diversity and inclusion are good for business and good for investors. The body of evidence to support this belief is growing rapidly.

During 2016/17 legislation was proposed that would have allowed discrimination against lesbian, gay, bisexual, and transgender (LGBTQ) people. For example, North Carolina's House Bill 2 and Texas' Senate Bill 6. The Fund is supporting efforts by investors in the US to challenge such 'bathroom bills'. The states themselves have seen business leave, boycotts and major sporting events and concerts cancelled in protest.

Below are a few of the many ways in which we have delivered on our RI policy objectives and an outline of some of the planned activity for 2017/18.

Policy focus	What happened in 2016/17	Focus for 2017/18
Fiduciary duty – promoting the implementation of the Law Commission recommendations	Supported the development of the new LGPS Investment Regulations 2016 and supplementary guidance which embrace the Law Commission's recommendations. Contributed to the Investment Governance and the integration of environmental, social and governance factors by the OECD (2017). ²	Support policy makers and regulators to embed the Law Commission recommendations into guidance, recommendations and similar frameworks.
Long termism – furthering the implementation of the Kay review recommendations and a focus on fund manager reporting	Officers have attended roundtables and spoken at public events to promote long-term thinking.	Continue to explore with industry peers what alternative performance indicators or metrics can be included in manager reporting to enhance long termism.
Sustainable capitalism and impact investing – communicating positive case studies from our portfolio	Over a third of the fund invested in sustainable companies or assets. For case studies examples, please see Page 39.	Use the UN Sustainable Development Goals to evaluate current and future investment opportunities.
Climate change – engaging with pension funds and other stakeholders to develop and share best practice	Material progress against all our commitments. See below for more detail.	Further development of Transition Pathway Initiative (TPI) and promoting the FSB TFCD (see below for more details).
Water risk – promote risk identification and integration	Agreed water risks targets, to: - increase the response rate by listed companies to the CDP Water Program by 20% from the 2015 baseline by 2020. - reduce impact of water by 20% from the March 2015 baseline relative to the world index (MSCI All Country World Index) by 2020.	Letters to c160 companies (owned by the EAPF) encouraging them to provide water risk information to the market via CDP. Deep dive into our water risks in our environmental footprint to support dialogue with our asset managers.
Human capital – promoting business case for diversity/inclusion and consideration of the Living Wage	Supported specific 30% Club corporate engagement activity. LGBT corporate engagement (box 1)	Supporting the initiative through the Diversity Project ³ , which aims to accelerate progress in having a diverse and inclusive UK investment and savings industry.

² <http://www.oecd.org/cgfi/Investment-Governance-Integration-ESG-Factors.pdf>

³ <http://diversityproject.com/>

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) and are delighted to continue to support the delivery of their work programme through serving as a member of the Executive.

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 selected 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.

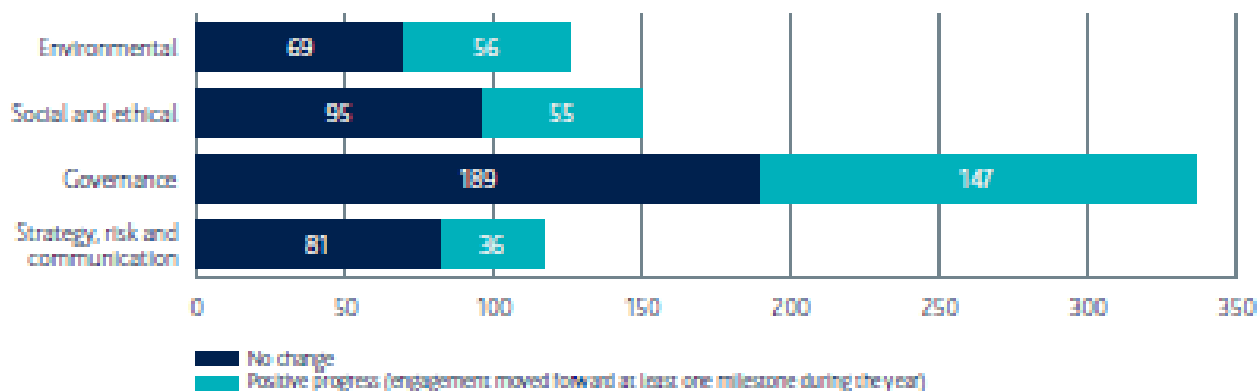
We believe that using the combined skills of ourselves, our managers and all these groups enable us to be confident that we are engaging on all material ESG risks to the Fund.

Acting as good owners

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 Equity Ownership Services](#), who bring together global clients to represent nearly c. £260bn of assets. We work with Hermes' 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.

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 2017 our combined equities are **8.16% more environmentally efficient** per million pounds invested than the composite benchmark. For our combined active bonds, environmental footprints are **4.0% 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.

Social and sustainable investment

Social investment can be defined to include a wide spectrum of investment opportunities⁴. 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%⁵) 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 criteria⁶ and
- Companies (often equities and bonds) with a progressive⁷ environmental, social or governance practices that may enhance investor value.

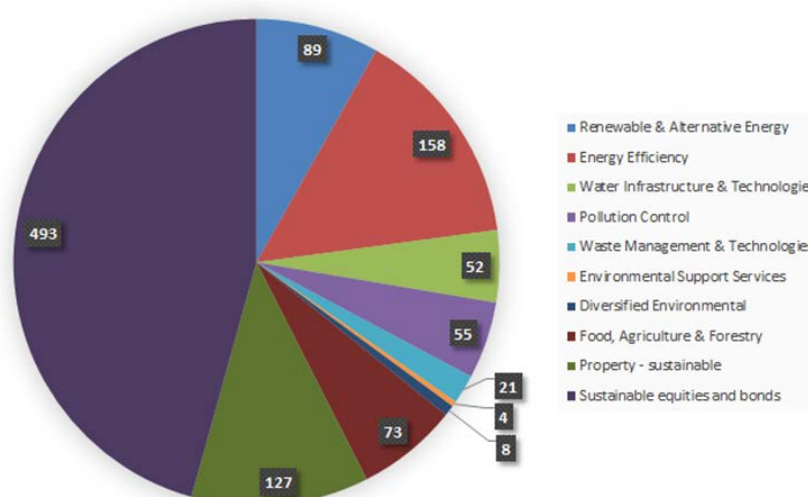
We set ourselves the target to maintain at least 25% of our investments in clean technology and other sustainable opportunities – far more than any other pension fund worldwide (AODP, 2017).

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.

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 (£1.1bn, 34%, as 31 March 2017) 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)



⁴ See Global Impact investor Network for more information <https://thegiin.org/>

⁵ We use the FTSE Environmental Markets classification and with the help of Impax Asset Management (our global equity manager who focuses on environment technologies) to analyse our public and private equity holdings including the pooled funds.

⁶ Strongly sustainable/ progressive are terms we use to describe companies or funds exceeding market norms and taking action on one or more areas of ESG that distinguishes their offering compared to their peers.

⁷ As above

Policy to Address the Impacts of Climate Change

We published our Policy to Address the Impacts of Climate Change in October 2015 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.

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.’**

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.

We also set a policy commitment that **“we will continue to engage with companies, regulators, policy makers and other intermediaries to demand higher disclosure standards and increased transparency for, and by, investors.”** It is no surprise therefore that we have been active in our support for the work of the Financial Stability Board 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”. The diagram below outlines the core elements of the recommended disclosures.

The recommendations were published in December 2016 and a final report was published 29 June 2017. The full report is available on the TCFD website (www.fsb-tcfd.org/) and our response is available on our website. In this section of our Annual Report, we aim to fulfil both our own transparency commitments to reporting progress on our climate change policy and to meet the recommendations of the TCFD.

Figure 2

Core Elements of Recommended Climate-Related Financial Disclosures



Governance

The organization’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

Source: Recommendations of the Task Force on Climate-related Financial Disclosures, 2016.

Our **Policy to Address the Impact of Climate Change ('the policy')** is owned by the EAPF Pension Committee on behalf of the **Environment Agency Board** (Administering Authority). As a core part of the investment strategy and risk management processes, the Pension Committee Chair includes updates on the delivery of the policy as part of their regular updates to the Environment Agency Board. Progress against the policy is reported in the Annual Report and Financial Statements approved by the Environment Agency Board (as well as the **Audit, Risk and Assurance Committee**). Further detail on the pension fund governance structure is outlined on page 9.

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.

Our climate change investment beliefs

We believe that:

- Climate change presents a **systemic risk** to the ecological, societal and financial stability of every economy and country on the planet, with the potential to impact our members, employers and all our holdings in the portfolio.
- Climate change is a **long term material financial risk** for the Fund, and therefore will impact our members, employers and all our holdings in the portfolio.
- Considering the impacts of climate change is both our **legal duty** and is entirely consistent with **securing the long term returns** of the Fund and is therefore acting in the best long term interests of our members.
- **Selective risk-based disinvestment** is appropriate but **engagement for change** is an essential component in order to move to a low carbon economy.

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 provides the Fund with impact assets across **10 and 35 year time horizons**. Our tailored report is publically available on the climate risk area of our website.

The study, our primary source of long term impact analysis, demonstrated that the fund's assets that were most sensitive to climate change over 35 years were **agriculture, infrastructure, timber, emerging market equities and real estate**. These are all asset classes where the fund has significant exposure and in the case of real assets is planned to increase. This provides clear prioritisation for the committee in monitoring risk. Integrating this research into our own review of our strategic asset allocation (SAA) informs the development of a robust portfolio, where the investment strategy is positioned to reduce risk and maximise investment opportunities presented by climate change.

The most recent study reinforced earlier action taken following the first study when in April 2013 we allocated investment in real assets covering real estate, infrastructure, forestry and agricultural land to 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. Page 39 provides examples of investment this year.

"I applaud the new Transition Pathway Initiative and its founding members. It represents yet another potentially powerful way of aligning real-world global investments with the real-world urgency of meeting the goals, aims and aspiration of the Paris Climate Change Agreement".
Patricia Espinosa, Executive Secretary of the UN climate convention

The Pension Committee and Investment Sub-committee will receive reports to enable them to monitor climate related issues every quarter. All committee members receive training on our work to address climate change and regularly represent the Fund externally with other stakeholders. 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 selection, there are specific budget allocations to climate change for **carbon metrics reporting** and the **Transition Pathway Initiative (TPI)** (box 2).

In decarbonising the portfolio 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, described right. However, we also work collaboratively with many other organisations to encourage positive active. For example on corporations sourcing of electricity.

Engaging for change – 100% Renewable Electricity

The RE100 initiative is led by [The Climate Group](#) in partnership with [CDP](#), as part of the [We Mean Business](#) coalition. The EAPF is an investor supporter and has co-signed letters to companies which encourages them to set a public goal to procure 100% of their electricity from renewable sources of energy by a specified year. The primary source of the Environment Agency's own electricity is renewable.

RE100 was launched during Climate Week in New York in September 2014 and, at the time of printing, around 100 of the world's most influential companies are going to be 100% through RE100.

<http://there100.org/companies>

Over the past year, coordinated by ShareAction, the RE100 investor group have sent company engagement letters to 65 target companies with a broad geographical and sector spread;

- 28 headquartered in the UK, 28 in Europe and 9 in the US
- 10 countries (UK, USA, Netherlands, France, Luxembourg, Switzerland, Spain, France, Germany, Sweden)
- 22 industries (finance, construction, retail, supermarket, fashion, delivery, telecommunications, electronics, food & drink, manufacturing, home appliances, media/digital, consumer goods, property, beverages, luxury goods, aerospace, automobiles, pharmaceuticals, chemicals, waste/water management, e-commerce)

Among those that have made an announcement following investor engagement British Land has set a goal to be 100% renewable by 2019. A significant success was the decision of Anheuser-Busch InBev, the world's largest brewer, to join RE100 following investor encouragement. Their global operations represent almost 6 terawatt-hours (TWh) of electricity annually. In addition, Tesco, the UK's largest retailer, has made a commitment to achieve 100% renewable sourcing for the 5TWh of electricity that power its global operations.

Box 2: The 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

Investors using the tool are currently able to compare the performance of the 20 largest companies in the global oil and gas and electricity utilities sectors online and for free. More companies' assessments will be rolled out in 2017 and beyond. The tool, methodology and results is freely available at www.transitionpathwayinitiative.org

What next?

An engagement programme based on the TPI assessments will be rolled out during 2017. The scope of the project is the 20 largest companies by market cap in each of 7 high impact sectors, namely Oil and Gas, Mining, Cement, Electricity Utilities, Automotive, Iron & Steel, and Pulp & Paper. The engagement will commence with companies in the utilities and oil and gas sectors, and be progressively widened to these other sectors.

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, IIGCC and PRI which is also aligned to the TPI framework.

As outlined in our policy we view the financial risks and opportunities arising from climate change to be both physical and those arising from transition risk, by which we mean impacts driven through changes in policy, regulations and the market. Our strategy has a particular focus on identifying financial opportunities arising from technological changes and innovations that provide competition and substitution.

Examples that illustrate this include **Actis**, which invests in energy infrastructure in emerging markets with a significant focus on renewable energy (>50%), which are now cost competitive in many markets without relying on subsidies. Actis' target markets are characterised by electricity shortages and growing demand for electricity, as a significant proportion of the population in emerging markets is still not connected to electricity (1,200 million people across developing countries). Another example is **Pegasus Capital Advisors** a fund that recognised the need for solutions for climate change and health and wellness and increasingly focused on sustainable industries with positive environmental and social impacts. See the full case studies on our website.

Liabilities as well as assets

As a pension fund there is the need to manage by looking at both its liabilities and its assets, looking at climate change is not different.

We have been active in working with the actuarial profession in support of integrating climate change into their work. In January 2017, the Institute and Faculty of Actuaries (IFoA) published the first in a series of bulletins on intergenerational fairness⁸. This bulletin focusses on the risks to financial stability posed by climate change and seeks to raise awareness among decision makers of the risk of not considering long-term implications of societal, environmental and technological changes. We contributed to the bulletin, the launch and serve on-going on the working group. In addition we are working with our actuary on this matter (see box 3).

Box 3: Examining the impact of climate change and pension liabilities - working with Hymans Robertson and Club Vita

The funding of pensions schemes has been encouraged by the presumption that investing now will help power economic growth ahead of drawing the benefits and hence make pensions affordable across the generations.

Climate change brings a new overarching set of uncertainties that can feed through to the savings industry in multiple ways: it may directly affect the future health of savers, or the economic prospects of some investments, or may do so indirectly via policy-makers and societal decisions. This raises a number of questions:

- 1) Will members perceive incomes in the far future to be valuable enough to save for?
- 2) Will economic growth be strong enough that pensions remain an affordable part of that at a macro level?

While pension provision and climate change are long-term activities, the way in which schemes are funded, or the extent to which members save out of income are short-term decisions that are difficult to make if the shape of the risks are not understood, or cannot be mitigated.

The work done by Club Vita and the Pensions and Lifetime Savings Association sheds a light on the possible impact of climate change on longevity. Hymans Robertson, in conjunction with the EAPF and other interested pension schemes, are now examining the likely financial effect of climate change in order to help schemes (and their actuaries) understand the impact this may have on funding outcomes. This work will then allow schemes to consider their strategy for mitigating the effects of this on future funding outcomes.

PLSA (2014) The NAPF Longevity Model – November 2014
http://www.plsa.co.uk/PolicyandResearch/DocumentLibrary/0414longevity_model_nov14.aspx

⁸ Intergenerational Fairness bulletin, Issue 01, IFoA, 2017, climate Change

Carbon targets

In our policy we set ourselves three goals for 2020 to invest, decarbonise and engage and we are making good progress on all three.

Climate goals	Progress
Invest 15% of the Fund in low carbon, energy efficient and other climate mitigation opportunities.	10% invested with current commitments bringing it to 12.5% .
Decarbonise the equity portfolio, reducing our exposure to 'future emissions' ⁹ 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 65% less than our baseline. Oil and gas is currently 79% 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.

Carbon metrics

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. The carbon metric table below summarises the indicators that underpin the reporting against the targets in our climate change goals.

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 or 15 funds received Green Star status. However, these processes do not in themselves provide enough information to assess all the climate related financial risks and we continue to work with our managers and the industry to explore effective solutions suitable for investing in private markets.

Financial Future Emissions from our combined listed equity portfolios

Financed Future Emissions (FFE) Metric	Baseline (2015 Benchmark)	2015	2016	2017	Relative Performance (2017 vs Baseline)	
Absolute FFE, Total (tCO ₂)	14,849,897	8,112,662	4,166,915	4,150,377	72.1%	
Of which coal (tCO ₂)	7,090,810	4,899,427	2,788,273	2,490,954	64.9%	
Of which O&G (tCO ₂)	7,759,087	3,213,235	1,378,642	1,659,423	78.6%	
FFE Intensity, Total (tCO ₂ /£m)	9,634	5,263	3,199	2,536	73.7%	
Of which coal (tCO ₂ /£m)	4,600	3,179	2,141	1,522	66.9%	
Of which O&G (tCO ₂ /£m)	5,034	2,085	1,059	1,014	79.9%	

⁹ '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.

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 benchmark¹⁰, 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.

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	2017 Benchmark	Relative Performance (2017 vs Benchmark)	
Carbon Emissions	Absolute Tonnes of Carbon (tonnes CO ₂ e)	394,451	276,981	265,638	463,242	42.7%	
	Carbon Footprint (tonnes CO ₂ e/GBPm revenue)	388	348	328	492	33.4%	
Disclosure Rate (Full and Partial)	Share of Scope 1 GHG emissions (%)	94%	92%	79%	90%	-12.9%	
Potential Stranded Assets	Exposure (£m)	32,153	15,558	21,329	49,955	57.3%	
	of which coal	7,635	3,825	4,656	10,335	54.9%	
Fossil Fuel Reserves	Financed Future Emissions (tonnes CO ₂)	8,112,662	4,166,915	4,150,377	12,665,883	67.2%	
	of which coal	4,899,427	2,788,273	2,490,954	5,730,043	56.5%	
	Exposure (£m)	20,536	9,152	13,617	34,848	60.9%	
	of which coal	3,204	1,050	1,119	3,251	65.6%	
Fossil Fuel Power Generation	Exposure (£m)	11,618	6,407	7,711	15,108	49.0%	
	of which coal	4,430	2,775	3,537	7,084	50.1%	
Renewable Power Generation	Exposure (£m)	5,121	8,425	9,069	3,923	131.2%	
Impact	Total Owned Revenue (£m)	1,008,775	832,957	810,332	940,973	13.9%	
	of which Fossil Fuels	39,328	23,249	15,576	31,745	50.9%	
	of which Coal Mining and Coal Power	10,470	6,257	3,754	7,605	50.6%	
	of which Fossil Fuel Power	10,763	6,374	6,527	12,387	47.3%	
	of which Coal Power	4,009	2,613	2,670	5,310	49.7%	
	of which Renewable Power	3,276	2,988	3,089	3,159	-2.2%	

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 (see sustainable equities pie chart above). 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 53% since 2008¹¹.** The chart below illustrates the combined carbon footprint of all our active equities against a standard industry benchmark, which itself improved by 13% from last year.

¹⁰ L&G GPBT MSCI World Low Carbon Target Index fund.

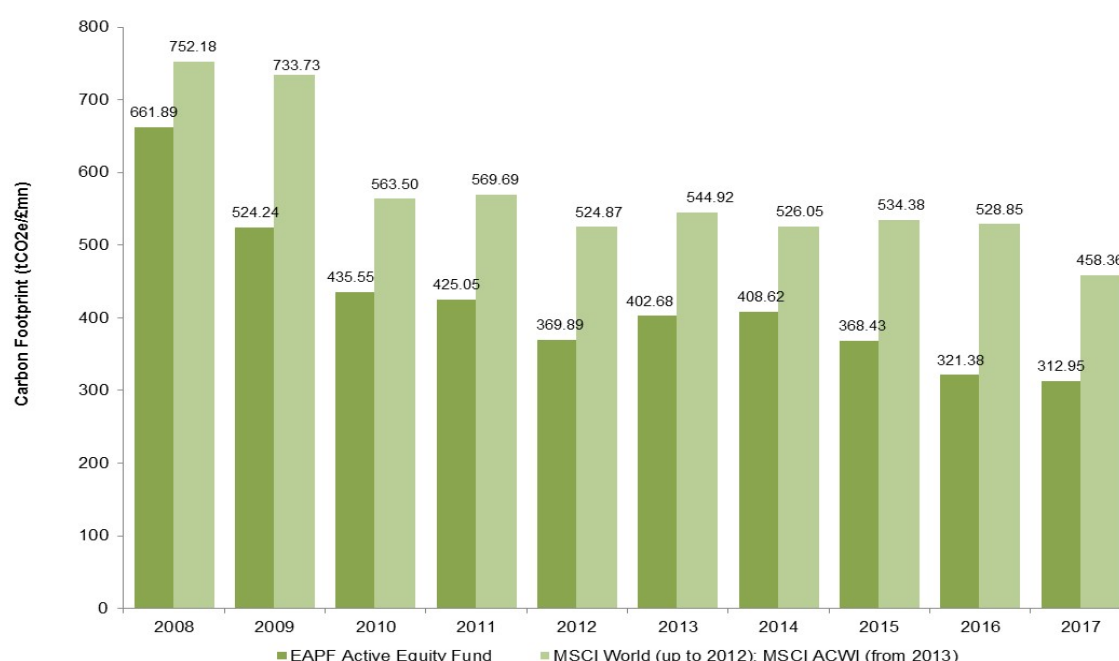
¹¹ 44% reduction in the carbon footprint of our combined active equities

We have also carbon footprinted our entire equity portfolio which is currently 33.41% more carbon efficient than our custom benchmark and our active bonds which is 25% more carbon efficient than our bond benchmark. A significant contributor to the fall in the relative carbon efficiency in our fixed income from last year can be attributed to a new entrant into the benchmark, Innogy SE, which has a strong renewable focus and demonstrates how such changes are having an impact on the benchmark carbon analysis.

So, in total, **we carbon footprint 70% 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 2008-2017



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 hope that our own disclosures, whilst not perfect, 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).

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 2016/17, the Fund's investments were based on the investment strategy agreed in 2015. This recognised that there was a case for reducing equity risk, but felt bonds, while low risk, were not attractive from a return perspective. It therefore created a high level allocation to diversifying growth assets. The investment strategy framework was modified to show a three way split between bonds, equities and diversifying growth assets, setting ranges for allocation to these areas. This allows flexibility while limiting risk.

Our allocation to diversifying growth assets consists of our continuing 12% allocation to real assets, a 5% allocation to growth fixed income, and a 5% allocation to private debt/illiquid credit. Growth fixed income strategies seek to exploit a wide range of specific opportunities while avoiding significant exposure to long term interest rates. Our exposure is through our holding of the Wellington Total Return bond fund.

Private debt/illiquid credit is a fairly new area which involves lending directly to companies and projects. The opportunity has been created by the withdrawal of banks from a lot 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 had already invested in two funds in this area, the Generation Credit Fund, and Bluebay Direct Lending UK Fund.

In 2016/17 we sought additional investments to meet our strategic target and provide diversification. In the autumn of 2016 we allocated to a new private debt fund run by Permira Debt Managers. This fund provides debt capital to small/medium sized companies in the UK and Europe. The manager takes the integration of ESG seriously and is a signatory of the Principles for Responsible Investment. We are looking to invest in further funds in this area during 2017/18 as we continue to believe is an interesting area and we are below our target allocation.

We have made further progress on our real assets portfolio (property, infrastructure, forestry and agriculture) although, because it takes time for suitable investments in real assets to be identified and then invested in, actual investment is slightly below target. However, investments and undrawn commitments now stand at £396m, or 12.1% of the Fund at year end with further investments already made in 2017/18. Despite a lot of demand from investors, we have found some good opportunities, partly through focusing on partnerships and innovative structures. Highlights have been our investments in Standard Life European Club III, targeting high quality commercial properties across Europe which are expected to increase in value through property enhancements and changing market dynamics, and in particular our first direct 'co-investment' – where we are investing directly alongside other investors – in a UK smart meter business, Calvin.

These new investments have been funded by reducing our exposure to equities. We reduced UK equities by £30m and passive global equities, by £25m – however, the pace of drawdowns was slightly reduced as a result of market uncertainty because of the EU referendum and the US elections.

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. We have also been actively engaged in exploring with the industry how we can ensure our exposure to ‘value’ equities is compatible with our low carbon ambitions. Discussions have been very positive and we are hopeful of progress in 2017/18.

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.

Fund benchmark

Based on the above strategy, the following strategic benchmark had been set for the Fund:

Asset Class	Benchmark Index	% Weight 2016/17	% Weight 2015/16
UK equities	FTSE All Share	5.0	7.0
Global equities	FTSE All World*	38.0	38.0
Emerging market equities	FTSE Emerging Markets	6.0	6.0
Index-linked gilts	FTSE-Actuaries UK Index-Linked Gilts over 15	8.5	9.0
Corporate bonds	iBoxx Sterling all non-gilt	21.0	21.0
Private equity	MSCI World	4.0	4.0
Real Assets	Retail Price Index	10.0	9.0
Private debt	3 month £ Libor	2.0	0.5
Total return bonds	3 month £ Libor	5.0	5.0
Cash	3 month £ Libor	0.5	0.5

* The benchmark is adjusted to allow for tax leakage in our equity investments by combining total return indices on the basis of 80% gross and 20% net.

Investment Performance

For the 2016/17 financial year the Fund achieved a very strong return of 19.6%. The key factors were the weakness of sterling after the Brexit vote, and strong equity market returns boosted by the signs of a broadening global economic recovery and a pro-business US President. The performance underlines the value of our unhedged equity approach: hedging the currency would have cost us over £100m in the year.

As we explained last year, we have taken several actions to reduce equity risk, and we warned that “the Fund may struggle to perform as well relative to benchmarks in strongly rising markets, although absolute returns would be good”. This is precisely what has happened: our benchmark return was even higher at 21.2% and the Fund underperformed by 1.6% over the year. This was primarily down to the fact that the Fund has chosen managers with a deliberately tilt towards low volatility, high quality companies, with a view to reducing downside risk and volatility. Several managers take a benchmark agnostic, long term, and absolute return approach. Thus we expect the Fund’s performance to lag in strongly rising markets, particularly when there is a focus on cheap stocks. This was exacerbated as sentiment actively shifted against the high quality and low volatility factors after good performance in previous years. More positively, there was no evidence that a material factor in the relative

underperformance was the Fund's strong tilt to low carbon and sustainable equities – our best performing managers were Generation and Impax, arguably our most sustainable.

Thus several of the managers that performed well last year, gave up many of those gains, although they are still ahead over the two years taken together - our low volatility managers, Robeco and Quoniam, our sustainable manager Ownership Capital, and our emerging market managers, First State and Comgest.

On the more positive note, Generation (sustainable global equities) performed very well again, this time in a more challenging year, and there was a welcome return to form at Royal London (UK Corporate bonds) who generated a good outperformance and are back to delivering in line with our expectations after a period of more mixed performance. Our real assets mandate with Townsend did very well, reflecting strong market conditions, but we need a longer time frame to evaluate this mandate properly. Most disappointing was the poor performance of Union (-9%), Wellington (-2.3%), and Standard Life (-4.8%) and addressing performance at these managers is a focus of attention.

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. The performance of our 'smart beta' allocations was reversed from last year with 'Low Volatility' underperforming, but 'Fundamental Value' added value, we still consider it valid long term.

The total return of the Fund over the year and over three years to 31 March 2017 is as follows:

Financial Performance	2017 %	2016 %
1 year		
Fund performance	+19.6	+2.3
Benchmark performance	+21.2	-0.3
Active fund relative performance	-1.6	+2.6
3 year		
Fund performance	+12.1	+8.3
Benchmark performance	+11.6	+6.0
Active fund relative performance	+0.5	+2.3

Details of financial performance by fund managers are available on pages 44 to 45.

Investment management

Responsibility for the day to day management of the Fund's investments has been allocated to 14 managers. Our investment managers are responsible for selecting individual investments, and operate at arm's length from the Fund, with full discretion over the management of their portfolios, subject to (for manager of segregated portfolios) complying with statutory limits and the Statement of Investment Principles and taking due regard of the Active Fund Responsible Investment policy and supplementary guidance, for example on environmental issues or voting. Each manager has been set a specific benchmark that reflects the asset class being managed, and in the case of segregated managers has a performance target they are aiming to achieve. Details of the managers, their benchmarks, targets and performance is available on pages 44 to 45.

We seek to work with our managers on a long term basis, as we believe this is the best way to achieve positive results for the Fund. We support the findings of the Kay review on long term decision making in investments. As our contribution to this discussion we reviewed our arrangements with managers, identifying where we may be recreating short term pressures on managers. To address these pressures, we developed a new standard investment management agreement for managers, and

supplemented it with a covenant laying out our expectations of managers and our commitment to managers more broadly. In particular, the covenant makes clear that we are more likely to be concerned about team instability or changes in approach than short term performance. We have published a paper on Long term Investing, available on our website.

We have not made any changes to our main managers this year, but have made some investments in illiquid assets of note. As discussed in private debt we invested £60m in the Permira Credit Solutions III fund. We made two investments in our Targeted Opportunities Portfolio: investing £15m in the Bridges Property Alternatives Fund IV, which invests in urban regeneration and redevelopment projects across the UK, with a strong focus on sustainability and social inclusion; and \$25m with Actis Fund IV, a UK based manager investing in clean and sustainable energy across the emerging markets. They have a comprehensive and broad approach to integrating the complexities of sustainability in these markets.

We continue to be very conscious of costs and value for money. The increase in investment management fees this year must be seen in this context. Our strategy changes, which involves us investing more directly in illiquid markets, has also resulted in a higher overall fee as these assets are more expensive to invest in and our more direct approach means we must account for their fees explicitly. To offset this, we continue to negotiate fee reductions or concessions with our managers. As part of this agenda we were pleased to make our first direct co-investment in our infrastructure mandate. Because co-investments are made directly they do not incur normal management fees and can be an effective way of reducing the high costs of investing in private markets.

Custody arrangements

The Northern Trust Company ('Northern Trust') acts as global custodian on behalf of the Fund's assets. All assets are held in the name of Nortrust Nominees. Where the assets held are unit linked insurance contracts or other collective investment vehicles, the underlying assets are held by the relevant insurance company or collective investment vehicle.

As part of its normal procedures Northern Trust holds all assets in safe custody, collects dividend income and interest, provides data for corporate actions, liaises closely with the investment managers and reports on all activity during the period.

Northern Trust is a strong company that is rated by Standard and Poor's as 'AA-' for long term / senior debt and 'A-1+' for short term / deposits. The Fund's assets are not held in the name of Northern Trust and so are segregated from those of Northern Trust, safeguarding them in the event of a failure by Northern Trust. Cash held by the Fund at Northern Trust in Sterling and United States dollars is invested in Northern Trust Global Cash Funds, which would not be affected in the event of a failure by Northern Trust. Only small amounts of cash are left on deposit at Northern Trust. The Northern Trust Global Cash Funds are rated 'Aaa-mf' by Moody's and are invested in short-term money instruments to preserve capital and liquidity. These cash funds are also closely monitored by Environment Agency Pension Fund officers.

Regular service reviews are held with Northern Trust to ensure continuous monitoring of service commitments. Other procedures and controls are reviewed by an independent reporting accountant in accordance with the American Institute of Certified Public Accountants Statement on Standards for Attestation Engagements No. 16 (SSAE 16) and in accordance with International Standard on Assurance Engagements 3402 (ISAE 3402).

Funding level

The funding level of the Active Fund is estimated to be 102% as at 31 March 2017, a 1% decline on the level from the result of the new triennial valuation at March 2016, but a 10% increase on the estimated value disclosed last year for March 2016 (based on the 2013 valuation).

The historical funding level and asset allocation for the last five triennial valuations are shown in the table below:

Valuation results	2004	2007	2010	2013	2016
Value of assets £m	983	1,521	1,589	2,118	2,730
Value of liabilities £m	1,050	1,455	1,684	2,351	2,641
Funding level %	94	105	94	90	103
Asset Allocation %					
Equities	71	67	58	63	52
Bonds	15	9	12	20	24
Gilts	7	14	15	9	10
Property	-	5	3	3	7
Private equity	-	2	5	4	4
Cash	7	3	7	1	3
Total	100	100	100	100	100

It is very important that it is recognised that the funding level will vary over different time periods, as the value of the Fund's assets changes, and the value of the Fund's liabilities is sensitive to financial and other assumptions used, as well as the maturity of the Fund. The Active Fund Funding Strategy recognises that the funding objective is to achieve and maintain assets equal to 100% or more of the present value of projected accrued liabilities over the long term. In the short term, recent events demonstrate that the funding level can be very sensitive to changes in the real yield on index linked gilts as well as to the level of the equity markets.

The Active Fund also has positive cash flows, as the employer and members' contributions should continue to exceed Fund outgoings, which gives the Fund time to build its Fund level. The future size of the Active Fund will also be affected by the long term return of the Fund's assets, which should be related to the amount of risk the Fund is prepared to take, as over the long term investing in riskier assets should yield higher returns.

Awards

Our team has received recognition from a number of quarters in 2016/17.

The Fund was ranked at number 2 in the World Index as part of the Global Climate 500 report and we have maintained our AAA rating for 4 years in a row.

The French Ministry of Environment and 2° investing initiative awarded the EAPF, the best reporting award for the assessment of climate risks and saw the Fund shortlisted at the Pension Age awards for Best Pension Scheme Communications.

The Fund also won 'Best approach to Responsible Investment' at the LGC Awards, maintaining its leadership in this area.

Dawn Turner, Chief Pension Officer, won the Local Government Chronicles (LGC) 'Officer of the year 2016' award. The LGC recognised Dawn's achievements on collaborative projects on asset pooling and her work on the Investment regulations, and Mark Mansley, Chief Investment Officer was ranked at 12 in a list of the Top 100 Key Individuals of 2016 related to outstanding contribution to his work on Infrastructure and Private markets.

The table below shows the performance of the total fund and the individual managers

Manager	Date appointed	Value at 31 Mar 2017 £m	Fund %	Asset class/ Mandate	Benchmark	2016/17 Performance				2015/16 Performance		
						Target %	Fund return %	Benchmark return %	Relative to benchmark %	Fund return %	Benchmark return %	Relative to benchmark %
Private equity & TOP												
Robeco	Oct-05	61.0	1.9	Private Equity (active segregated)	MSCI World (Gross)	+5.0	n/a	n/a	n/a	n/a	n/a	n/a
Targeted Opportunities Fund	Apr-14	39.6	1.2	Private Equity (active pooled)	Absolute Return 8.0% pa	+8.0	+5.7	+32.7	-27.0	-2.9	+0.3	-3.2
Listed equities												
Emerging markets equities												
Comgest	Nov-10	117.9	3.6	Emerging Markets equity (active segregated)	MSCI Emerging Market GDR	+3.0	+34.0	+35.2	-1.2	-7.8	-8.8	+1.1
Stewart	Oct-12	93.2	2.8	Emerging Markets Equity (active pooled)	MSCI Emerging Market GDR	>0	+29.8	+35.2	-5.5	-5.7	-9.1	+3.4
Global equities												
Robeco	Mar-13	153.7	4.7	Global Equity (low volatility - active segregated)	MSCI AC World GDR	>0	+25.5	+33.0	-7.5	+8.9	-0.7	+9.5
Quoniam	Mar-13	139.3	4.3	Global Equity (low volatility - active segregated)	85% MSCI AC World NDR (hedged to GBP) & 15% MSCI EM NDR (unhedged)	>0	+11.8	+19.5	-7.7	+5.9	-5.5	+11.4
Ownership Capital	Jun-14	133.9	4.1	Global Equity (active pooled)	MSCI Kokusai (World ex Japan) GD	+3.0	+26.9	+32.8	-5.9	+2.6	+0.7	+1.9
Generation	Aug-08	341.1	10.4	Global Equity (active segregated)	MSCI AC World (80% GD, 20% ND)	+3.0	+36.3	+32.8	+3.4	+7.9	-0.8	+8.6
Impax	Aug-08	101.5	3.1	Global Equity (active segregated)	MSCI AC World GDR	+3.0	+31.9	+33.0	-1.1	+7.5	-0.7	+8.2
Union	Mar-15	116.3	3.6	Global Equity (active segregated)	MSCI TR Gross World Sterling Index	+2.0	+23.7	+32.7	-9.0	+1.9	+0.3	+1.6
Legal & General	Feb-16	140.8	4.3	Global Equity (passive pooled)	FTSE RAFI 1000 Dev World	+0.0	+35.0	+35.1	-0.1			
Legal & General	Mar-15	252.1	7.7	Global Equity (passive pooled)	MSCI World Low Carbon Target	+0.0	+32.5	+32.7	-0.2	+0.4	+0.5	-0.1

UK Equities												
Standard Life	Mar-05	123.9	3.8	UK Equity (active segregated)	Customised FTSE All Share capped at 2%	+2.0	+15.6	+20.4	-4.8	-4.3	-2.9	-1.4
Diversifying Growth Assets												
Townsend	Mar-13	293.4	9.0	Real Assets (active segregated & pooled)	RPI (target RPI + 4% over rolling 5 years)	+4.0	+5.8	+3.1	+2.7	+9.4	+1.6	+7.8
Private Lending	Mar-15	47.8	1.5	Private Lending (active pooled)	3 Month Sterling LIBOR	+5.8	+9.4	+0.5	+8.9	+8.0	+0.6	+7.4
Wellington	Mar-15	148.7	4.5	GTR Bonds (active pooled)	3 Month Sterling LIBOR	+1.0	-1.8	+0.5	-2.3	+0.3	+0.6	-0.3
Bonds												
Corporate Bonds												
Royal London	Jul-07	291.8	8.9	Corporate Bonds (active segregated)	iBoxx £ Non Gilt all bonds	+1.3	+10.8	+9.2	+1.6	+0.3	+0.5	-0.1
Legal & General	Oct-15	317.4	9.7	Corporate Bonds (passive pooled)	iBoxx £ Non Gilt all bonds	+0.0	+8.6	+9.2	-0.6			
Index Linked Gilts												
Legal & General	Nov-09	333.9	10.2	UK Index Linked Gilts (passive seg)	FTSE Index Linked Gilt > 15 Year	+0.0	+26.1	+26.1	0.00	+2.4	+2.4	+0.0
Cash & Other												
Other net assets		25.7	0.8									
Total Fund		3,273.0	100.0		Strategic Benchmark	+0.9	+19.6	+21.2	-1.6	+2.3	-0.3	+2.6

Notes:

These performance numbers are based on mid price valuations and the performance relative to benchmark is shown as Fund return less Benchmark return (arithmetic basis).

No comparative figures are applicable for mandates appointed in 2015/16 which includes L&G RAFI Developed World 1000 & L&G Buy and Maintain Corporate Bonds.

Standard Life's benchmark is a customised index similar to the FTSE All Share Index but with constituent weights capped at 2%.

Robeco's Private Equity return is included in Total Fund performance but excluded from this table as it is measured differently to the main asset classes and managers above who manage over 97% of the Fund's assets.

Wellington use the Merrill Lynch 3-Month T-Bill Index hedged to £ as their benchmark but the 3 Month Sterling LIBOR benchmark is used for performance reporting purposes.

With effect from 1 April 2016 the Strategic Benchmark of the Fund was revised to:

5.0% FTSE All Share GD (UK Equities), 30.4% FTSE All World GD and 7.6% FTSE All World ND (Global Equities), 6% FTSE Emerging Markets GD (Emerging Markets) and 8.5% FTSE ILGs > 15 Years (ILGs), 0.5% 3m Sterling LIBOR (Cash) and 21% iBoxx Sterling All Non-Gilts (Bonds), 10% RPI (Real Assets), 4% MSCI World GD (Private Equity), 2% 3m Sterling LIBOR (Private Lending) and 5% 3 month Sterling LIBOR (Growth Fixed Income).

Portfolio analysis

Distribution of net investment assets by market value as at 31 March 2017

	Private Lending	Private Equity	UK Direct Equities	Overseas Equities including Pooled Equities						UK Fixed Interest	Overseas Fixed Interest	Pooled Fixed Interest	Pooled Property & Infrastructure	Cash	Other net investments including Derivatives	£m Total
				North America	Europe (exc Uk)	Emerging Markets & other areas	Asia Pacific (exc Japan)	Japan	Total							
Legal & General			24.0	234.2	75.4	0.2	21.0	37.9	368.7	333.9		317.4			0.3	1,044.3
Generation			11.4	221.2	35.5	42.5	14.1		313.3					12.4	4.1	341.1
Townsend		35.0											232.5	25.8	0.1	293.4
Royal London										203.0	75.1	7.4		1.7	4.6	291.8
Robeco LV			9.0	83.6	22.6	16.2	17.2	3.7	143.4					0.8	0.5	153.7
Wellington												148.7				148.7
Quoniam			5.3	67.5	18.0	21.1	6.4	17.1	130.1					5.2	(1.3)	139.3
Ownership				91.0				41.6	132.6					3.0	(1.7)	133.9
Standard Life			122.7											0.3	0.9	123.9
Comgest				1.1		100.2	14.0		115.3					2.4	0.2	117.9
Union			4.5	80.7	23.9			6.2	110.8					0.6	0.4	116.3
Impax			7.9	43.1	24.8	14.2	4.3	4.8	91.1					2.2	0.2	101.5
Stewart Investors			7.4		1.4	71.4	1.4	3.2	77.4					8.3		93.2
Robeco PE		58.0												3.1		61.1
Illiquid Credit	47.7															47.7
Targeted Opps		39.5												0.1		39.6
Cash & Other														24.3	0.1	24.4
Derivatives															1.2	1.2
£m Total	47.7	132.5	192.2	822.5	201.7	265.8	78.4	114.4	1,482.7	536.9	75.1	473.5	232.5	90.2	9.6	3,273.0
% of Fund	1.5	4.0	5.9	25.1	6.2	8.1	2.4	3.5	45.3	16.4	2.3	14.5	7.1	2.8	0.3	100.0

Note: May not add up exactly due to roundings

Top 20 holdings of the Fund as at 31 March 2017

Holding	Asset Class	2017	
		£m	% of Fund
L&G TSDD Buy & Maintain Corporate Bonds Fund	Pooled fixed interest - Overseas corporate bonds	317.4	9.7
L&G GPBT MSCI World Low Carbon Target Index Fund	Pooled equities - Global	252.0	7.7
Wellington Global Total Return Bond IV GBP T Acc Fund	Pooled fixed interest - Overseas corporate bonds	148.7	4.5
L&G GPAE FTSE RAFI Developed 1000 Equity Index Fund	Pooled equities - Global	140.7	4.3
Ownership Capital Global Equity Fund Class A	Pooled equities - Global	133.9	4.1
Stewart Investors Global Emerging Markets Sustainability Fund	Pooled emerging markets equity	93.2	2.8
Carbon Workplace Trust	Property - Real estate equity trust	27.3	0.8
UK Government 1.25% index-linked 22/11/55	Fixed interest - UK index linked gilts	26.7	0.8
Cerner Corporation	Direct equity	25.7	0.8
Generation IM Credit Feeder Fund III LP	Private Lending - Partnerships	25.6	0.8
UK Government 0.125% index-linked 22/03/68	Fixed interest - UK index linked gilts	25.4	0.8
Microsoft Corporation	Direct equity	25.1	0.8
UK Government 0.375% index-linked 22/03/62	Fixed interest - UK index linked gilts	25.0	0.8
UK Government 1.125% index-linked 22/11/37	Fixed interest - UK index linked gilts	21.8	0.7
UK Government 0.5% index-linked 22/03/50	Fixed interest - UK index linked gilts	21.8	0.7
UK Government 0.75% index-linked 22/11/47	Fixed interest - UK index linked gilts	21.8	0.7
UK Government 0.625% index-linked 22/03/40	Fixed interest - UK index linked gilts	21.3	0.7
Union Investment Lux SA Quoniam Select Em Markets Min Risk	Equities - Emerging Markets	21.1	0.6
UK Government 0.125% index-linked 22/03/44	Fixed interest - UK index linked gilts	20.6	0.6
Bridges Property Alternative Fund III LP	Private equity - partnerships	20.5	0.6
Total		1,415.6	43.3

Top 20 holdings of the Fund as at 31 March 2016

Holding	Asset Class	2016	
		£m	% of Fund
L&G TSDD Buy & Maintain Corporate Bonds Fund	Pooled fixed interest - Overseas corporate bonds	271.4	10.0
L&G GPBT MSCI World Low Carbon Target Index Fund	Pooled equities - Global	220.1	8.1
Wellington Global Total Return Bond IV GBP T Acc Fund	Pooled fixed interest - Overseas corporate bonds	150.9	5.5
Ownership Capital Global Equity Fund Class A	Pooled equities - Global	105.6	3.9
L&G GPAE FTSE RAFI Developed 1000 Equity Index Fund	Pooled equities - Global	104.2	3.8
Stewart Investors Global Emerging Markets Sustainability Fund	Pooled emerging markets equity	71.8	2.6
Carbon Workplace Trust	Property - Real estate equity trust	26.4	1.0
Generation IM Credit Feeder Fund III LP	Private Lending - Partnerships	25.0	0.9
Bridges Property Alternative Fund III LP	Private Equity - Partnerships	22.7	0.8
UK Government 1.25% index-linked 22/11/55	Fixed interest - UK index linked gilts	22.6	0.8
UK Government 0.375% index-linked 22/03/62	Fixed interest - UK index linked gilts	20.1	0.7
UK Government 1.125% index-linked 22/11/37	Fixed interest - UK index linked gilts	19.9	0.7
UK Government 0.125% index-linked 22/03/68	Fixed interest - UK index linked gilts	19.1	0.7
Union Investment Lux SA Quoniam Select Em Markets Min Risk	Equities - Emerging Markets	18.8	0.7
UK Government 0.75% index-linked 22/11/47	Fixed interest - UK index linked gilts	18.6	0.7
UK Government 0.625% index-linked 22/03/40	Fixed interest - UK index linked gilts	18.5	0.7
UK Government 0.5% index-linked 22/03/50	Fixed interest - UK index linked gilts	18.5	0.7
UK Government 1.25% index-linked 22/11/32	Fixed interest - UK index linked gilts	17.8	0.7
UK Government 0.125% index-linked 03/44	Fixed interest - UK index linked gilts	17.6	0.6
UBS Global Asset Management (UK) Triton Property Unit Trust B	Property - Real estate equity trust	17.5	0.6
Total		1,207.1	44.2

Geographical distribution of quoted and pooled equity investments

Geographical distribution	2017		2016	
	£m	% of total equity	£m	% of total equity
North America	822.5	49.1	641.4	46.8
Emerging Markets and other areas	265.8	15.9	193.4	14.1
Europe (excluding UK)	201.7	12.0	204.7	14.9
United Kingdom	192.2	11.5	202.5	14.8
Japan	114.4	6.8	64.2	4.7
Asia Pacific (excluding Japan)	78.4	4.7	64.1	4.7
Total	1,675.0	100.0	1,370.3	100.0

Top 10 global equities by sector

Sectors	2017	% of Fund	Sectors	2016	% of Fund
	£m			£m	
Technology	179.1	5.5	Technology	143.1	5.2
Industrial Goods & Services	150.5	4.6	Industrial Goods & Services	138.1	5.1
Healthcare	140.7	4.3	Healthcare	92.9	3.4
Personal & Household Goods	63.5	1.9	Insurance	53.6	1.9
Insurance	61.8	1.9	Personal & Household Goods	50.8	1.8
Financial Services	49.3	1.5	Telecommunications	48.8	1.8
Retail	49.1	1.5	Retail	46.7	1.7
Utilities	48.3	1.5	Utilities	42.5	1.6
Banks	43.6	1.3	Financial Services	40.2	1.5
Telecommunications	43.0	1.3	Banks	29.9	1.1
Total	828.9	25.3	Total	686.6	25.1

Note: The relative movements in this table are largely due to market movements from global economic conditions rather than any shift in strategic investment.

Top 20 direct equity holdings

Company	Country	2017 £m	% of Fund	Company	Country	2016 £m	% of Fund
Cerner Corporation	United States	25.7	0.8	Microsoft Corporation	United States	16.8	0.6
Microsoft Corporation	United States	25.1	0.8	Ingersoll-Rand PLC	United States	13.0	0.5
Taiwan Semiconductor Manufacturing Co Ltd	Taiwan	19.2	0.6	Linear Technology Corporation	United States	11.9	0.4
Alphabet Inc	United States	16.1	0.5	Qualcomm Inc	United States	11.4	0.4
CSL Limited	Australia	14.1	0.4	Cerner Corporation	United States	10.8	0.4
Unilever	Netherlands	13.7	0.4	Deere & Co	United States	10.2	0.4
Thermo Fisher Scientific Inc	United States	12.2	0.4	Check Point Software Tech.	United States	10.0	0.4
Mastercard Inc	United States	11.5	0.4	Waters Corp	United States	8.6	0.3
Ingersoll-Rand PLC	United States	10.8	0.3	Tencent Holdings Limited	China	8.0	0.3
Acuity Brands Inc	United States	10.5	0.3	Alphabet Inc	United States	7.3	0.3
Deere & Co	United States	10.5	0.3	Ansys Inc	United States	6.6	0.3
Ansys Inc	United States	9.6	0.3	T Rowe Price Group Inc	United States	6.4	0.2
Jones Lang LaSalle Inc	United States	9.6	0.3	Mastercard Inc	United States	6.3	0.2
Facebook Inc	United States	9.0	0.3	Akamai Technologies Inc	United States	6.2	0.2
Water Corp	United States	8.5	0.3	Taiwan Semiconductor Manufacturing Co Ltd	Taiwan	6.2	0.2
Hargreaves Lansdown PLC	United Kingdom	8.1	0.2	DS Smith PLC	United Kingdom	6.1	0.2
Delphi Automotive PLC	United States	7.6	0.2	Reckitt Benckiser Group PLC	United Kingdom	5.9	0.2
Tencent Holdings Ltd	China	7.4	0.2	CSL Limited	Australia	5.8	0.2
Sensata Technologies Holding NV	United States	7.0	0.2	BT Group PLC	United Kingdom	5.7	0.2
Becton Dickinson and Co	United States	6.8	0.2	Vodafone Group PLC	United Kingdom	5.5	0.2
Total		243.0	7.4			168.7	6.1

Note: These figures are active positions only, as overseas index stocks are pooled. 'Country' is country of listing.

Pension Fund administration

Administration arrangements

The Environment Agency Pension Fund (EAPF) is responsible for administering the current and future pension benefits for over 24,900 members of the Active Pension Fund.

While the Committee provides strategic direction and regular oversight, day to day pension Fund administration is delivered through our third party pension administrator, Capita Employee Benefits (a subsidiary of Capita Group Plc). We do this because it involves specialist knowledge, complex activity and significant investment in IS/IT which is considered beyond the core business of the Environment Agency.

The breadth and volume of work delivered by Capita is significant, and includes administering members' historical records, handling all Fund members' queries, distributing newsletters and annual benefit statements, issuing monthly pension payslips, making lump sum and pension payments, fraud prevention and debt collection, undertaking all HMRC returns, producing audited annual accounts for Parliament, provision of LGPS technical advice and a wide range of other tasks.

Performance measurement

The Committee measures the performance of Capita through monthly, quarterly and annual reports showing progress against the contractual Service Level Agreement (SLA). The perspectives by which the Committee assesses the performance include accuracy, timeliness, quality, helpfulness, feedback, service improvements and complaints.

We would like to express our thanks to Capita for resolving 27,295 Active and Closed Fund member requests/queries and for paying pensions to over 6,400 Active Fund pensioners. Over the year, Capita achieved the required service levels for 99% of all casework processed.

The 5 largest case types processed by Capita for the Active Pension Fund during 2016/17 were:

Case type	2017	2016
Joiners	1,152	509
Retirement estimates	892	468
Leavers with deferred pensions	470	392
Retirements	487	387
Transfers out of the Fund	357	188

Active Fund administration costs for the year to 31 March 2017 were £720k (2016: £523k) including member communications and postage costs. Additionally this year the Fund incurred higher costs for Capita to perform GMP reconciliations. We benchmark our Fund administration costs annually through the public accounting body CIPFA. For 2015/16 the CIPFA average was £19 per member. Across both Active and Closed Funds, our average cost for 2015/16 was £22 per member.

The total number of staff allocated by Capita to the EAPF administration contract is 24, of which 14 deal solely with pension benefits administration. Based on a membership of 39,529 across both the Active and Closed Funds at 31 March 2017, this represents an average of 2,824 members per administrator. The CIPFA LGPS average for 2015/16 was 4,025 members per administrator.

We take a value for money approach looking for appropriate balance between cost, service and quality in pension administration delivery. For example, in all 9 industry standard performance indicators measured by CIPFA for 2015/16, we achieved 99% compared to the average of 70% to 94% across the range of those indicators. The CIPFA 2016/17 figure will not be available until October 2017.

Internal controls

The EAPF system of internal controls is based on an ongoing process designed to identify and prioritise the risks to the achievement of the Fund's policies, aims and objectives, to evaluate the likelihood of those risks being realised and the impact should they be realised, and to manage them efficiently, effectively and economically.

The system of internal control has been in place in the Environment Agency and in the operation of the Fund for the year ended 31 March 2017, in accordance with LGPS and Treasury guidance and best practice.

Two independent reviews by Environment Agency Internal Audit on the adequacy and effectiveness of internal controls and Pension Fund Risks were conducted in accordance with Government Internal Audit Standards during the year.

The Pension Fund compliance audit concluded that we complied fully with the provisions of the Pensions Schedule of the Financial Memorandum and, with one exception, compliant with the requirements from the Pensions Regulator's public sector Code of Practice.

The one exception was in relation to the delivery of our contributing member annual pension benefit statements outside of the prescribed timescales in the LGPS Regulations. We reported ourselves to the Pensions Regulator for this breach. We are undertaking a detailed lessons learned project with all relevant parties to ensure we issue our 2017 statements in a timely manner. The Pensions Regulator is not taking any further action on this matter at this time.

The Risk audit also produced positive feedback on our risk management process and the application of our mitigating actions.

Data quality

Good quality data is vital to the efficient and accurate payment of retirement benefits and general administration of the Active Pension Fund. This is achieved primarily through the use of electronic interfaces between Fund employers and Capita on a weekly and monthly basis. Guidance issued by the Pensions Regulator (tPR) recommends that the Fund regularly assess the quality of EAPF member data.

Common data is defined by tPR as the key data items that are essential to the identification of the member's identity and are common to all schemes including items such as National Insurance number, surname, gender and address. The guidance recommends that Common data is 95% complete (in compliance with the tests specified by tPR) for data created prior to June 2010 and 100% for new data post June 2010.

Data quality testing is carried out for the Active Fund annually and a certificate issued reflecting compliance with tPR guidance. We expect the 2017 certificates to be available during June 2017. The latest available results from our 2016 certificates showed our post June 2010 data as 99%, with pre June 2010 data at 96%. The missing data for both categories relates to members moving house and not informing our administrators. We are carrying out an exercise to trace these members and will update their records accordingly.

More member specific data called 'Conditional data' has also been reviewed with positive results and both these tPR data checks are tested on a regular basis.

Data security

The Environment Agency Pension Fund and Pensions Committee take data security very seriously. Ownership and accountability for the transmission of employees' pensions related data to Capita is assigned to the human resources and payroll functions of our employers. This is mainly through the secure transmission of monthly and weekly electronic data interface files.

Capita hold member data in line with the requirements of the Data Protection Act and complies with the Cabinet Office Security Policy Framework. All Capita employees are required to undertake annual data protection training which covers 'Personal Data' and actions required to protect this data.

Capita are managing Information security and cyber risks through adherence to Capita Group policy requirements and Baseline Information Security Standards.

National Fraud Initiative/mortality checks

The Fund has a formal policy and procedure for handling fraud linked to the unreported deaths of pensioners. As part of this policy it participates in the Audit Commission's biennial National Fraud Initiative (NFI) and undertakes life certificate exercises for pensioners who live overseas. In addition, from November 2012 monthly mortality screening has been implemented to help reduce overpaid pensions and potential fraud.

As a general principle, where we investigate cases and fraud is suspected, we will pursue the case and will seek to agree a repayment plan or, if necessary, take legal action or involve the police. Our monthly mortality checks are in place to help reduce potential fraud on the Fund. There are no reported cases for 2016/17.

Communications

To read our full Communications Policy Statement please see annex 6. The Fund continues to develop and enhance its communication program which started with the introduction of an easily recognisable brand and writing style. This was aligned to a totally restructured website using rich media (which included the use of calculators, flowcharts and audio and visual presentations) to help enhance member experience and encourage regular use.

Both our public facing website and self-service facility, EAPF Online are 'device enabled' which means they allow users to access information on any mobile phone or tablet in an easily readable format, so our members can look up information or access tools at a time of their choosing.

Following last years' customer surveys we were able to establish a view on how our members prefer to communicate and interact with the Fund.

The first improvement involved a change of emphasis in our member webinars so that the sessions were shorter and topic based introducing new tailored sessions on Investment and for a specific category of employees, former HMIP members.

The sessions this year were supported by newsletter, a poster campaign, an E Shot and promotion through our Fund employers' internal communication channels. The EAPF has successfully transitioned to using webinars. It provides an opportunity for all members to participate and helps those who are unable to make the time commitment or can't get to a location depending on where they are based.

Introducing webinars allows us to:

- Reach a wider audience nationwide
- Remove the need for travel and time out of the office
- Deliver more sessions based on demand and more choice

All topics are recorded and the recorded presentation slides are made available on our website.

Completion of this year's Contributing member webinars saw us deliver 18 sessions to 753 members, with a number of topic based sessions for New starters, Investment, Increasing benefits, former HMIP and pre-retirement. This year's pre-retirement session switched emphasis from explaining scheme rules to 'planning and taking control of retirement'. The Investment sessions were also the first of their kind, and survey responses were very positive, demonstrating an appetite for more information from members, and high satisfaction levels.

Of the attendees who provided feedback (32%), the majority gave really positive feedback about both the content (96%) and the presentation style (99%). Perhaps the most revealing aspect of the exercise was that 96% of respondents would attend future webinars and 94% would recommend to colleagues. 90% felt their learning objectives had been met.

As part of our long term strategy, 2016/17 saw us continue our move to digital communications by analysing our pension data for the purpose of segmenting our members into 5 recognisable groups so that we could improve the way we engage, and the relevance of the contact. The profiles created are also used to help create easier navigation on our public website.

Our groups are:

- Spontaneous spender – adventure
- Pension sceptic – protection
- Assured saver – relaxed
- Responsible worrier – detail and focus
- Mature planner – companionship

We have been testing a number of 'E Shots' using different imagery, and messaging with our segmentation groups to establish preferences. We have started to send out specific segmented messages to the 5 main groups. Each communication has a 'call to action' (CTA) which may be to complete a form, or to click and watch a video etc. We are able to monitor how many messages are sent, how many are opened and how many complete the CTA, and this information is then shown in our Communication dashboard.

We'll monitor the feedback from members carefully, and will continue to collate responses to enable us to focus our messaging.

We introduced an online Self Service calculator in 2014/15 which allows members to model different retirement ages and pensions taking account of the complex protections and reductions within the Scheme. Our members told us that they still felt they needed to understand the '85 year rule' and so, this year we introduced a flowchart showing how the '85 year rule' protections would impact a member and promoted this through our newsletters and internal communications. We then shared these flowcharts with our Fund employers – HR practitioners who were able to test the content with employees. When we were satisfied that the charts worked, we then created a 85 year rule checker tool on our public website, which allows users to just click through yes/no answers to arrive at their protection status. The tool has been well received and used by 10% of our active membership and has led to a reduction in queries to the Pension helpdesk.

Further details on our publications and other services from the Fund can be found at www.eapf.org.uk

Complaints

The Fund has a formal process for dealing with complaints. The Committee defines a 'complaint' as any expression of oral or written dissatisfaction from members, the EAPF, its employer(s) and/or third parties, with regard to how a service has been carried out.

In addition, the Internal Dispute Resolution Procedure (IDRP) is a formal two stage procedure for settling disputes under the Local Government Pension Scheme (Administration) Regulations 2008 (as amended).

At Stage 1 the dispute will be reviewed by a person nominated by the Environment Agency to investigate complaints regarding decisions made under LGPS regulations, known as the 'specified person'. If you disagree with the Stage 1 decision you can apply to Stage 2 where the dispute will be reviewed by a representative of the Administering Authority. If you still cannot agree with the decision you can apply to the Pensions Ombudsman who will make a binding decision and who has the power to award compensation if he feels this is justified.

In 2016/17 Capita received 26 (8 for 2015/16) formal complaints from Active Fund members and these have all been resolved. There were three IDRP cases on the Active Fund raised during the year and one case went to the Pensions Ombudsman.

Foreword to the financial statements

The EAPF is a statutory public service pension scheme (as defined by the Pension Schemes Act 1993) under the Local Government Pension Scheme Regulations 2013 (as amended), the Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014 and earlier regulations (saved provisions).

The LGPS was contracted out of the State Earnings Related Pension Scheme (SERPS) and later the State Second Pension (S2P) until 5 April 2016, meaning it provides provides benefits that are as good as most members would receive if they had been in the SERPS/S2P. Full tax relief is granted on both members' and the Environment Agency's contributions paid to the Fund.

Roles and responsibilities of the Pensions Committee

With a membership of nominated Environment Agency Board members, senior officers, member nominees, a pensioner member nominee and a deferred member nominee, the Committee (which is a sub-committee of the Environment Agency Board) has been delegated the responsibility for Fund matters. It receives advice from its external advisers and is charged with appointing managers and agents required for the effective management of the duties outlined below.

The Committee and Accounting Officer is responsible for obtaining audited financial statements for each financial year which give a true and fair view of the financial transactions of the Fund and the disposition of its assets and liabilities at the year end, other than the liabilities to pay pensions and benefits after the scheme year end. In preparing the financial statements the Committee has:

- Selected suitable accounting policies and then applied them consistently.
- Made judgments and estimates that are reasonable and prudent.
- Followed applicable accounting standards, in particular the CIPFA guidance on narrative reporting and accounting disclosures for LGPS Funds.

The Committee and Accounting Officer are responsible for keeping proper accounting records which disclose, with reasonable accuracy, at any time, the financial position of the Fund and to enable it to ensure that the financial statements comply with Schedule 7 to the Financial Memorandum issued by Defra. However, responsibility for the regulations governing the LGPS lies with the Local Government Pensions Unit at DCLG.

The Committee and Accounting Officer are responsible for keeping records of contributions received in respect of active members of the Fund and for ensuring that contributions are made to the Fund in accordance with the Pensions Act 1995, the 2008 regulations and with the recommendations of the Consulting Actuary.

The Committee and Accounting Officer are also responsible for safeguarding the assets of the Fund and hence for taking reasonable steps for the prevention and detection of error, fraud and other irregularities. This Annual Report and Financial Statements is available on the Pension Fund's website and the Environment Agency's website. The maintenance and integrity of the website is the responsibility of the Environment Agency. The work carried out by the Auditor and the Scheme Administrator does not involve consideration of these matters. Accordingly, the Auditor accepts no responsibility for any changes that may have occurred to the information contained in the financial statements since they were initially presented on the websites. Legislation in the United Kingdom governing the preparation and dissemination of the financial statements and other information included in annual reports may differ from legislation in other jurisdictions.

Summary of the financial statements

The financial statements have been prepared on a market value basis.

Contribution income has risen by £3.8m to £94.9m (2016: risen by £4.2m to £91.1m). The increase for the year ended 31 March 2017 was due, in the main, to a higher level of additional amounts paid in respect of early retirements, along with an increase in the normal employer and employee contributions due to an increase in active membership. The 12 months ending 31 March 2017 have seen a 4.4% increase in total Fund membership (2016: increase of 2.4%).

Net income from all transfer values received in the year has decreased by £0.5m to £3.8m (2016: increased by £1.9m to £4.3m). The small decrease is due to slightly fewer members transferring their funds from previous arrangements during this financial year. Retirement benefits and other payments made to or in respect of members during the year have increased by £6.7m to £84.4m (2016: increased by £1.5m to £77.7m). This is primarily due to an increase in retirements and dependants' pensions paid this year.

The net assets of the Fund as at 31 March 2017 have increased by £545m to £3,274m (2016: increased by £73m to £2,730m). This is primarily due to an increase in the market value of its investments under management.

In order to comply with Regulation 4(2)(b) of the Pension Scheme (Management and Investment Funds) Regulation 2009, Additional Voluntary Contributions (AVCs) paid and the AVC assets are not included in the Fund's accounts.

The value of the AVCS is disclosed for information purposes in Note 21 on page 89.

Statement by the Consulting Actuary

Environment Agency Active Fund ('the Fund') Actuarial Statement for 2016/17

This statement has been prepared in accordance with Regulation 57(1)(d) of the Local Government Pension Scheme Regulations 2013. It has been prepared at the request of the Administering Authority of the Fund for the purpose of complying with the aforementioned regulation.

Description of Funding Policy

The funding policy is set out in the administering authority's Funding Strategy Statement (FSS), dated March 2017. In summary, the key funding principles are as follows:

- ensure that sufficient resources are available to meet all benefits as they fall due for payment;
- recover any shortfall in assets, relative to the value of accrued liabilities, over broadly the future working lifetime of current employees;
- enable employer contributions to be kept as stable as possible and at a reasonable cost, whilst achieving and maintaining fund solvency, which should be assessed in light of the risk profile of the fund and the risk appetite of the administering authority and employers;
- manage the employers' liabilities effectively; and
- maximise the returns from investments within reasonable risk parameters.

The FSS sets out how the administering authority seeks to balance the conflicting aims of securing the solvency of the Fund and keeping employer contributions stable. For both principal employers, contributions have been stabilised to return their portion of the Fund to full funding over 20 years if the valuation assumptions are borne out. Asset-liability modelling has been carried out which demonstrates that if these contribution rates are paid and future contribution changes are constrained as set out in the FSS, there is around a 75% chance that the Fund will be fully funded after 20 years.

Funding Position as at the last formal funding valuation

The most recent actuarial valuation carried out under Regulation 62 of the Local Government Pension Scheme Regulations 2013 was as at 31 March 2016. This valuation revealed that the Fund's assets, which at 31 March 2016 were valued at £2,730 million, were sufficient to meet 103% of the liabilities (i.e. the present value of promised retirement benefits) accrued up to that date. The resulting surplus at the 2016 valuation was £89 million.

Each employer had contribution requirements set at the valuation, with the aim of achieving full funding within a time horizon and probability measure as per the FSS. Individual employers' contributions for the period 1 April 2017 to 31 March 2020 were set in accordance with the Fund's funding policy as set out in its FSS.

Principal Actuarial Assumptions and Method used to value the liabilities

Full details of the methods and assumptions used are described in the 2016 valuation report.

Method

The liabilities were assessed using an accrued benefits method which takes into account pensionable membership up to the valuation date, and makes an allowance for expected future salary growth to retirement or expected earlier date of leaving pensionable membership.

Assumptions

A market-related approach was taken to valuing the liabilities, for consistency with the valuation of the Fund assets at their market value.

The key financial assumptions adopted for the 2016 valuation were as follows:

Financial Assumptions	31 March 2016	
	% p.a. Nominal	% p.a. Real
Discount Rate	3.8	2.0
Salary increase assumption	2.1	0.3
Benefit increase assumption (CPI)	1.8	-

The key demographic assumption was the allowance made for longevity. The life expectancy assumptions are based on the Fund's VitaCurves with improvements in line with the CMI 2013 model, assuming the current rate of improvements has reached a peak and will converge to a long term rate of 1.25% p.a. Based on these assumptions, the average future life expectancies at age 65 are as follows:

Pensioners	Males	Females
Current pensioners	22.6 years	24.4 years
Future pensioners*	24.3 years	26.7 years

*Aged 45 as at 2016 valuation.

Copies of the 2016 valuation report and Funding Strategy Statement are available on request from the Administering Authority to the Fund.

Experience over the period since 31 March 2016

Since the last formal valuation, real bond yields have fallen placing a higher value on the liabilities. The effect of this has been broadly offset by strong asset returns. Both events have roughly cancelled each other out in terms of the impact on the funding position as at 31 March 2017, which is estimated to be 102%.

The next actuarial valuation will be carried out as at 31 March 2019. The Funding Strategy Statement will also be reviewed at that time.



Richard Warden
Fellow of the Institute and Faculty of Actuaries
For and on behalf of Hymans Robertson LLP
22 May 2017

The Certificate and Report of the Comptroller and Auditor General to the Houses of Parliament, the Board of the Environment Agency and the Secretary of State for Environment, Food and Rural Affairs

I certify that I have audited the financial statements of the Environment Agency Active Pension Fund for the year ended 31 March 2017 under the Environment Act 1995. These comprise the Fund Account, the Net Assets Statement and the related notes. These financial statements have been prepared under the accounting policies set out within them.

Respective responsibilities of the Accounting Officer of the Environment Agency, the Pensions Committee and the auditor

As explained more fully in the section entitled roles and responsibilities of the Pensions Committee, the Accounting Officer and the Pensions Committee are responsible for preparing the financial statements and for being satisfied that they give a true and fair view. My responsibility is to audit the financial statements in accordance with relevant legal and regulatory requirements. I conducted my audit in accordance with International Standards on Auditing (UK and Ireland). Those standards require me and my staff to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Fund's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Department; and the overall presentation of the financial statements. In addition I read all the financial and non-financial information in the annual report to identify material inconsistencies with the audited financial statements. If I become aware of any apparent material misstatements or inconsistencies I consider the implications for my certificate.

I am required to obtain evidence sufficient to give reasonable assurance that the expenditure and income reported in the financial statements have been applied to the purposes intended by Parliament and that the financial transactions conform to the authorities which govern them.

Opinion on Regularity

In my opinion, in all material respects, the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and conform to the authorities which govern them.

Opinions on the financial statements

In my opinion:

- the financial statements show a true and fair view of the financial transactions of the Fund during the year ended 31 March 2017, and of the amount and disposition at that date of its assets and liabilities; and
- the financial statements have been properly prepared in accordance with Schedule 7 to the Environment Agency Financial Memorandum issued by Defra, in accordance with the Local Government Pension Scheme Regulations 1997, the Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 (as amended) and other related LGPS regulations and guidance.

Report

I have no observations to make on these financial statements.

Amyas C E Morse
Comptroller and Auditor General
National Audit Office
157-197 Buckingham Palace Road
Victoria
London
SW1W 9SP

Date: 6 July 2017

Financial statements for the year ending 31 March 2017

	Notes	2017 £000	2016 £000
Fund account			
Contributions and transfers			
Contributions	7	94,858	91,085
Transfer values received	8	3,785	4,326
		98,643	95,411
Benefits and other payments			
Benefits payable	9	(84,445)	(77,738)
Payments to and on account of leavers	10	(2,625)	(2,564)
		(87,070)	(80,302)
Net additions from dealings with members		11,573	15,109
Management expenses	11	(21,536)	(16,632)
Return on investments			
Investment income	12	45,049	41,614
Taxes on income	13	(1,271)	(1,094)
Profit and loss on disposal of investments and changes in the market value of investments	14a	510,822	34,428
		554,600	74,948
Net returns on investments		554,600	74,948
Net increase in the Fund during the year		544,637	73,425
Opening net assets of the Fund at 1 April		2,729,536	2,656,111
Net assets of the Fund at 31 March		3,274,173	2,729,536

Net assets statement	Notes	2017 £000	2016 £000
Investment assets	14c	3,285,634	2,737,258
Investment liabilities	14c	(12,668)	(5,918)
Net investment assets		3,272,966	2,731,340
Current assets	19	12,603	10,975
Current liabilities	20	(11,396)	(12,779)
Net assets of the Fund at 31 March		3,274,173	2,729,536

The financial statements summarise the transactions and net assets of the Fund. The financial statements do not take account of liabilities to pay pensions and other benefits that fall due after the end of the Scheme year. The actuarial position of the Fund, which does take account of such liabilities, is dealt with in the statement by the Consulting Actuary on page 57 and these financial statements should be read in conjunction with it. The Actuary's statement dated 22 May 2017 is based on a valuation as at 31 March 2016. The notes on pages 63 to 89 form part of these financial statements.



Dr. Clive Elphick
Chairman
Environment Agency Pensions Committee
28 June 2017



Sir James Bevan
Accounting Officer
Environment Agency
28 June 2017

Notes to the financial statements

1. Description of the Fund

The Environment Agency Active Pension Fund is part of the Local Government Pension Scheme and is administered by the Environment Agency. The Environment Agency is the reporting entity for this pension fund. The Fund is overseen by the Environment Agency Pension Fund Committee.

The following description is a summary only. For more detail, reference should be made to the Funding Strategy Statement (Annex 2).

General

The Fund is governed by the Superannuation Act 1972. The Fund is administered in accordance with the following secondary legislation:

The Local Government Pension Scheme Regulations 2013 (as amended).

The Local Government Pension Scheme (Transitional Provisions, Savings and Amendments) Regulations 2014 (as amended).

The LGPS (Management and Investment of Funds) Regulations 2016.

The Active Fund was established as the National Rivers Authority Pension Fund in 1989 at the time of the privatisation of the water industry in England and Wales. The Fund inherited active members' accrued liabilities from the predecessor pension arrangements, but no pensioners or deferred pensioner liabilities. In 1996 it transferred to the Environment Agency and became the Environment Agency Active Pension Fund. Since then, the Fund has been gradually maturing.

Membership

Unless they have elected in writing not to be members, all Environment Agency employees are eligible for membership of the Local Government Pension Scheme (LGPS) (excluding Environment Agency Board Members and those employees who are eligible to join another pension scheme) providing they are under the age of 75. Membership of the fund also includes employees of Natural Resource Wales and SSCL who were employees of the Environment Agency immediately before the transfer of services to those bodies. As at 31 March 2017, total membership of the Fund is 24,969, which represents 11,210 active members, 7,338 deferred members and 6,421 current pensioners.

Funding

The Fund employers pay the balance of the cost of delivering the benefits to members. Contributions payable by the Fund employers are determined in accordance with the Regulations (principally Regulation 36 of the Administration Regulations) which require that the actuary completes an actuarial valuation, including a rates and adjustments certificate, every three years. Contributions to the Active Fund should be set so as to 'secure its solvency', whilst the actuary must also have regard to the desirability of maintaining as nearly constant a rate of contribution as possible.

2. Basis of preparation

The financial statements have been prepared in accordance with the CIPFA Code of Practice on Local Authority Accounting in the United Kingdom 2016/17 which is based upon International Financial Reporting Standards (IFRS), as amended for the UK public sector. They are prepared with a covenant from Defra and the Welsh Government who are the financial sponsors of the Environment Agency under the Environment Agency Act 1995 and the DCLG as the statutory guarantors of the LGPS. The accounting policies have been drawn up in line with recommended accounting principles as specified in the Code of Practice on Local Authority Accounting and as disclosed below.

3. Summary of significant accounting policies

The following principal accounting policies have been applied consistently in the preparation of the financial statements.

Investments

Investments are included at their market values, provided by the Fund's global custodian, which are determined as follows:

- (i) Quoted securities listed on recognised stock exchanges are valued at bid prices at the year end. UK Government securities are valued at Gilt-edged Market Makers Association (GEMMA) closing prices.
- (ii) Pooled investment vehicles are stated at the bid price as quoted by the relevant fund managers, which reflect the underlying investments. In the case of single priced pooled investment vehicles, the closing single price is used as the best estimate of fair value.
- (iii) Unquoted securities are valued by fund managers on the basis of latest dealings, professional valuations and financial information at the year end. In the case of private equity limited company funds, the investments are valued at latest values which are previous quarter (generally end of December) values, updated for new investment and distributions. For private equity direct investments the price taken is that as provided by the Fund Manager, which reflect the prices at the latest round of financing if available, or book cost, unless impaired when this value is reduced.
- (iv) Acquisition costs are included in the purchase cost of investments.
- (v) Investment management fees are accounted for on an accruals basis.
- (vi) The Fund's global custodian is not authorised to enter into stock lending arrangements.

Derivatives

- (i) Futures contracts' fair value is determined using exchange prices at the year end date. The fair value is the unrealised profit or loss at the closing price of the contract. Amounts due from the broker represent the amounts outstanding in respect of the initial margin (representing collateral on the contracts) and any variation margin which is due to or from the broker. The amounts included in change in market value are the realised gains and losses on closed futures contracts and the unrealised gains and losses on open futures contracts.
- (ii) The fair value of the forward currency contracts is based on market forward exchange rates at the year end date.

Investment income

- (i) Income from fixed interest and index linked securities and other interest receivable is taken into account on an accruals basis. Income from all other marketable securities is taken into account on an accruals basis on the date when stocks are quoted ex-dividend.
- (ii) Income from overseas investments is recorded net of any withholding tax where this cannot be recovered.
- (iii) Accrued interest is excluded from the market value of fixed interest securities but is included in investment income receivable.
- (iv) Income on investments in pooled investment vehicles with accumulation units is reflected in the unit price. Income on investments in property pooled investment vehicles is distributed and recognised on an accruals basis.
- (v) Income from cash and short term deposits is accounted for on an accruals basis.

Exchange rates

- (i) Where forward contracts are in place for assets and liabilities in foreign contracts, the contract rate is used.
- (ii) Other assets and liabilities in foreign currencies are translated into sterling at the rates of exchange ruling at the year end.
- (iii) Overseas dividends are valued at rates of exchange on the date when stocks are quoted ex-dividend. Surpluses and deficits arising on conversion or translation are dealt with as part of the change in market value of investments.

Contributions

Standard contributions, both from the members and from the employer, are accounted for on an accruals basis, under the Schedule of Contributions received each month by the Pension Fund and are in compliance with the following:

- (i) Regulation 67 of The Local Government Pension Scheme Regulations 2013 (as amended), stipulates that the employer's standard contributions must be made at a rate as noted in the rates and adjustments certificate as determined by the Pension Fund Actuary under regulations 62 and 64 of those same regulations. The employer's standard contributions are necessary to ensure that the Fund is able to meet its existing and prospective liabilities including indexation.
- (ii) The employee's standard contributions are determined with reference to regulations 9 and 10 of The Local Government Pension Scheme Regulations 2013 (as amended).

Employer's further contributions, accounted for on an accruals basis, may be made to cover the costs of:

- (i) Awarding additional pension to an active member under Regulation 31 of the Local Government Pension Scheme Regulations 2013 (as amended). The costs for such an award are calculated and paid in accordance with Regulation 68 of the same Regulations.
- (ii) Any extra charge to the Pension Fund as a result of a member retiring on the grounds of ill health (Regulation 35), early retirement with employer consent, redundancy or efficiency or flexible retirement (Regulation 30) of the Local Government Pension Scheme Regulations 2013 (as amended).
- (iii) The costs for such an award are calculated and paid in accordance with regulation 68 of the same regulations.

Additional contributions from members are accounted for in the month deducted from the payroll and may relate to the:

- (i) Purchase of additional years payable under regulation 55 of the Local Government Pension Scheme 1997 Regulations (as amended).
- (ii) Purchase of additional pension payable under regulation 14 of the Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 (as amended).
- (iv) Purchase of additional pension payable under regulation 16 of the Local Government Pension Scheme Regulations 2013 (as amended).
- (v) Payment of additional voluntary contributions (AVCs) payable under regulation 17 of the Local Government Pension Scheme Regulations 2013 (as amended).

Additional Voluntary Contributions

The EAPF provides an additional voluntary contributions (AVC) scheme for its members, the assets of which are invested separately from the pension fund. The Fund has open arrangements with Prudential and Standard Life as well as closed arrangements with Equitable Life and Clerical Medical. AVCs are paid to the AVC providers by employers and specifically for providing additional benefits for individual contributors. Each AVC contributor receives an annual statement showing the amount held in their account and the movements in the year.

AVCs are not included in the accounts in accordance with Regulation 4(2)(b) of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2009, but are disclosed as a note only (Note 21).

Benefits

Members can choose whether to take a proportion of their retirement benefits as a pension and/or lump sum. Pensions and lump sums are accounted for on an accruals basis from the date the option is exercised. Lump sum death grants and refunds of contributions are included from the date of death or date the member leaves the Scheme. Transfers to and from other schemes are those amounts paid to, or received from, other pension schemes relating to previous periods of pensionable employment. Individual transfers are included in the financial statements when paid or received, but bulk transfers are accounted for on an accruals basis when the amounts have been agreed.

Other expenses

Investment management and administration expenses are accounted for on an accruals basis. Expenses are recognised net of any recoverable VAT. The fees of the Fund's external investment managers reflect their differing mandates. Fees are generally linked to the market value of the Fund's investments and therefore may increase or reduce as the value of the investment changes. Fees are also payable to the Fund's global custodian. In cases where expenditure relates to both the Active and Closed Pension Fund, this has been respectively apportioned during the year as follows:

Apportionment of common expenditure	2017 %	2016 %
Custodial arrangements	80/20	80/20
Other (e.g. Environment Agency administration costs)	60/40	60/40

From 1 April 2017, both custodial and other common expenditure will be apportioned 80/20.

Taxation

UK income tax and capital gains tax

The Fund was exempt approved under Chapter I of Part XIV of the Income and Corporation Taxes Act 1988 and became a registered pension scheme under Chapter 2 Part 4 of the Finance Act 2004 with effect from 6 April 2006. It is therefore not liable to UK income tax on interest and dividend income (other than dividends arising from UK equities), or to capital gains tax.

Value added tax

VAT input tax is recoverable on all administration expenses. The accounts are exclusive of VAT.

US withholding tax

The income earned from investments in stocks and securities in the United States is exempt from US tax pursuant to Section 892 of the Income Tax Code and is not subject to the withholding of any tax under Section 1441. This exemption has continued to be applied thus far under the US Tax Reform Act of 1986.

Overseas tax deductions

Where possible, tax deducted at source is recovered by the investment managers.

4. Critical judgments in applying accounting policies

Unquoted private equity investments

It is important to recognise the highly subjective nature of determining the fair value of private equity investments. They are inherently based on forward-looking estimates and judgments involving many factors. Unquoted private equities are valued by the investment managers using guidelines set out by the British Venture Capital Association. The value of unquoted private equities at 31 March 2017 was £132.5m (2016: £127.4m).

Pension Fund liability

The Pension Fund liability is calculated every three years by the appointed actuary, with annual updates in the intervening years. The methodology used is in line with accepted guidelines and in accordance with IAS19. Assumptions underpinning the valuations are agreed with the actuary and are summarised in Note 18. This estimate is subject to significant variances based on changes to the underlying assumptions.

5. Assumptions made about the future and other major sources of estimation

The Financial Statements contain figures that are based on assumptions made by our Private Equity manager. Estimates are made taking into account historical experience, current trends and other relevant factors. The items in the net assets statement at 31 March 2017 for which there is a risk of material adjustment in the forthcoming financial year is as follows:

Item	Uncertainties	Effect of actual results differ from assumptions
Private equity	Private equity investments are valued at fair value in accordance with British Venture Capital Association guidelines. These investments are not publicly listed and as such there is a degree of estimation involved in the valuation.	There is a risk that this investment may be under or overstated in the accounts.

6. Events after the net asset statement date

The financial statements were approved by both the Pensions Committee on 15 June 2017 and Audit and Risk Assurance Committee on 21 June 2017. The financial statements are signed under delegated authority of the Board. They were also noted at a meeting of the Board on 18 July 2017. In April 2017 we commenced the defunding of our equity allocation with Standard Life as we increase our alternatives portfolio. There are no adjusting events that need to be recognised in the financial statements after the net asset statement date.

7. Contributions receivable

By contribution type	2017 £000	2016 £000
Employer		
Normal	51,330	50,486
Advanced	15,450	-
Special	3,288	896
Defecit funding	-	15,500
	70,068	66,882

Members		
Normal	24,513	23,730
Purchase of added years	277	473
	24,790	24,203
Total	94,858	91,085

Normal contributions are regular employer and employee contributions paid across by our employers. Special contributions are additional amounts paid by our employers in respect of early retirements and also include a contribution to fully fund a bulk transfer in 2015/16. The advanced contributions were future service contributions paid prior to the year end by our employers. The deficit funding contributions shown in the prior year were advanced contributions paid by our employers in relation to the historical past service deficit.

By employer	2017 £000	2016 £000
Employer contributions		
Environment Agency	61,694	58,409
Natural Resources Wales	8,195	8,081
SSCL	179	392
	70,068	66,882
Employee contributions		
Environment Agency	22,714	22,008
Natural Resources Wales	2,035	2,111
SSCL	41	84
	24,790	24,203
Total	94,858	91,085

8. Transfer values received

	2017 £000	2016 £000
Individual transfers from other schemes	2,740	798
AVC transfers	1,045	1,096
Group transfers from other schemes	-	2,432
Total	3,785	4,326

Transfer values have been paid ('cash equivalents' within the meaning of Part 1 of Schedule 5 to the Pensions Scheme Act 1993), and service credits given for transfers received, calculated in accordance with the method and assumptions on the advice of the Actuary and based on guidelines issued by the Institute and Faculty of Actuaries.

AVC transfers represent amounts disinvested from the AVC arrangements disclosed in Note 21 during the year and subsequently used to fund benefits.

The group transfer in during the prior year represented a transfer from the Torfaen Fund in relation to employees from the Caldicot and Wentloog Drainage Board into the Fund.

No discretionary benefits have been included in the calculation of transfer values.

9. Benefits payable

	2017 £000	2016 £000
Retirement and dependants' pensions	66,321	62,993
Lump sum retirement grants	15,870	13,470
Lump sum death grants	2,254	1,270
Taxation where annual allowance exceeded	-	5
Total	84,445	77,738

10. Payments to and on account of leavers

	2017 £000	2016 £000
Individual transfers to other schemes	2,504	2,527
Refunds of contributions	87	35
AVC transfers	34	2
Total	2,625	2,564

11. Management expenses

	2017 £000	2016 £000
Administration costs		
Environment Agency Pension Fund management	583	547
Scheme administration	720	523
	1,303	1,070
Oversight and governance costs		
Specialist advice	934	706
External audit	43	47
	977	753
Investment management expenses		
Management fees	11,772	10,167
Performances related fees	5,633	3,733
Custody fees	108	124
Transaction costs	1,743	785
	19,256	14,809
Total	21,536	16,632

The increase in Scheme administration is due to increased costs associated with GMP reconciliations. The rise in investment base fees is primarily due to an increase in directly held funds investing in the more expensive asset classes of private debt and equity as well as increase in assets under management. Performance fees increased due to the continued very good performance of Generation and this year Royal London generated a good outperformance. The external auditor remuneration does not include any fees in respect of non-audit services for 2017 and 2016.

12. Investment income

	2017 £000	2016 £000
Dividends from equities	22,495	21,233
Income from fixed interest securities	13,698	13,339
Income from pooled property and infrastructure	6,849	5,637
Income from private equity	1,160	372
Income from pooled investment vehicles	438	640
Interest on cash deposits	409	393
Total	45,049	41,614

13. Taxes on income

	2017 £000	2016 £000
Withholding tax – equities	(1,090)	(958)
Withholding tax – pooled property	(181)	(136)
Total	(1,271)	(1,094)

14. Investments

a) Investment movements summary 2016/17

Financial year to the 31 March 2017	Market value at 01.04.16	Purchases at cost and derivative payments	Sales proceeds and derivative receipts	Change in market value	Market value at 31.03.17
	£000	£000	£000	£000	£000
Equities	940,290	403,209	(442,688)	257,108	1,157,919
Fixed interest	512,556	82,211	(66,825)	84,119	612,061
Pooled equities	429,860	85	(46,281)	133,383	517,047
Pooled fixed interest	428,710	22,438	(64)	22,407	473,491
Pooled property	196,800	51,114	(25,375)	9,947	232,486
Private equity	127,339	20,530	(30,483)	15,122	132,508
Private debt	34,491	23,318	(15,611)	5,542	47,740
FX and derivatives	1,039	3,712,717	(3,690,118)	(19,912)	3,726
	2,671,085	4,315,622	(4,317,445)	507,716	3,176,978
Cash deposits and instruments	53,103			3,120	90,151
Other investment balances	7,152			(14)	5,837
Total	2,731,340			510,822	3,272,966

Investment movements summary 2015/16

Financial year to the 31 March 2016	As restated Market value at 01.04.15	Purchases at cost and derivative payments	Sales proceeds and derivative receipts	Change in market value	Market value at 31.03.16
	£000	£000	£000	£000	£000
Equities	956,300	311,603	(340,892)	13,279	940,290
Fixed interest	503,945	91,009	(76,850)	(5,548)	512,556
Pooled equities	657,400	559,782	(785,288)	(2,034)	429,860
Pooled fixed interest	269,634	257,279	(111,605)	13,402	428,710
Pooled property	138,644	77,286	(31,563)	12,433	196,800
Private equity	80,538	70,969	(30,538)	6,370	127,339
Private debt	-	37,479	(3,179)	191	34,491
FX and derivatives	(1,948)	2,746,029	(2,738,730)	(4,312)	1,039
	2,604,513	4,151,436	(4,118,645)	33,781	2,671,085
Cash deposits and instruments	43,580			641	53,103
Other investment balances	7,967			6	7,152
Total	2,656,060			34,428	2,731,340

Note: FX and derivatives turnover is primarily due to the currency hedging for one of our low volatility mandates. This is rolled over monthly for efficiency and accuracy, and although this generates high turnover, it is extremely low cost and has no market impact.

The change in the market value of investments comprises all increases and decreases in the market value of investments held at any time during the year, including profits and losses realised on sales of investments during the year.

The derivatives in the above table represent futures' contracts and forward foreign exchange contracts. The closing market values represent fair values at the year end date. In the case of futures' contracts, which are traded on exchanges, this value is determined using exchange prices at the reporting date. Forward foreign exchange contracts are over the counter contracts and are valued by determining the gain or loss that would arise from closing out the contract at the reporting date by entering into an equal and opposite contract at that date.

All contracts settled during the period are reported within the table as purchases and sales. As all contracts are settled individually, with an amount being paid to or from the broker in respect of all the foreign currency contracts, these transactions need to be disclosed as purchases and sales. As forward foreign exchange trades are settled gross they need to be included as gross receipts and payments and hence the volumes shown are high.

Indirect transaction costs are incurred through the bid-offer spread on investments within pooled investment vehicles. The amount of indirect costs is not separately provided to the Fund.

b) Investment value details

Investment assets	2017 £000	2016 £000
Equities		
Overseas quoted	989,490	765,422
UK quoted	168,429	174,868
	1,157,919	940,290
Fixed interest		
UK index linked gilts public sector	333,946	264,703
UK corporate quoted	202,980	177,071
Overseas corporate quoted	73,967	68,644
Overseas public sector quoted	1,168	2,138
	612,061	512,556
Pooled equities		
Overseas unit trusts	493,009	402,230
UK unit trusts	24,038	27,630
	517,047	429,860
Pooled fixed interest		
UK corporate quoted unit trusts	317,386	271,429
Overseas corporate quoted unit trusts	156,105	157,281
	473,491	428,710
Private equity		
Overseas unquoted	94,896	95,354
UK unquoted	37,612	31,985
	132,508	127,339
Pooled property and infrastructure		
UK infrastructure funds	147,615	143,012
Overseas infrastructure funds	74,723	41,947
Overseas unquoted collective limited partnership investments	7,578	8,988
UK unquoted collective limited partnership investments	2,570	2,853
	232,486	196,800
Private debt	47,740	34,491
Derivative contracts		
Forward foreign exchange	3,727	996
Futures	(1)	43
	3,726	1,039
Cash deposits and instruments		
Cash with custodian and fund managers	90,055	52,905
Cash margin with brokers	96	198
	90,151	53,103
Other investment balances		
Amounts due from trade and currency brokers	10,101	4,622
Accrued income	6,954	6,678
Income tax recoverable	1,232	925
Amounts due to trade and currency brokers	(12,450)	(5,073)
	5,837	7,152
Net investment assets	3,272,966	2,731,340

c) Financial assets and liabilities

	2017 £000	2016 £000
Financial assets		
Equities (includes pooled and private equity)	1,807,474	1,497,490
Bonds (includes pooled and gilts)	1,085,552	941,265
Pooled property and infrastructure	232,486	196,800
Cash	90,151	53,103
Private debt	47,740	34,491
Other investment assets	18,287	12,225
Derivatives – Futures and forward foreign exchange	3,944	1,884
Total financial assets	3,285,634	2,737,258
Financial liabilities		
Derivatives – Futures and forward foreign exchange	(218)	(845)
Amounts due to trade and currency brokers	(12,450)	(5,073)
Total financial liabilities	(12,668)	(5,918)
Net financial assets	3,272,966	2,731,340

d) Derivative contracts

	2017		2016	
Derivatives	Asset £000	Liability £000	Asset £000	Liability £000
Futures contracts	-	(1)	55	(12)
Forward foreign currency contracts	3,942	(215)	1,829	(833)
	3,942	(216)	1,884	(845)
Net derivatives	3,726		1,039	

Type of futures contract	Expiration	2017 Nominal value £000	2016 Nominal value £000	2017 Fair Value £000	2016 Fair Value £000
E-mini S&P 500 US exchange traded June 2017 (Generation)	3 months	1,038		(3)	
Eurostoxx 50 index exchange traded June 2017 (Generation)	3 months	410		2	
E-mini S&P 500 US exchange traded June 2016 (Generation)	3 months		2,497		55
Eurostoxx 50 index exchange traded June 2016 (Generation)	3 months		697		(12)
Total		1,448	3,194	(1)	43

Investment in derivative instruments may only be made if they contribute to a reduction of risks and facilitate efficient portfolio management. A derivative is a financial contract between two parties, the value of which is determined by the underlying asset. Derivatives are used to a limited extent, primarily for efficient portfolio management and reducing currency risk.

In the table above, the 'nominal value' of the futures contracts is the 'economic exposure' of those futures and the 'Fair value' is the unrealised profit or loss of the futures as at 31 March.

Forward over the counter foreign currency contracts

At 31 March 2017 there was an unrealised gain of £3,727,000 on the currency forwards (2016: unrealised gain of £996,000). The main currency hedging programme has been terminated, and the current position relates to specific hedging undertaken by individual managers.

Currency bought	Currency sold	Settlement dates	2017 Asset £000	2017 Liability £000	2016 Asset £000	2016 Liability £000
Australian Dollar	Sterling	21 days	-	(10)	2	-
Australian Dollar	US Dollar	28 days	38	-	251	-
Brazilian Real	Sterling	1 day	-	-	6	-
Canadian Dollar	US Dollar	28 days	-	(80)	363	-
Euro	Sterling	1-14 days	-	-	39	-
Euro	US Dollar	28 days	-	(10)	-	-
Japanese Yen	US Dollar	28 days	185	-	262	-
New Zealand Dollar	Sterling	21 days	-	(1)	4	-
Norwegian Krone	Sterling	3-21 days	-	(2)	-	-
South African Rand	Sterling	5 days	-	-	9	-
Sterling	Danish Krone	21 days	24	-	-	(28)
Sterling	Euro	3-82 days	258	(2)	-	(85)
Sterling	Israeli Shekel	14 days	-	-	-	(32)
Sterling	Japanese Yen	82 days	28	(33)	174	(4)
Sterling	Norwegian Krone	21 days	62	-	-	-
Sterling	Canadian Dollar	3-21 days	213	-	-	(189)
Sterling	Australian Dollar	3-21 days	130	-	-	(98)
Sterling	New Zealand Dollar	21 days	22	-	-	(33)
Sterling	Swedish Krone	21 days	56	-	-	(23)
Sterling	Swiss Franc	3-21 days	177	-	-	(51)
Sterling	US Dollar	3-82 days	2,749	-	712	(11)
Swedish Krone	Sterling	3 days	-	(4)	-	-
Swiss Franc	Sterling	21 days	-	(4)	3	-
US Dollar	Sterling	3-82 days	-	(33)	4	(50)
US Dollar	Chinese Yuan	28 days	-	(36)	-	-
US Dollar	Euro	15 days	-	-	-	(229)
Total			3,942	(215)	1,829	(833)

e) Investments exceeding 5% of net investment assets

The following table represents the investments of the Fund that exceed 5% of the total net investment assets.

Holding	2017		2016	
	Market value £m	% of net assets	Market value £m	% of net assets
Wellington Global Return Fund Pooled Bonds	-	-	150.9	5.5
MSCI World Low Carbon Leaders Index	252.0	7.7	220.1	8.1
TSDD Bespoke	317.4	9.7	271.4	10.0

15. Financial Instruments

a) Classification of financial instruments

The accounting policies describe how different asset classes of financial instruments are measured, and how income and expenses, including fair value gains and losses, are recognised. The following table analyses the carrying amounts of financial assets and liabilities by category and net assets statement heading.

31 March 2017	Designated as fair value through profit and loss £'000	Receivables £'000	Financial liabilities at amortised cost £'000
Financial assets			
Equities	1,157,919	-	-
Fixed interest	612,061	-	-
Pooled equities	517,047	-	-
Pooled fixed interest	473,491	-	-
Pooled property and infrastructure	232,486	-	-
Private equity	132,508	-	-
Private debt	47,740	-	-
Derivatives	3,944	-	-
Cash deposits and instruments	-	95,252	-
Other investment assets	-	18,287	-
Debtors	-	7,502	-
	3,177,196	121,041	-
Financial liabilities			
Derivative contracts	(218)	-	-
Other investment liabilities	-	-	(12,450)
Creditors	-	-	(11,396)
	(218)	-	(23,846)
Net assets of the Fund	3,176,978	121,041	(23,846)

31 March 2016	Designated as fair value through profit and loss £000	Receivables £000	Financial liabilities at amortised cost £000
Financial assets			
Equities	940,290	-	-
Fixed interest	512,556	-	-
Pooled equities	429,860	-	-
Pooled fixed interest	453,748	-	-
Private equity	136,792	-	-
Pooled property and infrastructure	196,800	-	-
Derivatives	1,039	-	-
Cash deposits and instruments	-	57,569	-
Other investment assets	-	12,225	-
Debtors	-	6,509	-
	2,671,085	76,303	-
Financial liabilities			
Derivative contracts	-	-	-
Other investment liabilities	-	-	(5,073)
Creditors	-	-	(12,779)
	-	-	(17,852)
Net assets of the Fund	2,671,085	76,303	(17,852)

b) Net gains and losses on financial instruments

	2017 £000	2016 £000
Financial assets		
Fair value through profit and loss	510,822	34,428
Financial liabilities		
Fair value through profit and loss	-	-
Total change in market value	510,822	34,428

c) Valuation of financial instruments carried at fair value

Fair value – basis of valuation

The summary basis of the valuation of each class of investment asset is set out below. There has been no change in the valuation techniques used during the year. All assets have been valued using fair value techniques which represent the highest and best price available at the reporting date. Elements of some asset categories, for example pooled investments, may be classified under a different valuation hierarchy where these individual investments fit into these levels.

Description of asset	Valuation hierarchy	Basis of valuation	Observable and unobservable inputs	Key sensitivities affecting the valuations provided
Market quoted investments	Level 1	Published bid market price ruling on the final day of the accounting period.	Not required	Not required
Quoted bonds	Level 1	Fixed interest securities are valued at a market value based on current yields.	Not required	Not required
Futures and options in UK bonds	Level 1	Published exchange prices at the year-end.	Not required	Not required
Exchange traded pooled investments	Level 1	Closing bid value on published exchanges.	Not required	Not required
Unquoted bonds	Level 2	Average of broker prices.	Evaluated price feeds.	Not required
Forward foreign exchange derivatives	Level 2	Market forward exchange rates at the year-end.	Exchange rate risk.	Not required
Overseas bond options	Level 2	Option pricing model.	Annualised volatility of counterparty credit risk.	Not required
Pooled investments – overseas unit trusts and property funds	Level 2	Closing bid price where bid and offer prices are published. Closing single price where single price published.	NAV-based pricing set on a forward pricing basis.	Not required
Pooled investments – hedge funds	Level 3	Closing bid price where bid and offer prices are published. Closing single price where single price published.	NAV-based pricing set on a forward pricing basis.	Valuations could be affected by material events occurring between the date of the financial statements provided and the pension fund's own reporting date, by changes to expected cashflows, and by any differences between audited and unaudited accounts.
Freehold and leasehold properties	Level 3	Valued at fair value at the year-end using the investment method of valuation by John Finley FRICS of independent valuers Carrott-Jones LLP in accordance with the RICS Valuation Standards (9 th Edition).	Existing lease terms and rentals Independent market research. Nature of tenancies. Covenant strength for existing tenants. Assumed vacancy levels. Estimated rental growth. Discount rate.	Significant changes in rental growth, vacancy levels or the discount rate could affect valuations as could more general changes to market prices.
Unquoted equity	Level 3	Comparable valuation of similar companies in accordance with International Private Equity and Venture Capital Valuation Guidelines (2012).	EBITDA multiple. Revenue multiple. Discount for lack of marketability. Control premium.	Valuations could be affected by material events occurring between the date of the financial statements provided and the pension fund's own reporting date, by changes to expected cashflows, and by any differences between audited and unaudited accounts.

Sensitivity of assets valued at Level 3

Having analysed historical data and current market trends, and consulted with independent investment advisors, the fund has determined that the valuation methods described above are likely to be accurate to within the following ranges and has set out below the consequent potential impact on the closing value of investments held at 31 March 2017.

	Assessed valuation range % (+/-)	Value at 31 March 2017	Value on increase £000	Value on decrease
		£000	£000	£000
Fixed interest	10.1	3,823	386	(386)
Equities	18.4	3,298	607	(607)
Pooled property and infrastructure	14.2	121,955	17,318	(17,318)
Private equity	28.5	132,508	37,764	(37,764)
Private debt	28.5	47,740	13,606	(13,606)
Total		309,324	69,681	(69,681)

The valuation of financial instruments has been classified into three levels, according to the quality and reliability of information used to determine fair values.

Level 1

Financial instruments at Level 1 are those where the fair values are derived from unadjusted quoted prices in active markets for identical assets or liabilities. Products classified as Level 1 comprise quoted equities, quoted fixed securities, quoted index-linked securities and unit trusts.

Listed investments are shown at bid prices. The bid value of the investment is based on the bid market quotation of the relevant stock exchange.

Level 2

Financial instruments at Level 2 are those where quoted market prices are not available, for example, where an instrument is traded in a market that is not considered to be active, or where valuation techniques are used to determine fair value and where these techniques use inputs that are based significantly on observable market data.

Level 3

Financial instruments at Level 3 are those where at least one input that could have a significant effect on the instrument's valuation is not based on observable market data.

Such instruments would include unquoted equity investments and hedge fund of funds, which are valued using various techniques that require significant judgement in determining appropriate assumptions.

The values of the investment in private equity are based on valuations provided by the general partners to the private equity funds in which Environment Agency Active Pension Fund has invested.

These valuations are prepared in accordance with the International Private Equity and Venture Capital Valuation Guidelines, which follow the valuation principles of IFRS and US GAAP. Valuations are usually undertaken annually at the end of December. Cash flow adjustments are used to roll forward the valuations to 31 March as appropriate.

The values of the investment in hedge funds are based on the net asset value provided by the fund manager. Assurances over the valuation are gained from the independent audit of the value. The following table provides an analysis of the financial assets and liabilities of the pension fund grouped into Levels 1 to 3 based on the level at which the fair value is observable:

Values at 31 March 2017	Quoted market price	Using observable inputs	With significant unobservable inputs	Total £000
	Level 1 £000	Level 2 £000	Level 3 £000	
Financial assets				
Financial assets at fair value through profit and loss	1,057,369	1,810,503	309,324	3,177,196
Receivables	76,815	44,226	-	121,041
Total financial assets	1,134,184	1,854,729	309,324	3,298,237
Financial liabilities				
Financial liabilities at fair value through profit and loss	-	(218)	-	(218)
Financial liabilities at amortised cost	(11,396)	(12,450)	-	(23,846)
Total financial liabilities	(11,396)	(12,668)	-	(24,064)
Net assets of the Fund	1,122,788	1,842,061	309,324	3,274,173

Values at 31 March 2016	Quoted market price	Using observable inputs	With significant unobservable inputs	Total £000
	Level 1 £000	Level 2 £000	Level 3 £000	
Financial assets				
Financial assets at fair value through profit and loss	1,585,480	520,039	566,411	2,671,930
Receivables	76,301	2		76,303
Total financial assets	1,661,781	520,041	566,411	2,748,233
Financial liabilities				
Financial liabilities at fair value through profit and loss	-	-	(845)	(845)
Financial liabilities at amortised cost	(17,852)	-	-	(17,852)
Total financial liabilities	(17,852)	-	(845)	(18,697)
Net assets of the Fund	1,643,929	520,041	565,566	2,729,536

Reconciliation of fair value measurements within level 3

Period 2016/17	Market value 1 April 2016	Transfers into Level 3	Transfers out of Level 3	Purchases during the year and derivative payments	Sales during the year and derivative receipts	Change in market value	Market value 31 March 2017
	£000	£000	£000	£000	£000	£000	£000
Fixed interest	4,358	-	(2,321)	1,793	(25)	18	3,823
Equities	2,970	-	-	430	(114)	12	3,298
Pooled property and infrastructure	-	71,887	-	50,420	(10,126)	9,774	121,955
Private equity	127,339	-	-	20,530	(30,483)	15,122	132,508
Pooled equity	429,860	-	(429,860)	-	-	-	-
Private debt	-	34,491	-	23,318	(15,611)	5,542	47,740
Derivatives	1,039	-	(1,039)	-	-	-	-
Totals	565,566	106,378	(433,220)	96,491	(54,462)	28,571	309,324

16. Nature and extent of risks arising from financial instruments

Risk and risk management

The Fund's primary long-term risk is that the Fund's assets will fall short of its liabilities (i.e. promised benefits payable to members). Therefore the aim of investment risk management is to minimise the risk of an overall reduction in the value of the Fund and to maximise the opportunity for gains across the whole Fund's portfolio. The Fund achieves this through asset diversification to reduce exposure to market risk (price risk, currency risk and interest rate risk) and credit risk to an acceptable level. In addition, the Fund manages its liquidity risk to ensure there is sufficient liquidity to meet the Fund's forecast cash flows. The Fund manages these investment risks as part of its overall pension Fund risk management programme.

Considerations of investment risk are integrated into the Fund's Investment strategy, responsibility for which rests with the Pension Fund Committee. In addition, the Fund maintains a Register of risks which includes investment risks, and the Fund, working with its advisers, regularly monitors investment risks within the Fund, enabling the Pensions Committee to consider risk as required.

Market risk

Market risk is the risk of loss from fluctuations in equity and commodity prices, interest and foreign exchange rates and credit spreads. All securities investments present a risk of loss of capital. The Fund is exposed to market risk from its investment activities, particularly through its equity holdings. The level of risk exposure depends on market conditions, expectations of future price and yield movements and the asset mix.

The objective of the Fund's risk management strategy is to identify, manage and control market risk exposure within acceptable parameters, whilst optimising the potential for long term return within a given risk framework – long term investment returns fundamentally depend on the willingness to take on risk.

In general, excessive volatility in market risk is managed through the diversification of the portfolio in terms of geographical and industry sectors and individual securities. Specific risks on individual investments, caused by factors specific to the individual instrument, can be largely managed and reduced through diversification. Broader market risk, arising from factors affecting all instruments in the market, can only be reduced to a limited extent through diversification without affecting long term returns.

To mitigate specific market risk, the Fund and its investment advisers undertake appropriate monitoring of individual manager's selection of securities, their performance against benchmarks and their compliance with their individual Investment Management Agreement and the Fund's overall investment strategy. Broader market risk, analysed below, is regularly monitored by the Fund and its advisers, and is a key consideration in determining the Fund's overall Asset Allocation. The Fund also considers the use of risk management tools such as currency hedging. However, the Fund does not attempt to manage market risk by short term shifts in asset allocation, as this may increase rather than reduce risk.

Market risk – sensitivity analysis

Following analysis of historical data and expected investment return movement during the financial year, in consultation with the Fund's advisers, the Fund has determined that the following movements in market price risk are reasonably possible for the 2016/17.

Asset Class	Potential change in value from market risk	
	31 March 2017 £000	31 March 2016 £000
UK equities	32,912	34,558
Global equities (ex UK)	272,780	229,098
Private equity	37,765	36,838
Property	33,013	2,485
Private debt (senior loans)	2,673	-
Global corporate bonds	75,912	28,908
UK index linked gilts	50,760	64,342
Other	478	25,431
Cash	-	360
(Less impact of diversification)	(178,996)	(121,609)
Total Fund volatility	327,297	300,410

Asset Class	1 Year expected volatility %	% of Fund
UK equities	17.1	5.9
Global equities (ex UK)	18.4	45.3
Private equity	28.5	4.0
Property	14.2	7.1
Private debt (senior loans)	5.6	1.5
Global corporate bonds	10.1	23.0
UK index linked gilts	15.2	10.2
Other	5.0	0.2
Cash	0.0	2.8
Total Fund volatility	10.0	100.0

The potential price changes disclosed above are broadly consistent with a one standard deviation movement in the value of the assets. The sensitivities are consistent with the assumptions contained in the investment adviser's most recent review. The Total Fund volatility takes into account the expected interactions between the different asset classes shown, based on the underlying volatilities and correlations of the assets, in line with mean variance portfolio theory.

Due to the approach taken to determine the Total Fund volatility (in which the impact of diversification is recognised), the monetary impact on the total Fund assets is determined using the total Fund volatility rather than the sum of the monetary impact for each asset class.

Had the market price of the Fund's investments increased/decreased in line with the above, the change in the net assets available to pay benefits in the market price would have been as follows (the prior year comparator is shown below):

	31 March 2017	31 March 2016
Total net investment assets (£000)	3,272,966	2,731,430
Percentage change (%)	10	11
Value on increase (£000)	3,600,263	3,031,787
Value on decrease (£000)	2,945,669	2,430,893

Interest rate risk

Many investments are subject to interest rate risks, which represent the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The Fund's direct interest rate risk exposure is primarily due to its fixed income holdings. The Fund may also have indirect interest rate exposure through its holdings of other assets however, it is not possible to quantify these. Note that interest rate risk is also included in the overall estimate of market risk earlier. There is a small interest rate exposure arising from the Fund's cash holdings, where changes in interest rates will change the income received from cash, however, capital values will not be affected.

More significantly, the Fund's liabilities are also estimated using long term interest rates. The interest rate exposure in the Fund's liabilities is materially greater than, and in an opposite direction to, the exposures in the fixed interest portfolios. Thus the overall impact of interest rate movements on the funding level of the Fund is significantly different from that implied below. Effectively, the holdings of fixed income assets provide a partial hedge to the interest rate risk in the Fund's liabilities. The Fund monitors this position through regular estimation of its funding position which includes sensitivity analysis of these risks.

	As at 31 March 2017	Interest rate sensitivity duration 2017	As at 31 March 2016	Interest rate sensitivity duration 2016
UK Index Linked Gilts	333,946	31.2	264,703	29.6
Pooled Sterling Bonds Indexed	-	-	6,726	7.7
Sterling Bonds Actively Managed	595,501	8.1	694,875	7.6
Total	929,447		966,304	

Interest rate risk sensitivity analysis

The Fund recognises that interest rates can vary and can affect both income to the Fund and the value of the net assets available to pay benefits. A 1% movement in interest rates provides an appropriate indication of the sensitivity of the fixed interest portfolio and the Fund's Net Assets to a change in interest rates. The Fund advisers have indicated that long term average interest rates are expected to move less than 1% from one year to the next. This interest rate exposure has to be multiplied by the modified duration of the investments to obtain the risk to capital values.

The analysis that follows assumes that all other variables remain constant, and shows the effect in the year on the net assets available to pay benefits of a +/- 1% change in interest rates. Note that changes on rates on Index Linked Gilts do not necessarily correspond with changes in rates on other sterling bonds, so total figures are provided for information only.

	Carrying amount as at 31 March 2017	Possible change in the net assets available to pay benefits	
	£000	+1%	-1%
		£000	£000
UK Index linked Gilts	333,946	104,191	(104,191)
Pooled Sterling bonds indexed			
Sterling bonds actively managed	595,501	48,236	(48,236)
Total	929,447	152,427	(152,427)

	Carrying amount as at 31 March 2016	Possible change in the net assets available to pay benefits	
	£000	+1%	-1%
		£000	£000
UK Index linked Gilts	264,703	78,617	(78,617)
Pooled Sterling bonds indexed	6,726	518	(518)
Sterling bonds actively managed	694,875	52,811	(52,811)
Total	966,304	131,946	(131,946)

Currency risk

Currency risk represents the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Fund is exposed to currency risk on financial instruments that are denominated in any currency other than the functional currency of the Fund (£). Currency risk is also included in the overall estimate of market risk earlier. Most of the Fund's currency risk is through exposure to overseas equities, which are exposed to a complex range of risk factors of which currency is only one. There may also be some indirect currency exposure in the Fund's sterling denominated assets, such as UK equities, but these are impossible to quantify. During the year the Pensions Committee decided to end the Fund's currency hedging programme as it was not effective at reducing the Fund's overall risk. The Pension Fund's currency rate risk are routinely monitored by the Fund and its investment advisors.

The following table summarises the Fund's currency exposure as at 31 March 2017 and as at the previous period end:

Currency exposure – asset type	Asset value as at 31 March 2017	Asset value as at 31 March 2016
	£000	£000
Overseas quoted securities	1,064,625	771,310
Overseas pooled equities	649,114	414,021
Overseas unquoted private equity	177,197	104,807
Total overseas assets	1,890,936	1,290,138

Currency risk – sensitivity analysis

Following analysis of historical data in consultation with the Fund's advisers, the Fund considers the likely volatility associated with foreign exchange rate movements to be 10% (as measured by one year expected standard deviation).

This analysis assumes that all other variables, in particular interest rates, remain constant. A 10% strengthening/weakening of the pound against the various currencies in which the Fund holds investments would increase/decrease the net assets available to pay benefits as follows:

Currency exposure – asset type	Asset value as at 31 March 2017	Possible change to net assets available to pay benefits	
	£000	+10% £000	-10% £000
Overseas quoted securities	1,064,625	106,462	(106,462)
Overseas pooled equities	649,114	64,911	(64,911)
Overseas unquoted private equity	177,197	17,720	(17,720)
Total value/change in assets available	1,890,936	189,093	(189,093)

Currency exposure – asset type	Asset value as at 31 March 2016	Possible change to net assets available to pay benefits	
	£000	+10% £000	-10% £000
Overseas quoted securities	771,310	77,131	(77,131)
Overseas pooled equities	414,021	41,402	(41,402)
Overseas unquoted private equity	104,807	10,481	(10,481)
Total change in assets available	1,290,138	129,014	(129,014)

Credit risk

Credit risk represents the risk that the counterparty to a transaction or a financial instrument will fail to discharge an obligation and cause the Fund to incur a financial loss. The market values of investments generally reflect an assessment of credit in their pricing and consequently the risk of loss is implicitly provided for in the carrying value of the Fund's financial assets and liabilities.

Credit risk also arises inevitably with transactions and trading. However, the selection of high quality counterparties, brokers and financial institutions minimises credit risk that may occur through the failure to settle a transaction in a timely manner.

To minimise credit risk exposure most of the Fund's cash is held in money market funds run by the Fund's custodian Northern Trust and the Fund's index fund provider Legal & General – these funds invest in a wide range of cash instruments and have limited exposure to any individual institution. Furthermore they are legally separate from the manager, which should safeguard the Fund's investments in the case of the default of the manager.

The Fund believes it has managed the Fund's exposure to credit risk, and has had no experience of default in cash deposits or uncollectible deposits over the past five financial years. The Fund's cash holding under its cash management arrangements at 31 March 2017 was £95 million (31 March 2016 was £58 million). This was held with the following institutions:

Summary	Rating by Moody's	Balances as at 31 March 2017 £000	Balances as at 31 March 2016 £000
Money market funds:			
Northern Trust	Aaa	90,151	53,103
Bank current accounts:			
National Westminster Bank plc	A2	5,101	4,466
Total		95,252	57,569

Liquidity risk

Liquidity risk represents the risk that the Fund will not be able to meet its financial obligations as they fall due. The Pension Fund therefore takes steps to ensure that it has adequate cash resources to meet its commitments. This will particularly be the case for cash from the cash flow matching mandates from the main investment strategy to meet the pensioner payroll costs; and also cash to meet investment commitments. The Pension Fund has immediate access to its cash holdings.

The Fund defines liquid assets are those that can be converted to cash within three months. Illiquid assets are those assets which will take longer than three months to convert in to cash, and are assumed to be the private equity and property holdings. As at 31 March 2017, the value of potentially illiquid assets was £412m, which represented 12.6% of the total Fund assets (2016: £333.6m, which represented 12.2% of the total Fund assets).

Management prepares periodic cash flow forecasts to understand and manage the timing of the Fund's cash flows. The appropriate strategic level of cash balances to be held forms part of the Fund's investment strategy. All financial liabilities at 31 March 2017 are due within one year.

Refinancing risk

The key risk is that the Fund will be bound to replenish a significant proportion of its pension fund financial instruments at a time of unfavourable interest rates. The Fund does not have any financial instruments that have a refinancing risk as part of its investment strategy.

17. Funding arrangements

In line with the Local Government Pension Scheme Regulations 2013, the Fund's actuary undertakes a funding valuation every three years for the purpose of setting employer contribution rates for the forthcoming triennial period. The last such valuation took place as at 31 March 2016. The next valuation will take place as at 31 March 2019.

The key elements of the funding policy are as follows:

- Ensure that sufficient resources are available to meet all benefits as they fall due for payment;
- Recover any shortfall in assets, relative to the value of accrued liabilities, over broadly the future working lifetime of current employees;
- Enable the employer contributions to be kept as stable as possible and at reasonable cost, whilst achieving and maintaining fund solvency, which should be assessed in light of the risk profile of the Fund and the risk appetite of the administering authority and employers;

- Manage the Environment Agency's, as the employer, liabilities effectively; and
- Maximise the returns from investments within reasonable risk parameters.

The Funding Strategy Statement (FSS) sets out how the administering authority seeks to balance the conflicting aims of securing solvency of the Fund and keeping employer contribution stable.

At the 2016 actuarial valuation, the Fund was assessed as 103% funded (90% at the March 2013 valuation). This corresponded to a deficit of £89m (2013 valuation: deficit of £233m) at that time.

The following table shows the minimum contributions payable after allowing for discretionary lump sum payments paid to the Fund in March 2017.

Employer name	Minimum contributions for the year ending:					
	31 March 2018		31 March 2019		31 March 2020	
	% pay	£m	% pay	£m	% pay	£m
EA	14.0	nil	14.0	14.35	14.0	14.66
NRW	0.0	6.45	0.0	6.09	0.0	7.0
SSCL	22.7	nil	22.7	nil	22.7	nil

Full details of the contribution rates payable can be found in the 2016 actuarial valuation report (which include the Rates and Adjustment Certificate) dated 31 March 2017 and the FSS.

The valuation of the Fund has been undertaken using the projected unit method under which the salary increase for each member is assumed to increase until they leave active service by death, retirement or withdrawal from service. The principal assumptions were:

Financial assumptions

Financial assumptions	% per annum	Description
Investment Return (Discount Rate)	3.8	Yield on long term fixed interest Government bonds plus Asset Outperformance Assumption of 1.6%
Retail Price Inflation (RPI)	2.9	The difference between yields on long term fixed and index linked Government bonds less 0.3% p.a. in respect of the inflation risk premium
Salary Increases*	2.1	RPI less 0.7% (with the adjustment applied geometrically)
Pension Increases	1.8	CPI (assumed to be 1.0% less than RPI with the adjustment applied geometrically)

*An allowance is also made for promotional pay increases.

Longevity assumptions

Life expectancy is based on the Fund's Vita Curves with improvements in line with the CMI 2013 model assuming that the current rate of improvement has reached a peak and will converge to a long term rate of 1.25% p.a.. Based on these assumptions, the average future life expectancies at age 65 are summarised below:

Pensioners	Males	Females
Current pensioners	22.6 years	24.4 years
Future pensioners*	24.3 years	26.7 years

* Figures assume members aged 45 as at the last formal valuation date.

Commutation assumption

It is assumed that future retirees will take 50% of the maximum additional tax free lump sum up to HMRC limits.

18. Actuarial present value of promised retirement benefits

IAS26: Accounting and reporting by retirement benefit plans

In addition to the triennial funding valuation, the Fund's actuary also undertakes a valuation of the pension fund liabilities on an IAS19 basis, every year using the same base data as the funding valuation rolled forward to the current financial year, taking account of changes in membership numbers and updating assumptions to the current year.

In order to assess the value of the benefits on this basis, the actuary has updated the actuarial assumptions (set out below) from those used for funding purposes (see Note 17). The actuary has also used valued ill health and death benefits in line with IAS19.

The actuarial value of promised retirement benefits at the accounting date, calculated in line with International Accounting Standard 19 (IAS19) assumptions, is estimated to be £3,732m (2016: £3,233m). The figure is only prepared for the purposes of IAS19 and has no validity in other circumstances. In particular, it is not relevant for calculations undertaken for funding purposes and setting contributions payable to the Fund.

Assumptions

The assumptions used are those adopted for the Environment Agency's IAS19 report.

Financial assumptions

Financial assumptions used are different to the triennial funding valuation shown on Page 58 as this follows the basis of IAS19. The financial assumptions adopted are summarised below:

Year ended	31 March 2017 % p.a.	31 March 2016 % p.a.
Inflation/Pensions Increase Rate	2.1	1.9
Salary Increase Rate	2.4	3.4
Discount Rate *	2.6	3.5

Demographic assumptions

The demographic assumptions (including longevity) used to determine the actuarial present value of promised retirement benefits as at 31 March 2017 are those adopted for the formal actuarial valuation as at 31 March 2016. The actuary has estimated the impact of the change of financial and demographic assumptions to 31 March 2017 as an increase to the actuarial present value of £590m.

19. Current assets

	2017 £000	2016 £000
Debtors		
Contributions due – employers	4,970	4,094
Contributions due – employees	1,928	1,929
VAT to be reimbursed to the Fund	505	453
Overpaid pensions on death to be refunded to the Fund	12	12
Sundry – amount due from Closed Fund/Bank interest	87	21
	7,502	6,509
Cash at bank	5,101	4,466
Total	12,603	10,975

Analysis of debtors

	2017 £000	2016 £000
Government Agencies – Environment Agency	6,939	6,002
Admitted Bodies – NRW and SSCL	10	41
Central government bodies – HMRC	506	453
Other entities and individuals	47	13
Total	7,502	6,509

Amounts due from the Environment Agency, shown above under Government Agencies, are:

- Employers' and employees' contributions of £3,823,000 (2016: £3,810,000) and £1,925,000 (2016: £1,920,000) respectively outstanding in the normal course of collection at the year end and subsequently paid over within the statutory time limit.
- £1,140,000 (2016: £252,000) for special contributions due in respect of augmentations to members' Benefits.
- £51,000 (2016: £20,000) is due from the Environment Agency Closed Fund in respect of member and administration expenses.

20. Current liabilities

	2017 £000	2016 £000
Creditors		
Administration and investment expenses	(9,488)	(10,394)
Benefits payable	(1,095)	(1,647)
PAYE	(769)	(737)
Tax payable on refunds	(44)	(1)
Total	(11,396)	(12,779)

Analysis of creditors

	2017 £000	2016 £000
Other entities and individuals – Benefits and admin fees	(10,538)	(11,994)
Central Government bodies – HMRC	(813)	(738)
Independent Parliamentary Bodies – NAO fees	(45)	(47)
Total	(11,396)	(12,779)

21. Additional Voluntary Contributions

The table below shows information about these separately invested AVCs.

	2017 £000	2016 £000
Standard Life	3,244	3,569
Clerical Medical	2,249	1,920
Prudential	2,143	1,514
The Equitable Life Assurance Society	950	977
Total AVC investments	8,586	7,980

In accordance with Regulation 4(2)(b) of the Pension Scheme (Management and Investment Funds) Regulation 2009, the contributions paid and the assets of these investments are not included in the Fund's accounts. The AVC providers secure benefits on a money purchase basis for those members electing to buy AVCs. Members of the AVC schemes each receive an annual statement confirming the amounts held in their account and the movements in the year. The Fund relies on individual contributors to check that deductions are accurately reflected in the statements provided by the AVC provider.

22. Related party transactions

During the year ended 31 March 2017 there have been the following related party transactions:

- Pensions administration costs of £518k (2016: £397k) were recharged to the Active Fund by the Environment Agency.
- Six members of the Pensions Committee are contributing members of the Active Fund.
- One member of the Pensions Committee have deferred benefits in the Active Fund.
- Payment of unfunded liabilities of £358k (2016: £360k) recharged to the Environment Agency and funded by grant-in-aid from Defra in respect of compensatory added years.
- During the year, special contributions of £43,436 (2016: £100,616) were paid over to the Active Fund outside of our agreed timescales. As at the year end, no special contributions were outstanding.

23. Contingent liabilities and assets

In accordance with authorised investment strategy and mandates, the outstanding investment commitments at 31 March 2017 are, Private equity £32.9m (2016: £39.5m) and Property and infrastructure £119.6m (2016: £121.7m). There are no contingent assets as at 31 March 2017 (2016: £nil).

24. Impairment losses

For the year to 31 March 2017 the Fund has recognised an impairment loss of less than £0.05m (2016: less than £0.1m) for the non-recovery of pensioner death overpayments.

25. IAS10: Authorisation for issue

The Environment Agency Closed Pension Fund annual report and financial statements are laid before the Houses of Parliament by Defra. In accordance with IAS10 these financial statements have been authorised for issue by the Accounting Officer on the same date as the Comptroller and Auditor General's audit certificate.

The annexes

Annex 1 – Scheme rules and benefits

On 1 April 2014 the Scheme rules and benefits became subject to the Local Government Pension Scheme Regulations 2013 (as amended) and the Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014.

Scheme membership and income

- (a) All Fund employees are eligible for membership of the Local Government Pension Scheme (LGPS) (excluding Environment Agency Board Members and those employees who are eligible to join another pension scheme) providing they are under the age of 75 and have a contract of employment that is valid for at least 3 months. If it is for less than 3 months and you are, or during that period become, an *Eligible Jobholder* you will be brought into the scheme from either:
- The automatic enrolment date (unless your employer issues you with a postponement notice to delay bringing you into the scheme for up to a maximum of 3 months).
 - If your contract is extended to be for 3 months or more, or you opt to join by completing an application form, you will be brought into the scheme from the beginning of the pay period after the one in which your contract is extended or you opt to join.

Members' contributions are deducted from pensionable pay and the rate is dependent on the value of the permanent pensionable earnings paid. The rate the member pays depends on which earnings band the member falls into, but the rate will fall between 5.5% and 12.5% of permanent pensionable earnings. If the member works part time, the rate will be based on the full time equivalent permanent pensionable pay for the job, although the member will only pay contributions on the pensionable pay actually earned.

Subject to limits set by the Her Majesty's Revenue and Customs (HMRC), members can:

- Pay additional voluntary contributions (AVCs) with one of the Environment Agency In -House providers (Standard Life or Prudential) to buy a larger retirement pension, to improve other specific benefits or to provide additional EAFP pension, or membership for pension purposes (if the employee has continuously paid additional voluntary contributions since prior to 13 Nov 2001).
- Purchase additional EAFP pension.

The Environment Agency Pension Fund also has AVC membership in Equitable Life and Clerical Medical but these are now closed to new members.

- (b) Transfer payments for pension rights in almost any other scheme can be accepted by the Environment Agency Pension Fund to increase benefits, providing the transfer payment is received within 12 months of joining the Environment Agency Pension Fund (or such a longer date that the Fund employer may allow).
- (c) The Fund employer must make the balancing contribution required to keep the Fund solvent, having regard to existing and prospective liabilities. This is usually determined as a percentage of the members' pensionable pay by the Consulting Actuary following each triennial actuarial valuation of the Fund.
- (d) The Fund employer is required to fund early retirements (other than dismissal on the grounds of ill health) and any discretionary award of additional membership and/or pension by making up front payments into the Fund.
- (e) Monies not immediately required for the payment of benefits and other outgoings have to be invested in accordance with the provisions of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2009.

Outline of pension benefits provided by the LGPS

	Prior to 1 April 2008	1 April 2008 to 31 March 2014	From 1 April 2014
Basis of pension	Final salary	Final salary	Career Average Revalued Earnings (CARE)
Accrual rate	1/80th final salary for each year	1/60th final salary for each year	1/49th
Revaluation rate	Final salary		Consumer Price Index
Pensionable pay	Pay excluding non-contractual overtime and non-pensionable additional hours		Pay including non-contractual overtime and non-pensionable additional hours
Lump sum	3/80ths (+ commutation 12:1)	No automatic lump sum (commutation 12:1)	
Ill health retirements	One tier	Three tiers	
Death benefits	2 x salary, 5 year Guarantee	3 x salary, 10 year guarantee	
Contribution rate (see table below)	Flat rate of 6%	7 contribution bands 5.5% to 7.5% Bands index linked	9 contribution bands 5.5% to 12.5% Bands index linked
Early retirement	From age 50 (either redundancy or employee request)	From age 55 (either redundancy or employee request)	
Voluntary retirement	From age 60 if employee has 25 years' service	From age 60 but with reductions	from age 55 but with reductions
85 year rule	Can retire when combined age and service equals 85	Removed but existing staff have retained protections	
Normal retirement age	Age 65	Age 65	State Pension Age (minimum 65)

Contributions Table

The following table displays the 2016/17 employee contribution bands which did not increase from the previous financial year.

Pay range (based on actual Pensionable pay paid)	Contribution rate Main Section	Contribution rate 50/50 Section
Up to £13,600	5.50%	2.75%
£13,601 to £21,200	5.80%	2.90%
£21,201 to £34,400	6.50%	3.25%
£34,401 to £43,500	6.80%	3.40%
£43,501 to £60,700	8.50%	4.25%
£60,701 to £86,000	9.90%	4.95%
£86,001 to £101,200	10.50%	5.25%
£101,201 to £151,800	11.40%	5.70%
£151,801 or more	12.50%	6.25%

Annex 2 – Funding Strategy Statement

1. Introduction

What is this document?

This is the Funding Strategy Statement (FSS) of the Environment Agency Active Pension Fund ('the Fund'), which is administered by the Environment Agency on behalf of the Environment Agency Pensions Committee ('the Administering Authority').

It has been prepared by the Administering Authority in collaboration with the Fund's actuary, Hymans Robertson LLP, and after consultation with the Fund's employers and investment adviser. It is effective from 23 March 2017.

What is the Environment Agency Active Pension Fund?

The Fund is part of the national Local Government Pension Scheme (LGPS). The LGPS was set up by the UK Government to provide retirement and death benefits for local government employees, and those employed in similar or related bodies, across the whole of the UK.

The Environment Agency Active Fund was established as the National Rivers Authority Active Pension Fund in 1989 at the time of the privatisation of the water industry in England and Wales. The Fund inherited active members' accrued liabilities from the predecessor pension arrangements, but no pensioners or deferred pensioner liabilities. In 1996 it transferred to the Environment Agency and became the Environment Agency Active Pension Fund. Since then, the Fund has been gradually maturing.

As at 31 March 2016, the Active Fund contained 10,759 active members, 6,082 pensioners and 7,332 deferred pension members whose benefits have yet to come into payment.

The Active Fund has three participating employers – the Environment Agency (EA), Natural Resources Wales (NRW) and Shared Services Connected Ltd (SSCL).

The Administering Authority runs the Environment Agency Active Pension Fund to make sure it:

- Receives the proper amount of contributions from employees and employers, and any transfer payments.
- Invests the contributions appropriately, with the aim that the Fund's assets grow over time with investment income and capital growth.
- Uses the assets to pay Fund benefits to the members (as and when they retire, for the rest of their lives), and to their dependants (as and when members die), as defined in the LGPS Regulations. Assets are also used to pay transfer values and administration costs.

The roles and responsibilities of the key parties involved in the management of the Fund are summarised in Appendix B.

Why does the Fund need a Funding Strategy Statement?

Employees' benefits are guaranteed by the LGPS Regulations, and do not change with market values or employer contributions. Investment returns will help pay for some of the benefits, but probably not all, and certainly with no guarantee. Employees' contributions are fixed in those Regulations also, at a level which covers only part of the cost of the benefits.

Therefore, employers need to pay the balance of the cost of delivering the benefits to members and their dependants.

The FSS focuses on how employer liabilities are measured, the pace at which these liabilities are funded, and how employers or pools of employers pay for their own liabilities. This statement sets out how the Administering Authority has balanced the conflicting aims of:

- Affordability of employer contributions,
- Transparency of processes,
- Stability of employers' contributions, and
- Prudence in the funding basis

There are also regulatory requirements for an FSS, as given in Appendix A.

The FSS is a summary of the Fund's approach to funding its liabilities, and this includes reference to the Fund's other policies; it is not an exhaustive statement of policy on all issues. The FSS forms part of a framework which includes:

- The LGPS Regulations;
- The Rates and Adjustments Certificate (confirming employer contribution rates for the next three years) which can be found in an appendix to the formal valuation report.
- The Fund's policies on admissions, cessations and bulk transfers.
- Actuarial factors for valuing individual transfers, early retirement costs and the costs of buying added service.
- The Fund's Statement of Investment Principles / Investment Strategy Statement.

How does the Fund and this FSS affect me?

This depends on who you are:

- A member of the Fund, i.e. a current or former employee, or a dependant: the Fund needs to be sure it is collecting and holding enough money so that your benefits are always paid in full.
- An employer in the Fund (or which is considering joining the Fund): you will want to know how your contributions are calculated from time to time, that these are fair by comparison to other employers in the Fund, and in what circumstances you might need to pay more. Note that the FSS applies to all employers participating in the Fund.

What does the FSS aim to do?

The FSS sets out the objectives of the Fund's funding strategy, such as:

- To ensure the long-term solvency of the Fund, using a prudent long term view. This will ensure that sufficient funds are available to meet all members'/dependants' benefits as they fall due for payment.
- To ensure that employer contribution rates are reasonably stable where appropriate.
- To minimise the long-term cash contributions which employers need to pay to the Fund, by recognising the link between assets and liabilities and adopting an investment strategy which balances risk and return.

- To reflect the different characteristics of different employers in determining contribution rates. This involves the Fund having a clear and transparent funding strategy to demonstrate how each employer can best meet its own liabilities over future years.
- To use reasonable measures to reduce the risk to other employers and ultimately to the UK tax payer from an employer defaulting on its pension obligations.

How do I find my way around this document?

We show how the funding strategy is linked with the Fund's investment strategy.

In the Appendices we cover various issues in more detail if you are interested:

- the regulatory background, including how and when the FSS is reviewed,
- who is responsible for what,
- what issues the Fund needs to monitor, and how it manages its risks,
- some more details about the actuarial calculations required,
- the assumptions which the Fund actuary currently makes about the future.

Basic Funding issues

(More detailed and extensive descriptions are given in Appendix D).

How does the actuary measure the required contribution rate?

In essence this is a three-step process:

Calculate the ultimate funding target for that employer, i.e. the ideal amount of assets it should hold in order to be able to pay all its members' benefits. See Appendix E for more details of what assumptions we make to determine that funding target.

Determine the time horizon over which the employer should aim to achieve that funding target.

Determine a contribution strategy that has at least a given probability of achieving that funding target over that time horizon, allowing for different likelihoods of various possible economic outcomes over that time horizon.

What is each employer's contribution rate?

This is described in more detail in Appendix D. Employer contributions are normally made up of two elements:

- the estimated cost of benefits being built up each year, after deducting the members' own contributions and including administration expenses. This is referred to as the '*Primary rate*', and is expressed as a percentage of members' pensionable pay; plus
- an adjustment for the difference between the Primary rate above, and the actual contribution the employer needs to pay, referred to as the '*Secondary rate*'. In broad terms, payment of the Secondary rate will aim to return the employer to full funding over an appropriate period (the 'time horizon'). The Secondary rate may be expressed as a percentage of pay and/or a monetary amount in each year.

The rates for all employers are shown in the Fund's Rates and Adjustments Certificate, which forms part of the formal Actuarial Valuation Report. Employers' contributions are expressed as minima, with employers able to pay contributions at a higher rate. Account of any higher rate will be taken by the Fund actuary at subsequent valuations, i.e. will be reflected as a credit when next calculating the employer's contributions.

How does the contribution rate vary for different employers?

All three steps above are considered when setting contributions.

Funding target

The funding target is based on a set of assumptions about the future (e.g. investment returns, inflation, pensioners' life expectancies).

For employers *open to new entrants* a long-term view is taken to determine the funding target. In particular, the investment return assumption makes an allowance for anticipated returns from equities and other assets held by the Fund being in excess of UK Government bonds (gilts) over the long term. For the 2016 valuation, it was assumed that the Fund's assets will, over the long-term, deliver an average additional return of 1.6% a year in excess of the return available from investing in index-linked gilts. This is known as the 'ongoing' funding basis.

The EA (including SSCL by virtue of their risk-sharing agreement – see Section 3 note (c)) was funded on the ongoing funding basis at the 2016 valuation date.

If an employer that is **closed to new entrants** is approaching the end of its participation in the Fund then its funding target may be set on a more prudent basis, so that its liabilities are less likely to be spread among other employers after its cessation. This basis is known as the 'gilts cessation' basis and does not make any allowance for the outperformance of the Fund's assets above the rate of return on long dated index-linked gilts. Furthermore, the gilts cessation basis allows for future improvements in life expectancy in excess of those assumed under the ongoing funding assumptions.

NRW was funded on the gilts cessation basis at the 2016 valuation date.

Time horizon

The time horizon required is, in broad terms, the period over which any deficit is to be recovered. A shorter period will lead to higher contributions, and vice versa (all other things being equal).

When considering the adequacy of funding for employers that are **open to new entrants** (other than those open employers that participate in the Fund for a fixed period), the primary focus of the Pension Committee should be on the long-term because:

- liabilities are paid over a long period, rather than crystallising on a single day;
- market prices of assets with growth potential can be volatile;
- pension liabilities are significant compared to the employer's payroll; and
- cuts in employer contributions are easy to implement, but very slow to reverse.

The EA's contribution strategy was determined using a 20 year time horizon (from 1 April 2017) at the 2016 valuation.

For employers that are **closed to new entrants**, the Pensions Committee has regard to each employer's likely remaining period of participation in the Fund.

As a closed employer, the funding objective for NRW is to be 100% funded on the gilts cessation basis by the time the last active member leaves, triggering a cessation event (see section 3 note (c) for more details). For contribution setting purposes, a 20 year time horizon (from 1 April 2017) has been modelled. In practice, NRW's cessation date is expected to be beyond this time horizon.

Probability of achieving the funding target

The **probability of achieving** the funding target over that time horizon will be dependent on the Fund's view of the strength of employer covenant and its funding profile. Where an employer is considered to be weaker, then the required probability will be set higher, which in turn will increase the required contributions (and vice versa).

The EA and NRW are secure employers with a Government guarantee. The Pensions Committee have settled on contribution strategies for both employers that aim to meet their respective funding targets with at least a 73% probability of success.

Any costs of non ill-health early retirements must be paid by the employer, see 3.5.

Costs of ill-health early retirements are covered in 3.5 also.

How is a surplus or deficit calculated?

An employer's 'funding level' is defined as the ratio of:

- The market value of the employer's share of assets (see Appendix D), for further details of how this is calculated), to
- The value placed by the actuary on the benefits built up to date for the employer's employees and ex-employees (the 'liabilities'). The Fund actuary agrees with the Administering Authority the assumptions to be used in calculating this value.

If this is less than 100% then it means the employer has a shortfall, which is the employer's deficit; if it is more than 100% then the employer is said to be in surplus. The amount of deficit or shortfall is the difference between the asset value and the liabilities value.

It is important to note that the deficit/surplus and funding level are only measurements at a particular point in time, on a particular set of assumptions about the future. Whilst we recognise that various parties will take an interest in these measures, for most employers the key issue is how likely it is that their contributions will be sufficient to pay for their members' benefits (when added to their existing asset share and anticipated investment returns).

In short, deficits and funding levels are short term measures, whereas contribution-setting is a longer term issue.

How does the Fund balance the conflicting objectives of benefit security and contribution rate affordability?

The Administering Authority and the Fund actuary are acutely aware that, all other things being equal, a higher contribution required to be paid to the Fund will mean less cash available for the employer to spend on the provision of services.

Whilst this is true, it should also be borne in mind that:

- The Fund provides invaluable financial security to former employees and their families after their death.
- The Fund must have the assets available to meet these retirement and death benefits, which in turn means that the various employers must each pay their own way. Lower contributions today will mean higher contributions tomorrow: deferring payments does not alter the employer's ultimate obligation to the Fund in respect of its current and former employees.
- Each employer will generally only pay for its own employees and ex-employees (and their dependants), not for those of other employers in the Fund.
- The Fund strives to maintain reasonably stable employer contribution rates where appropriate and possible. However, a recent shift in regulatory focus means that solvency within each generation is considered by the Government to be a higher priority than stability of contribution rates.
- The Fund wishes to avoid the situation where an employer falls so far behind in managing its funding shortfall that its deficit becomes unmanageable in practice: such a situation may lead to employer insolvency and the resulting deficit falling on the other Fund employers. In that situation, those employers' services would in turn suffer as a result.

Overall, therefore, there is clearly a balance to be struck between the Fund's need for maintaining prudent funding levels, and the employers' need to allocate their resources appropriately. The Fund achieves this through various techniques which affect contribution increases to various degrees.

In deciding which of these techniques to apply to any given employer, the Administering Authority takes a view on the financial standing of the employer, i.e. its ability to meet its funding commitments and the relevant time horizon.

The Administering Authority will consider a risk assessment of that employer using a knowledge base which is regularly monitored and kept up-to-date. This database will include such information as the type of employer, its membership profile and funding position, any guarantors or security provision, material changes anticipated, etc.

For instance, where the Administering Authority has reasonable confidence that an employer will be able to meet its funding commitments, then the Fund will permit options such as stabilisation, a longer time horizon, and/or a lower probability of achieving their funding target. Such options will temporarily produce lower contribution levels than would otherwise have applied. This is permitted in the expectation that the employer will still be able to meet its obligations for many years to come.

On the other hand, where there is doubt that an employer will be able to meet its funding commitments or withstand a significant change in its commitments, then a higher funding target, and/or a shorter deficit recovery period, and/or a higher probability of achieving the target may be required.

The Fund actively seeks employer input, including to its funding arrangements, through various means: see Appendix A.

Calculating contributions for individual Employers

General comments

A key challenge for the Administering Authority is to balance the need for stable, affordable employer contributions with the requirement to take a prudent, longer-term view of funding and ensure the solvency of the Fund. With this in mind, the Fund's three-step process identifies the key issues:

1. What is a suitably (but not overly) prudent funding target?
2. How long should the employer be permitted to reach that target? This should be realistic but not so long that the funding target is in danger of never actually being achieved.
3. What probability is required to reach that funding target? This will always be less than 100% as we cannot be certain of future market movements. Higher probability hurdles can be used for employers where the Fund wishes to reduce the risk that the employer ceases leaving a deficit to be picked up by other employers.

These and associated issues are covered in this Section. The Administering Authority recognises that there may occasionally be particular circumstances affecting individual employers that are not easily managed within the rules and policies set out in the Funding Strategy Statement. Therefore the Administering Authority may, at its sole discretion, direct the actuary to adopt alternative funding approaches on a case by case basis for specific employers.

The effect of paying lower contributions

In limited circumstances the Administering Authority may permit employers to pay contributions at a lower level than is assessed for the employer using the three step process above. At their absolute discretion the Administering Authority may:

- Extend the time horizon for targeting full funding;
- Adjust the required probability of meeting the funding target;
- Permit an employer to participate in the Fund's stabilisation mechanisms;
- Permit extended phasing in of contribution rises or reductions.

Employers which are permitted to use one or more of the above methods will often be paying, for a time, contributions less than required to meet their funding target, over the appropriate time horizon with the required likelihood of success. Such employers should appreciate that:

- Their true long term liability (i.e. the actual eventual cost of benefits payable to their employees and ex-employees) is not affected by the pace of paying contributions.
- Lower contributions in the short term will be assumed to incur a greater loss of investment returns on the deficit. Thus, deferring a certain amount of contribution may lead to higher contributions in the long-term.
- It may take longer to reach their funding target, all other things being equal.

Overleaf is a summary of how the main funding policies differ for the 3 employers currently participating in the EAPF, followed by more detailed notes.

The different approaches used for different employers

Employer	Environment Agency (EA)	Natural Resources Wales (NRW)	Shared Services Connected Limited (SSCL)
Funding Target Basis used	Ongoing funding basis (see Appendix E)	Gilts cessation basis	Ongoing funding basis (see Appendix E)
Primary rate approach	(see Appendix D – D.2)		
Method for assessing total contributions payable	Contribution Stability Overlay - see Note (a)	NRW funding arrangement – see Note (b)	Risk sharing arrangement – see Note (c)
Maximum time horizon – Note (d)	20 years	20 years (for assessment of Primary rate)	20 years (for assessment of Primary rate)
Treatment of surplus	Covered by Contribution Stabilisation Mechanism	Covered by NRW funding arrangement	Covered by risk sharing arrangement
Probability of achieving target – Note (e)	76%	73%	N/A – see Note (c)
Phasing of contribution changes	Covered by Contribution Stabilisation Mechanism	None	N/A
Review of rates – Note (f)	Administering Authority reserves the right to review contribution rates and amounts, at regular intervals between valuations		
Cessation of participation: cessation debt payable	Cessation is assumed not to be generally possible, as Scheduled Bodies are legally obliged to participate in the LGPS. In the rare event of cessation occurring (machinery of Government changes for example), the cessation debt principles applied would be as per Note (g).	As per Note (g)	Covered by fixed rate arrangement

(Notes 'a' to 'g' are shown between pages 100 to 103)

Note (a) Contribution Stabilisation Mechanism

Stabilisation is a mechanism where employer contribution rate variations from year to year are kept within a pre-determined range, thus allowing those employers' rates to be relatively stable. In the interests of stability and affordability of employer contributions, the Administering Authority, on the advice of the Fund Actuary, believes that stabilising contributions can still be viewed as a prudent longer-term approach. However, employers whose contribution rates have been 'stabilised' (and may therefore be paying less than their theoretical contribution rate) should be aware of the risks of this approach and should consider making additional payments to the Fund if possible.

This stabilisation mechanism allows short term investment market volatility to be managed so as not to cause volatility in employer contribution rates, on the basis that a long term view can be taken on net cash inflow, investment returns and strength of employer covenant.

Stabilisation in the Environment Agency Active Pension Fund is reserved for long, term secure open employers. At present, the EA is the only employer with a stabilised contribution rate.

On the basis of extensive asset liability modelling carried out for the 2016 valuation exercise, the stabilised details are as follows:

Employer	Environment Agency
Short term contribution increases	+0% p.a. until 31 March 2020
Max cont increase per year thereafter	+0.5% of pay
Max cont decrease per year thereafter	-0.5% of pay

The stabilisation criteria and limits will be reviewed at the 31 March 2019 valuation, to take effect from 1 April 2020. However the Administering Authority reserves the right to review the stabilisation criteria and limits at any time before then, on the basis of membership and/or employer changes.

Note (b) NRW funding arrangement

NRW joined the Environment Agency Active Pension Fund on 1 April 2013. As an employer closed to new entrants, NRW's period of participation is finite and will cease when the last current active member leaves employment. At the 2013 valuation of the Fund, NRW were certified a contribution rate which aimed to target full funding on the ongoing basis over a period of 12 years (the estimated future working lifetime of the active membership at the time). In practice, an actual cessation event may not be for another 30-40 years.

Following the 2013 valuation, NRW indicated to the Fund that a fixed monetary contribution would be desirable as this would provide budgeting certainty. At the instruction of the Administering Authority, the Fund Actuary has carried out extensive asset liability modelling to determine a fixed level of contribution that would provide the Fund with the desired probability of funding success. As the employer will eventually be asked to meet a cessation payment assessed on the 'gilts cessation' basis, this been used as the funding target for the purpose of this modelling.

On the basis of this modelling, the following fixed annual contributions have been agreed:

Employer	Natural Resources Wales
Fixed annual contributions – 1 April 2017 to 31 March 2020	£7m
Fixed annual contributions – from 1 April 2020	Intended to remain at £7m but subject to regular review.

The long term contributions of £7m p.a. are intended to be fixed from 1 April 2020 until the last active member leaves employment and a cessation event is triggered. Based on the modelling carried out by the actuary, the Administering Authority is comfortable that the payment of a fixed amount of £7m p.a. leads to a sufficiently high likelihood of NRW being fully funded on the gilts cessation basis in the long term. However, the Administering Authority will carry regular monitoring of progress against the funding objective to ensure NRW remains 'on track'. The Administering Authority reserves the right to change the level of fixed contribution in the event of a significant change in funding position or to the economic outlook, or a change in employer circumstances (e.g. a significant change in membership).

Note (c) Risk sharing arrangement

An Awarding Authority may enter into a 'risk sharing' arrangement with a participating employer (typically a contractor). A 'risk sharing' arrangement is defined whereby the contribution and/or cessation requirements of an employer have been altered through the implementation of a separate side agreement between the Awarding Authority and the employer. The terms of any 'risk sharing' arrangement will be documented appropriately (i.e. in a signed legal agreement) and shared with the Administering Authority.

The terms of separate 'risk sharing' arrangement may differ (for example, the rate payable by the participating employer could be fixed or capped in some way). In addition, the approach taken to certify contributions required from employers in respect of separate 'risk sharing' arrangements may also differ. The Administering Authority will ensure that the Rates and Adjustments (R&A) certificate reflects any specific 'risk sharing' arrangement in place between an Awarding Authority and a participating employer.

The Administering Authority reserves the right to veto any risk sharing proposal in the event that the terms of the proposal leads to undue risk on the Fund and its participating employers.

There is currently one risk sharing agreement between EAPF employers, which exists between SSCL and the EA. As per the terms of this agreement, SSCL will be certified to pay a total contribution rate of 22.7% of payroll throughout their period of participation in the Fund. On ceasing to participate in the Fund, no cessation debt will be payable and all assets and liabilities of this employer will revert to the EA.

Note (d) Maximum time horizon

The maximum time horizon starts at the commencement of the revised contribution rate (1 April 2017 for the 2016 valuation). The Administering Authority would normally expect the same period to be used at successive triennial valuations, but would reserve the right to propose alternative time horizons, for example where there were no new entrants.

Note (e) Probability of achieving funding target

Each employer has its funding target calculated, and a relevant time horizon over which to reach that target. Contributions are set such that, combined with the employer's current asset share and anticipated market movements over the time horizon, the funding target is achieved with a given minimum probability. A higher required probability bar will give rise to higher required contributions, and vice versa.

Different probabilities are set for different employers depending on their nature and circumstances: in broad terms, a higher probability will apply due to one or more of the following:

- The Fund believes the employer poses a greater funding risk than other employers
- The employer does not have a guarantor or other sufficient security backing its funding position; and/or
- The employer is likely to cease participation in the Fund in the short or medium term

The EA and NRW are secure employers with a Government guarantee. The Pensions Committee have settled on contribution strategies for both employers that aim to meet their respective funding targets with at least a 73% probability of success.

Note (f) Regular Reviews

Such reviews may be triggered by significant events including but not limited to: significant reductions in payroll, altered employer circumstances, Government restructuring affecting the employer's business, or failure to pay contributions or arrange appropriate security as required by the Administering Authority.

The result of a review may be to require increased contributions (by strengthening the actuarial assumptions adopted and/or moving to monetary levels of deficit recovery contributions), and/or an increased level of security or guarantee.

Note (g) Cessation of participating employers

An employer's participation in the Fund is generally assumed to be open-ended and to continue until all the benefits have been paid in full. Contributions, expressed as capital payments, can continue to be levied after all the employees have retired. Participation in the Fund can however be terminated at any point, subject to the terms of any admission agreement.

The Fund, however, considers any of the following as triggers for the termination of an admission agreement:

- Last active member ceasing participation in the Fund;
- The insolvency, winding up or liquidation of the employer;

- Any breach by the employer of any of its obligations under the agreement that they have failed to remedy to the satisfaction of the Fund;
- A persistent failure by the employer to pay any sums due to the Fund within the period required by the Fund, which leads to the accrual of arrears to a level deemed by the Fund to be significant; or
- The failure by the employer to renew or adjust the level of the bond or indemnity or to confirm an appropriate alternative guarantor as required by the Fund.

In addition either party can voluntarily terminate the agreement by giving the appropriate period of notice to the other party.

If an employer ceased to participate in the Fund, the Administering Authority instructs the Fund actuary to carry out a special valuation to determine whether there is any deficit.

The assumptions adopted to value the departing employer's liabilities for this valuation will depend upon the circumstances. For example, for admission bodies whose participation is voluntarily ended either by themselves or the Fund, the Administering Authority must look to protect the interests of other ongoing employers and will require the actuary to adopt valuation assumptions which, to the extent reasonably practicable, protect the other employers from the likelihood of any material loss emerging in future. Where there is a guarantor, and the guarantor participates in the Fund, the cessation valuation will normally be calculated using an ongoing valuation basis appropriate to the investment strategy. Where a guarantor does not exist (or in the case where the guarantor does not participate in the Fund) then, in order to protect other employers in the Fund, the cessation liabilities and final deficit will normally be calculated using a 'gilts cessation basis' with no allowance for potential future investment outperformance and with an allowance for further future improvements in life expectancy. This approach results in a higher value being placed on the liabilities than would be the case under a valuation on the ongoing funding basis and could give rise to significant payments being required. These principles also apply to any employers that are not admission bodies.

Any shortfall would be levied on the departing admission body as a capital payment.

In the event that the Fund is not able to recover the required payment in full directly from the admission body or from any bond or indemnity or guarantor, then the unpaid amounts fall to be shared amongst all of the employers in the Fund. This will normally be reflected in contribution rates set at the formal valuation following the cessation date.

Where the ceasing admission body is continuing in business, the Fund, at its absolute discretion, reserves the right to enter into an agreement with the ceasing admission body to accept an appropriate alternative security to be held against any funding deficit and to carry out the cessation valuation on an ongoing valuation basis. This approach would be monitored as part of each triennial valuation and the Fund reserves the right to revert to a 'gilts cessation basis' and seek immediate payment of any funding shortfall identified.

For those employers whose lifespan is limited (e.g. closed employers), the Administering Authority may seek to increase or reduce the employer's contributions to the Fund in the period leading up to cessation to target a position where the employer's assets are equal to their liabilities on an appropriate basis.

Protection mechanisms

The Administering Authority has a duty to set prudent funding assumptions and protect the long term health of the Fund. The following table explains the key tools that have been used in the decision making process to arrive at the recommended set of assumptions.

	Tool	Description
1	Contribution stability a. Contribution stability overlay b. Contribution stability overlay safety check	Limit on annual changes in contributions for long term, secure employers (currently only the Environment Agency) of +/-0.5% of pay from April 2020 (contributions fixed at 2016/17 levels until then). Asset liability modelling was carried out to ensure that the likelihood of the employer achieving full funding with the contribution stability mechanism in place was sufficiently high.
2	NRW funding strategy c. Fixed annual contributions d. Fixed annual contributions check	Long term contributions for NRW have been set at £7m per annum. Asset liability modelling was carried out to ensure that the likelihood of the employer achieving full funding on the 'gilts cessation' basis in the long term (20 years) was sufficiently high. Fixed annual contributions will be reviewed regularly (e.g. triennially) and tweaked as necessary.
2	Pay growth check	An annual check on the impact of pay awards on the value of accrued liabilities, compared to assumptions made at this actuarial valuation, will continue to be undertaken. Each employer will be able to pay additional top-up contributions at the Fund's discretion.
3	Time horizon	Determined separately for each participating employer by reference to the employer's circumstances and basis of participation in the Fund.

Funding for early retirement

Non ill health retirements

The actuary's funding basis makes no allowance for premature retirement except on grounds of ill health. Each employer is required to pay a lump sum contribution whenever an employee retires before attaining the age at which the valuation assumes that benefits are payable.

It is assumed that members' benefits are payable from the earliest age that the employee could retire, on or after age 60, without incurring a reduction to their benefit and without requiring their employer's consent to retire.

Employees who joined the LGPS before 1 October 2006 (and are subject to Rule of 85 protections on their pre April 2008 benefits) but reach age 60 after 31 March 2020, plus all employees who joined after 1 October 2006 (and are assumed to retire before 1 April 2022), are assumed to take all of their benefits at age 65. Otherwise all benefits accrued will be payable at the member's State Pension Age (SPA). SPA is as per current legislation where the SPA is due to rise to 67 between 2034 and 2036 and to 68 between 2044 and 2046. The Government has indicated that further changes will be made to SPA, but as yet these are to be confirmed in legislation.

The additional costs of premature retirement are calculated by reference to these ages. Each employer is required to meet all costs of early retirement strain caused by early retirements other than on the grounds of ill health by immediate capital payments into the Fund.

Ill health monitoring

The Fund monitors employees' ill health experience on an ongoing basis. If the cumulative number of ill health retirements in any financial year exceeds the allowance at the previous valuation, the employer may, after the Administering Authority has consulted with the actuary, be charged additional contributions on the same basis as apply for non ill-health cases.

New employers participating in the Fund

The Fund currently has three participating employers. It is possible that more employers will join the Fund in future. There are a number of ways in which new bodies can participate in the LGPS, such as a scheduled body or an admission body.

In general, the following principles will apply when a new employer enters the Fund:

- Starting assets and liabilities will be notionally ring-fenced within the Fund and the funding level of the new employer tracked over time based on its own experience, cash flows in and out and membership movements.
- The new employer will have its own individual contribution rate separate from any other employer in the Fund and based on its own membership profile, with a time horizon no greater than the average future working lifetime of its active employees.

- Any deficit left behind if past service benefits are transferred from a ceding employer in the Fund to the new employer as result of a fully funded transfer should be met via either an up-front capital payment or over a suitable spreading period, which should be no longer than that applied to the Environment Agency, as agreed with the paying body.
- Any deficit that the new body inherits at commencement (e.g. as a result of a 'share of fund' transfer from another employer within or outside the Fund) would be expected to be met via an up-front capital payment from the new employer or over some suitable spreading period, which should be no longer than that applied to the Environment Agency.
- The calculation of all up-front capital payments are based on market conditions at the date that the new employer joins the Fund (i.e. the vesting or transfer date).

The extent to which these principles will apply will depend on the individual circumstances of the new employer. For example, the Fund will take into account the type of new body (e.g. admission or scheduled body), whether or not it is closed or open to new entrants, its financial covenant and the existence of any Crown guarantee. The Fund will also refer to its policy on the participation of new admission bodies and bulk transfers when agreeing its entry requirements.

Policies on bulk transfers

The Fund's policy on bulk transfers is based on the following key principles:

- When a group of active scheme members joins the EAPF, the Administering Authority's objective is to ensure, as far as practical that the EAPF does not accept an ongoing funding deficit in respect of the transferring employees.
- When a group of active scheme members leaves the EAPF, in order to protect the funding position in respect of the remaining members, the transfer values in respect of the transferring members should be no more than the assets held in respect of the transferring liabilities, and at most be 100% of the transferring liabilities on the ongoing funding basis as set out in the EAPF's Funding Strategy Statement.
- Service credits granted to active scheme members should fully reflect the value of the benefits being transferred, irrespective of the transfer value paid or received.
- There is also an overriding objective to ensure that the LGPS Regulations and any supplementary guidance (in particular the Cabinet Office Statement of Practice on Staff Transfers in the Public Sector 2000 (COSOP) and Fair Deal guidance) as they pertain to bulk transfers are adhered to. The Fair Deal guidance, in as much as it relates to LGPS employers, is currently under review. At the time of drafting the outcome of this review was still unknown.

EAPF employers should treat the EAPF's preferred terms on bulk transfers as non-negotiable. Any differences between the value the EAPF is prepared to pay (or receive) and that which the other scheme involved is prepared to accept should be dealt with by the employers concerned outside the EAPF.

Funding strategy and links to investment strategy

What is the Fund's investment strategy?

The Fund has built up assets over the years, and continues to receive contribution and other income. All of this must be invested in a suitable manner, which is the investment strategy.

Investment strategy is set by the administering authority, after consultation with the employers and after taking investment advice. The precise mix, manager make up and target returns are set out in the Statement of Investment Principles (being replaced by an Investment Strategy Statement under new LGPS Regulations), which is available to members and employers.

The investment strategy is set for the long-term, but is reviewed from time to time. Normally a full review is carried out as part of each actuarial valuation, and is kept under review annually between actuarial valuations to ensure that it remains appropriate to the Fund's liability profile.

The Environment Agency's Pensions Committee has decided to adopt a more flexible approach to the Active Fund future investment strategy and asset allocation so that we can respond responsibly and robustly to both the changing global economic environment and impacts of climate change. This will ensure that the Fund's approach to environmental issues remains in the best interest of fund members with many environmental issues able to affect the financial and physical wellbeing of individuals.

The same investment strategy is currently followed for all employers.

What is the link between funding strategy and investment strategy?

The Fund must be able to meet all benefit payments as and when they fall due. These payments will be met by contributions (resulting from the funding strategy) or asset returns and income (resulting from the investment strategy). To the extent that investment returns or income fall short, then higher cash contributions are required from employers, and vice versa

Therefore, the funding and investment strategies are inextricably linked.

How does the funding strategy reflect the Fund's investment strategy?

In the opinion of the Fund actuary, the current funding policy is consistent with the current investment strategy of the Fund. The asset outperformance assumption contained in the discount rate (see Appendix E3) is within a range that would be considered acceptable for funding purposes; it is also considered to be consistent with the requirement to take a 'prudent longer-term view' of the funding of liabilities as required by the UK Government (see Appendix A1).

However, in the short term – such as the three yearly assessments at formal valuations – there is the scope for considerable volatility and there is a material chance that in the short-term and even medium term, asset returns will fall short of this target. The stability measures will damp down, but not remove, the effect on employers' contributions.

The Fund does not hold a contingency reserve to protect it against the volatility of equity investments.

How does this differ for a large stable employer? (e.g. the EA)

The Actuary has developed four key measures which capture the essence of the Fund's strategies, both funding and investment:

Prudence - the Fund should have a reasonable expectation of being fully funded in the long term;

Affordability – how much can employers afford;

Stewardship – the assumptions used should be sustainable in the long term, without having to resort to overly optimistic assumptions about the future to maintain an apparently healthy funding position; and

Stability – employers should not see significant moves in their contribution rates from one year to the next, to help provide a more stable budgeting environment.

The key problem is that the key objectives often conflict. For example, minimising the long term cost of the scheme (i.e. keeping employer rates affordable) is best achieved by investing in higher returning assets e.g. equities. However, equities are also very volatile (i.e. go up and down fairly frequently in fairly large moves), which conflicts with the objective to have stable contribution rates.

Therefore, a balance needs to be maintained between risk and reward, which has been considered by the use of Asset Liability Modelling: this is a set of calculation techniques applied by the Fund's actuary to model the range of potential future solvency levels and contribution rates.

The Actuary was able to model the impact of these four key areas, for the purpose of setting a stabilisation approach. The modelling demonstrated that retaining the present investment strategy, coupled with constraining employer contribution rate changes, struck an appropriate balance between the above objectives. In particular the stabilisation approach currently adopted meets the need for stability of contributions without jeopardising the Administering Authority's aims of prudent stewardship of the Fund.

Whilst the current stabilisation mechanism is to remain in place until 2020, it should be noted that this will need to be reviewed following the 2019 valuation.

Does the Fund monitor its overall funding position?

The Administering Authority monitors the relative funding position, i.e. changes in the relationship between asset values and the liabilities value, quarterly. It reports this to the regular Pensions Committee meetings, and also to employers through regular communication.

Statutory reporting and comparison to other LGPS Funds

Purpose

Under Section 13(4)(c) of the Public Service Pensions Act 2013 ('Section 13'), the Government Actuary's Department must, following each triennial actuarial valuation, report to the Department of Communities & Local Government (DCLG) on each of the LGPS Funds in England & Wales. This report will cover whether, for each Fund, the rate of employer contributions are set at an appropriate level to ensure both the solvency and the long term cost efficiency of the Fund.

This additional DCLG oversight may have an impact on the strategy for setting contribution rates at future valuations.

Solvency

For the purposes of Section 13, the rate of employer contributions shall be deemed to have been set at an appropriate level to ensure solvency if:

- (a) The rate of employer contributions is set to target a funding level for the Fund of 100%, over an appropriate time period and using appropriate actuarial assumptions (where appropriateness is considered in both absolute and relative terms in comparison with other funds).
- (b) Employers collectively have the financial capacity to increase employer contributions, and/or the Fund is able to realise contingent assets should future circumstances require, in order to continue to target a funding level of 100%.
- (c) There is an appropriate plan in place should there be, or if there is expected in future to be, a material reduction in the capacity of fund employers to increase contributions as might be needed.

Long Term Cost Efficiency

The rate of employer contributions shall be deemed to have been set at an appropriate level to ensure long term cost efficiency if:

- i. The rate of employer contributions is sufficient to make provision for the cost of current benefit accrual.
- ii. With an appropriate adjustment to that rate for any surplus or deficit in the Fund.

In assessing whether the above condition is met, DCLG may have regard to various absolute and relative considerations. A relative consideration is primarily concerned with comparing LGPS pension funds with other LGPS pension funds. An absolute consideration is primarily concerned with comparing Funds with a given objective benchmark.

Relative considerations include:

- 1. The implied deficit recovery period.
- 2. The investment return required to achieve full funding after 20 years.

Absolute considerations include:

- 1. The extent to which the contributions payable are sufficient to cover the cost of current benefit accrual and the interest cost on any deficit.
- 2. How the required investment return under 'relative considerations' above compares to the estimated future return being targeted by the Fund's current investment strategy.
- 3. The extent to which contributions actually paid have been in line with the expected contributions based on the extant rates and adjustment certificate.
- 4. The extent to which any new deficit recovery plan can be directly reconciled with, and can be demonstrated to be a continuation of, any previous deficit recovery plan, after allowing for actual Fund experience.

DCLG may assess and compare these metrics on a suitable standardised market-related basis, for example where the local funds' actuarial bases do not make comparisons straightforward.

Appendix A – Regulatory framework

Why does the Fund need an FSS?

The Department for Communities and Local Government (DCLG) has stated that the purpose of the FSS is:

“To establish a **clear and transparent fund-specific strategy** which will identify how employers’ pension liabilities are best met going forward.

To support the regulatory framework to maintain **as nearly constant employer contribution rates as possible**.

To take a **prudent longer-term view** of funding those liabilities.”

These objectives are desirable individually, but may be mutually conflicting.

The requirement to maintain and publish a FSS is contained in LGPS Regulations which are updated from time to time. In publishing the FSS the Administering Authority has to have regard to any guidance published by Chartered Institute of Public Finance and Accountancy (CIPFA) (most recently in 2016) and to its Statement of Investment Principles / Investment Strategy Statement.

This is the framework within which the Fund’s actuary carries out triennial valuations to set employers’ contributions and provides recommendations to the Administering Authority when other funding decisions are required, such as when employers join or leave the Fund. The FSS applies to all employers participating in the Fund.

Does the Administering Authority consult anyone on the FSS?

Yes. This is required by LGPS Regulations. It is covered in more detail by the most recent CIPFA guidance, which states that the FSS must first be subject to “consultation with such persons as the authority considers appropriate”, and should include “a meaningful dialogue at officer and Pensions Committee level with council tax raising authorities and with corresponding representatives of other participating employers”.

In practice, for the Fund, the consultation process for this FSS was as follows:

- a) A draft version of the FSS was issued to all participating employers on 9 March 2017 for comment;
- b) Comments were requested within 14 days;
- c) Following the end of the consultation period the FSS was updated where required and then published on 23 March 2017.

How is the FSS published?

The FSS is made available through the following routes:

Published on the website, at www.eapf.org.uk

A copy sent by email to each participating employer in the Fund.

A full copy included in the annual report and financial statements of the Fund.

Copies made available on request.

How often is the FSS reviewed?

The FSS is reviewed in detail at least every three years as part of the triennial valuation. This version is expected to remain unaltered until it is consulted upon as part of the formal process for the next valuation in 2019.

It is possible that (usually slight) amendments may be needed within the three year period. These would be needed to reflect any regulatory changes, or alterations to the way the Fund operates (e.g. to accommodate a new class of employer). Any such amendments would be consulted upon as appropriate:

- trivial amendments would be simply notified at the next round of employer communications,
- amendments affecting only one class of employer would be consulted with those employers,
- other more significant amendments would be subject to full consultation.

In any event, changes to the FSS would need agreement by the Pensions Committee and would be included in the relevant Committee Meeting minutes.

How does the FSS fit into other Fund documents?

The FSS is a summary of the Fund's approach to funding liabilities. It is not an exhaustive statement of policy on all issues, for example there are a number of separate statements published by the Fund including the Statement of Investment Principles/Investment Strategy Statement, Governance Strategy and Communications Strategy. In addition, the Fund publishes an Annual Report and Accounts with up to date information on the Fund.

These documents can be found at www.eapf.org.uk

Appendix B – Responsibilities of key parties

The efficient and effective operation of the Fund needs various parties to each play their part.

The Administering Authority should:-

Operate the Fund as per the LGPS Regulations.

Effectively manage any potential conflicts of interest arising from its dual role as Administering Authority and a Fund employer.

Collect employer and employee contributions, and investment income and other amounts due to the Fund.

Ensure that cash is available to meet benefit payments as and when they fall due.

Pay from the Fund the relevant benefits and entitlements that are due.

Invest surplus monies (i.e. contributions and other income which are not immediately needed to pay benefits) in accordance with the Fund's Statement of Investment Principles/Investment Strategy Statement (SIP/ISS) and LGPS Regulations.

Communicate appropriately with employers so that they fully understand their obligations to the Fund.

Take appropriate measures to safeguard the Fund against the consequences of employer default.

Manage the valuation process in consultation with the Fund's actuary.

Provide data and information as required by the Government Actuary's Department to carry out their statutory obligations.

Prepare and maintain a FSS and a SIP/ISS, after consultation.

Notify the Fund's actuary of material changes which could affect funding (this is covered in a separate agreement with the actuary).

Monitor all aspects of the fund's performance and funding and amend the FSS and SIP/ISS as necessary and appropriate.

The Individual Employer should:-

Deduct contributions from employees' pay correctly.

Pay all contributions, including their own as determined by the actuary, promptly by the due date.

Have a policy and exercise discretions within the regulatory framework.

Make additional contributions in accordance with agreed arrangements in respect of, for example, augmentation of scheme benefits, early retirement strain.

Notify the Administering Authority promptly of all changes to its circumstances, prospects or membership, which could affect future funding.

The Fund Actuary should:-

Prepare valuations, including the setting of employers' contribution rates. This will involve agreeing assumptions with the Administering Authority, having regard to the FSS and LGPS Regulations, and targeting each employer's solvency appropriately.

- Provide data and information as required by the Government Actuary's Department to carry out their statutory obligations.
- Provide advice relating to new employers in the Fund, including the level and type of bonds or other forms of security (and the monitoring of these).
- Prepare advice and calculations in connection with bulk transfers and individual benefit-related matters.
- Assist the Administering Authority in considering possible changes to employer contributions between formal valuations, where circumstances suggest this may be necessary.
- Advise on the termination of employers' participation in the Fund.
- Fully reflect actuarial professional guidance and requirements in the advice given to the Administering Authority.

Other parties:-

Investment advisers (either internal or external) should ensure the Fund's SIP/ISS remains appropriate, and consistent with this FSS.

Investment managers, custodians and bankers should all play their part in the effective investment (and dis-investment) of Fund assets, in line with the SIP/ISS.

Auditors should comply with their auditing standards, ensure Fund compliance with all requirements, monitor and advise on fraud detection, and sign off annual reports and financial statements as required.

Governance advisers may be appointed to advise the Administering Authority on efficient processes and working methods in managing the Fund.

Legal advisers (either internal or external) should ensure the Fund's operation and management remains fully compliant with all regulations and broader local government requirements, including the Administering Authority's own procedures.

The Department for Communities and Local Government (assisted by the Government Actuary's Department) and the Scheme Advisory Board, should work with LGPS Funds to meet Section 13 requirements.

Appendix C – Key risks and controls

Types of risk

The Administering Authority has an active risk management programme in place. The measures that it has in place to control key risks are summarised below under the following headings:

- Financial
- Demographic
- Regulatory
- Governance

Financial risks

Risk	Summary of Control Mechanisms
Fund assets fail to deliver returns in line with the anticipated returns underpinning the valuation of liabilities over the long-term.	Only anticipate long-term returns on a relatively prudent basis to reduce risk of under-performing. Assets invested on the basis of specialist advice, in a suitably diversified manner across asset classes, geographies, managers, etc. Analyse progress at three yearly valuations for all employers. Inter-valuation roll-forward of liabilities between valuations at whole Fund level.
Inappropriate long-term investment strategy.	Overall investment strategy options considered as an integral part of the funding strategy. Used asset liability modelling to measure 4 key outcomes. Chosen option considered to provide the best balance.
Fall in risk-free returns on Government bonds, leading to rise in value placed on liabilities.	Asset liability modelling at for EA and NRW allows for the probability of this within a longer term context. Inter-valuation monitoring, as above. Some investment in bonds helps to mitigate this risk.
Active investment manager under-performance relative to benchmark.	Quarterly investment monitoring analyses market performance and active managers relative to their index benchmark.
Pay and price inflation significantly more than anticipated.	The focus of the actuarial valuation process is on real returns on assets, net of price and pay increases.

Risk	Summary of Control Mechanisms
	Inter-valuation monitoring, as above, gives early warning. Some investment in bonds also helps to mitigate this risk. Employers pay for their own salary awards and should be mindful of the geared effect on pension liabilities of any bias in pensionable pay rises towards longer-serving employees.
Effect of possible increase in employer's contribution rate on service delivery and admission/scheduled bodies.	An explicit stabilisation mechanism has been agreed as part of the funding strategy for the EA, whilst a stable monetary contribution (subject to triennial review) has been agreed for NRW. SSCL participate in the Fund with a fixed contribution rate.
Effects of possible shortfall in cash required to meet benefit outgo due to reduced cash contributions and/or maturing demographic profile.	Mitigate risk by introducing a cash flow monitoring process, whereby any possible future cash shortfall is identified early enough for appropriate action to be taken. Accuracy of cashflow projections is improved by use of bespoke baseline longevity assumptions.
Effect of possible asset underperformance as a result of climate change.	The EAPF has a comprehensive approach to managing this risk outlined in its Policy to Address the Risks of Climate Change.

Demographic risks

Risk	Summary of Control Mechanisms
Pensioners living longer, thus increasing cost to Fund.	Set mortality assumptions with some allowance for future increases in life expectancy. The Fund Actuary has direct access to the experience of over 50 LGPS funds which allows early identification of changes in life expectancy that might in turn affect the assumptions underpinning the valuation.
Maturing Fund – i.e. proportion of actively contributing employees declines relative to retired employees.	Continue to monitor at each valuation, consider seeking monetary amounts rather than % of pay and consider alternative investment strategies.
Deteriorating patterns of early retirements.	Employers are charged the extra cost of non ill-health retirements following each individual decision. Employer ill health retirement experience is monitored,

Risk	Summary of Control Mechanisms
	and insurance is an option.
Reductions in payroll causing insufficient deficit recovery payments.	In many cases this may not be sufficient cause for concern, and will in effect be caught at the next formal valuation. However, there are protections where there is concern, as follows: The EA may be brought out of the stabilisation mechanism to permit appropriate contribution increases. For other employers, review of contributions is permitted in general between valuations. NRW pay contributions as a monetary amount rather than a percentage of payroll to avoid a gradually reducing annual contribution.

Regulatory risks

Risk	Summary of Control Mechanisms
Changes to national pension requirements and/or HMRC rules e.g. changes arising from public sector pensions reform.	The Administering Authority considers all consultation papers issued by the Government and comments where appropriate. The results of the most recent reforms were built into the 2013 valuation. Any changes to member contribution rates or benefit levels will be carefully communicated with members to minimise possible opt-outs or adverse actions.
Time, cost and/or reputational risks associated with any DCLG intervention triggered by the Section 13 analysis.	Take advice from Fund Actuary on position of Fund as at prior valuation, and consideration of proposed valuation approach relative to anticipated Section 13 analysis.
Changes by Government to particular employer participation in LGPS Funds, leading to impacts on funding and/or investment strategies.	The Administering Authority considers all consultation papers issued by the Government and comments where appropriate. Take advice from Fund Actuary on impact of changes on the Fund and amend strategy as appropriate.

Governance risks

Risk	Summary of Control Mechanisms
Administering Authority unaware of structural changes in an employer's membership (e.g. large fall in employee members, large number of retirements) or not advised of an employer closing to new entrants.	The Administering Authority has a close relationship with employing bodies and communicates required standards e.g. for submission of data. The Actuary may revise the rates and Adjustments certificate to increase an employer's contributions between triennial valuations. Deficit contributions may be expressed as monetary amounts.
Actuarial or investment advice is not sought, or is not heeded, or proves to be insufficient in some way.	The Administering Authority maintains close contact with its specialist advisers. Advice is delivered via formal meetings involving Pensions Committee Members, and recorded appropriately. Actuarial advice is subject to professional requirements such as peer review.
An employer ceasing to exist with insufficient funding or adequacy of a bond.	The Administering Authority believes that it would normally be too late to address the position if it was left to the time of departure. The risk is mitigated by: Seeking a funding guarantee from another scheme employer, or external body, where-ever possible. Alerting the prospective employer to its obligations and encouraging it to take independent actuarial advice. Vetting prospective employers before admission. Where permitted under the regulations requiring a bond to protect the Fund from various risks. Requiring new Community Admission Bodies to have a guarantor. Reviewing bond or guarantor arrangements at regular intervals. Reviewing contributions well ahead of cessation if thought appropriate.

Appendix D – The calculation of Employer contributions

This Appendix considers these calculations in much more detail.

All three steps above are considered when setting:

1. The **funding target** is based on a set of assumptions about the future, eg investment returns, inflation, pensioners' life expectancies. However, if an employer is approaching the end of its participation in the Fund then its funding target may be set on a more prudent basis, so that its liabilities are less likely to be spread among other employers after its cessation of participation;
2. The **time horizon** required is, in broad terms, the period over which any deficit is to be recovered. A shorter period will lead to higher contributions, and vice versa (all other things being equal). Employers may be given a lower time horizon if they have a less permanent anticipated membership, or do not have tax-raising powers to increase contributions if investment returns under-perform;
3. The required **probability of achieving** the funding target over that time horizon will be dependent on the Fund's view of the strength of employer covenant and its funding profile. Where an employer is considered to be weaker, or potentially ceasing from the Fund, then the required probability will be set higher, which in turn will increase the required contributions (and vice versa).

The calculations involve actuarial assumptions about future experience., and these are described in detail in Appendix E.

What is the difference between calculations across the whole Fund and calculations for an individual employer?

Employer contributions are normally made up of two elements:

- a) the estimated cost of ongoing benefits being accrued, referred to as the 'Primary contribution rate'; plus
- b) an adjustment for the difference between the Primary rate above, and the actual contribution the employer needs to pay, referred to as the 'Secondary contribution rate'.

The contribution rate for each employer is measured as above, appropriate for each employer's funding position and membership. The whole Fund position, including that used in reporting to DCLG (see section 5), is calculated in effect as the sum of all the individual employer rates. DCLG currently only regulates at whole Fund level, without monitoring individual employer positions.

How is the Primary contribution rate calculated?

The Primary element of the employer contribution rate is calculated with the aim that these contributions will meet benefit payments in respect of members' **future** service in the Fund. This is based upon the cost (in excess of members' contributions) of the benefits which employee members earn from their service each year.

The Primary rate is calculated separately for all the employers. The Primary rate is calculated such that it is projected to:

- Meet the required funding target for all future years' accrual of benefits*, excluding any accrued assets.
- Within the determined time horizon.
- With a sufficiently high probability, as set by the Fund's strategy for the category of employer.
- The projection is for the current active membership where the employer no longer admits new entrants, or additionally allows for new entrants where this is appropriate.

The projections are carried out using an economic modeller developed by the Fund's actuary Hymans Robertson: this allows for a wide range of outcomes as regards key factors such as asset returns (based on the Fund's investment strategy), inflation, and bond yields. The measured contributions are calculated such that the proportion of outcomes meeting the employer's funding target (by the end of the time horizon) is equal to the required probability.

The approach includes expenses of administration to the extent that they are borne by the Fund, and includes allowances for benefits payable on death in service and on ill health retirement.

How is the Secondary contribution rate calculated?

The combined Primary and Secondary rates aim to achieve the employer's funding target, within the appropriate time horizon, with the relevant degree of probability.

For the funding target, the Fund actuary agrees the assumptions to be used with the Administering Authority – see Appendix E. These assumptions are used to calculate the present value of all benefit payments expected in the future, relating to that employer's current and former employees, based on pensionable service to the valuation date only (i.e. ignoring further benefits to be built up in the future).

The Fund operates the same target funding level for all employers of 100% of its accrued liabilities valued on the ongoing basis, unless otherwise determined.

The Secondary rate is calculated as an adjustment to the Primary rate, such that the total is projected to:

- Meet the required funding target relating to combined past and future service benefit accrual, including accrued asset share,
- Within the determined time horizon,
- With a sufficiently high probability, as set by the Fund's strategy for the category of employer.

The projections are carried out using an economic modeller developed by the Fund Actuary Hymans Robertson: this allows for a wide range of outcomes as regards key factors such as asset returns (based on the Fund's investment strategy), inflation, and bond yields. The measured contributions are calculated such that the proportion of outcomes with at least 100% solvency (by the end of the time horizon) is equal to the required probability.

What affects a given employer's valuation results?

The results of these calculations for a given individual employer will be affected by:

1. Past contributions relative to the cost of accruals of benefits.
2. Different liability profiles of employers (e.g. mix of members by age, gender, service vs. salary).
3. The effect of any differences in the funding target, i.e. the valuation basis used to value the employer's liabilities.
4. Any different time horizons.
5. The difference between actual and assumed rises in pensionable pay.
6. The difference between actual and assumed increases to pensions in payment and deferred pensions.
7. The difference between actual and assumed retirements on grounds of ill-health from active status.
8. The difference between actual and assumed amounts of pension ceasing on death.
9. The additional costs of any non ill-health retirements relative to any extra payments made.
10. Differences in the required probability of achieving the funding target.

How is each employer's asset share calculated?

The Administering Authority does not account for each employer's assets separately. Instead, the Fund's actuary is required to apportion the assets of the whole Fund between the employers, at each triennial valuation.

This apportionment uses the income and expenditure figures provided for certain cash flows for each employer. This process adjusts for transfers of liabilities between employers participating in the Fund, but does make a number of simplifying assumptions. The split is calculated using an actuarial technique known as 'analysis of surplus'.

Actual investment returns achieved on the Fund between each valuation are applied proportionately across all employers, to the extent that employers in effect share the same investment strategy. Transfers of liabilities between employers within the Fund occur automatically within this process, with a sum broadly equivalent to the reserve required on the ongoing basis being exchanged between the two employers.

The Fund actuary does not allow for certain relatively minor events, including but not limited to:

The actual timing of employer contributions within any financial year, the effect of the premature payment of any deferred pensions on grounds of incapacity. These effects are swept up within a miscellaneous item in the analysis of surplus, which is split between employers in proportion to their liabilities.

The methodology adopted means that there will inevitably be some difference between the asset shares calculated for individual employers and those that would have resulted had they participated in their own ring-fenced section of the Fund.

The asset apportionment is capable of verification but not to audit standard. The Administering Authority recognises the limitations in the process, but it considers that the Fund actuary's approach addresses the risks of employer cross-subsidisation to an acceptable degree.

Appendix E – Actuarial assumptions

What are the actuarial assumptions?

These are expectations of future experience used to place a value on future benefit payments ('the liabilities'). Assumptions are made about the amount of benefit payable to members (the financial assumptions) and the likelihood or timing of payments (the demographic assumptions). For example, financial assumptions include investment returns, salary growth and pension increases; demographic assumptions include life expectancy, probabilities of ill-health early retirement, and proportions of member deaths giving rise to dependants' benefits.

Changes in assumptions will affect the measured funding target. However, different assumptions will not of course affect the actual benefits payable by the Fund in future.

The combination of all assumptions is described as the 'basis'. A more optimistic basis might involve higher assumed investment returns (discount rate), or lower assumed salary growth, pension increases or life expectancy; a more optimistic basis will give lower funding targets and lower employer costs. A more prudent basis will give higher funding targets and higher employer costs.

What basis is used by the Fund?

The Fund's standard funding basis is described as the 'ongoing' basis, which applies to the EA (and SSCL) as an open employer in the Fund. This is described in more detail below. It anticipates the EA remaining in the Fund in the long term.

However, in certain circumstances, typically where the employer is not expected to remain in the Fund long term, a more prudent basis applies: this is known as the 'gilt cessation' basis. As a closed employer which will eventually cease participation in the Fund, NRW's contribution strategy has been set with regard to this eventual funding target.

What assumptions are made in the ongoing basis?

a) Investment return / discount rate

The key financial assumption is the anticipated return on the Fund's investments. This 'discount rate' assumption makes allowance for an anticipated out-performance of Fund returns relative to long term yields on UK Government bonds ('gilts'). There is, however, no guarantee that Fund returns will out-perform gilts. The risk is greater when measured over short periods such as the three years between formal actuarial valuations, when the actual returns and assumed returns can deviate sharply.

Given the very long-term nature of the liabilities, a long term view of prospective asset returns is taken. The long term in this context would be 20 to 30 years or more.

For the purpose of the triennial funding valuation at 31 March 2016 and setting contribution rates effective from 1 April 2017, the Fund actuary has assumed that future investment returns earned by the Fund over the long term will be 1.6% per annum greater than gilt yields at the time of the valuation (this is in line with the assumption used at the 2013 valuation). In the opinion of the Fund actuary, based on the current investment strategy of the Fund, this asset out-performance assumption is within a range that would be considered acceptable for the purposes of the funding valuation.

b) Salary growth

Pay for public sector employees is currently subject to a restriction of 1% p.a. by the UK Government until 2020. Allowing for this restriction, and assuming that salaries are in line with the RPI after 2020, leads to an overall salary increase assumption at the 2016 valuation of RPI less 0.7% per annum. This is a change from the previous valuation, which assumed annual salary increases would be in line with RPI on average. The change has led to a reduction in the funding target (all other things being equal). The measure of RPI used in the actuary's calculations includes an inflation risk premium deduction of 0.3% (see 'Pension increases' below).

c) Pension increases

Since 2011 the consumer prices index (CPI), rather than RPI, has been the basis for increases to public sector pensions in deferment and in payment. Note that the basis of such increases is set by the Government, and is not under the control of the Fund or any employers.

As at the previous valuation, we derived our assumption for RPI from market data as the difference between the yield on long-dated fixed interest and index-linked government bonds. An inflation risk premium was then applied to the market-implied RPI, by means of a 0.3% deduction to allow for market distortions. This is then reduced to arrive at the CPI assumption, to allow for the 'formula effect' of the difference between RPI and CPI. At this valuation, we have used a reduction of 1.0% per annum. This is a larger reduction than at 2013 (which was 0.8%), which will serve to reduce the funding target (all other things being equal). (Note that the reduction is applied in a geometric, not arithmetic, basis).

d) Life expectancy

The demographic assumptions are intended to be best estimates of future experience in the Fund based on past experience of LGPS funds which participate in Club Vita, the longevity analytics service used by the Fund, and endorsed by the actuary.

The longevity assumptions that have been adopted at this valuation are a bespoke set of 'VitaCurves', produced by the Club Vita's detailed analysis, which are specifically tailored to fit the membership profile of the Fund. These curves are based on the data provided by the Fund for the purposes of this valuation.

It is acknowledged that future life expectancy and, in particular, the allowance for future improvements in life expectancy, is uncertain. There is a consensus amongst actuaries, demographers and medical experts that life expectancy is likely to improve in the future. Allowance has been made in the ongoing valuation basis for future improvements in line with the 2013 version of the Continuous Mortality Investigation model published by the Actuarial Profession and a 1.25% per annum minimum underpin to future reductions in mortality rates. This is a similar allowance for future improvements to that made in 2013.

The combined effect of the above changes from the 2013 valuation approach, is to reduce life expectancy slightly (by around 0.1-0.2 years), which reduces the funding target all other things being equal. The approach taken is considered reasonable in light of the long term nature of the Fund and the assumed level of security underpinning members' benefits.

e) General

The same financial assumptions are adopted for most employers, in deriving the funding target underpinning the Primary contribution rates. The Secondary contributions are calculated in different ways, depending on the employer's circumstances.

The demographic assumptions, in particular the life expectancy assumption, in effect vary by type of member and so reflect the different membership profiles of employers.

Approved by the Pensions Committee on 23 March 2017 and will be reviewed in 2019.

Annex 3 – Investment Strategy Statement

Introduction

The Environment Agency Active Pension Fund (the Fund or 'EAPF') is a funded, defined benefit pension scheme with over 23,000 members and assets of approximately £3.2bn as at 31 March 2017. Full details of the EAPF and our activities can be found on www.eapf.org.uk

This Investment Strategy Statement (ISS) sets out the principles and strategy that govern our process for investing the assets of the Fund as required by Regulation 7 of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016. This Statement was made and approved by the Environment Agency Pension Committee on 23 March 2017, after taking advice from its investment staff, investment consultants, independent investment adviser and consulting actuary.

We will refer to this Statement when making investment decisions to ensure they are consistent with our investment principles and strategy. As set out in the regulations, the Pensions Committee will review the Statement from time to time, but at least every three years following the triennial valuation of the Fund.

The Statement should be read and will be implemented in conjunction with the Fund's Governance Policy, Funding Strategy Statement, Responsible Investment Policy and Global Stewardship Compliance Statement. These provide and state our more detailed requirements and supplementary guidance on these specific topics for our external fund managers. It is supported by the contents of our investment management agreements for each investment mandate. Details of the investment and performance objectives for each mandate are published in our Annual Report and Financial Statements.

Fund governance: Investment

Our Governance Policy sets out how the Fund is governed and the role of the Pensions Committee; Pension Board; Investment Sub-Committee; and Environment Agency officers on investment matters. The Environment Agency Board appoints the Pensions Committee and Pension Board, and delegates responsibility for compliance with legislation and best practice, overall strategic asset allocation, investment policy, budgets and the appointment of fund managers and investment advisers. The Environment Agency Board approves the Annual Report and Financial Statements of the Fund, which includes the policies under which the Fund is governed.

The Investment Sub-Committee normally consists of seven representatives of the Pensions Committee and receives advice from professional investment officers, specialist investment consultants, an independent investment adviser, the Fund actuary, and other professional advisers as required.

The Investment Sub-Committee has received delegated responsibility to prepare and recommend the investment strategy to the Pensions Committee and, within the context of the agreed investment strategy, to decide on the structure of mandates and their specification, to appoint fund managers, to monitor the performance of fund managers, and to terminate or alter mandates.

We have delegated day-to-day management of the Funds assets to a number of fund managers. They have full discretion to manage their portfolios, subject to their investment management agreements with us and in compliance with the Fund's own policies including this ISS. We do not seek to direct the managers on individual investment decisions.

We have appointed a performance measurer independent of the fund managers to calculate risk and return measures for each manager and the Fund overall. We have also appointed a global custodian who is responsible for the safe-keeping of the directly-held assets of the Fund and who works in close liaison with each fund manager.

The Fund's actuary is responsible for performing a formal valuation of the Fund every three years in order to assess the extent to which the assets cover accrued liabilities and to inform the development of an appropriate Funding Strategy Statement. The Funding Strategy takes account of, and informs the development of, our investment strategy and this ISS.

In all matters, our fiduciary obligations to Fund members are paramount, and neither the Fund's committees nor the Fund's officers would take any action which would be in conflict with these obligations. Similarly, fund managers are required to invest in the best interest of the Fund.

High Level Investment Principles

Working with our colleagues in the Brunel Partnership, we have agreed a set of investment principles with the intention that they provide a framework for the investment strategy, operations, manager selection, monitoring and reporting. The principles are also designed to meet the Department for Communities and Local Government's Local Government Pension Scheme: Investment Reform Criteria and Guidance and the requirements and expectations of Financial Conduct Authority. They can be applied to all asset classes, although the detail of operation will vary by asset class. The principles do not impose any restrictions on type, nature of companies or assets held within the portfolios. The principles do place an expectation that recognised best practice standards in governance, risk management, stewardship and value for money will be delivered.

Long-term investors	We are long-term investors: we implement our funds investment strategies that require productive assets that contribute to economic activity, such as equities, bonds and real assets. This may include the delegated responsibility to provide sustainable and sufficient return on their assets.
Responsible investors	We are responsible investors: we believe that in the long term we will generate better financial returns by investing in companies and assets that demonstrate they contribute to the long term sustainable success of the global economy and society.
Best practice governance	We adopt best practice collective governance with appropriate oversight, prioritisation, delegation and decision making at the right level, and clear accountability.
Decisions informed through experts and knowledgeable officers and committee	We make our decisions based on extensive expertise including trained and insightful operations' governance members, experienced and professional officers and high quality, knowledgeable advisors.
Evidence and research at heart of investments	We take an evidence and research based approach to investment: continually learning and reappraising from academic research, investment professionals, and our peers, and seek continual development in our understanding of investment.
Leadership and innovation	We are prepared to be innovative and demonstrate thought leadership in collective investment, within the requirement of prudence and our joint fiduciary duty.
Right risk for right return	We will make our collective investments work as hard as possible to meet our funds' objectives: we will provide the right structure of sub funds and managers within asset classes. While we take account of market and economic levels in our decision making, we will avoid making decisions on purely a short term basis.

Full risk evaluation	We will be comprehensive in our consideration of our funds' risks assessed on their liabilities and contributions; consider financial and non-financial risk as appropriate; offer a pooled structure to accommodate the need to diversify risk, but also recognise the limits of that diversification – as long term investors we accept that our investment success depends substantially on the sustainable growth of the economy.
Responsible stewardship	We will enable our funds' to exercise responsible stewardship of the assets they hold, and act as a collective responsible voice in the broader investment community.
Cost effective solutions	We will seek the most cost-effective solutions to achieving our funds' objectives and implementing these principles collectively: we recognise the impact of costs on the Funds, but we are prepared to pay for active management and other services when we believe that the costs incurred are likely to be justified by the benefits. We will seek to gain leverage from our collective status through reduction in fees and avoidance of cost through increased resilience and sharing our peoples' strengths, knowledge and expertise.
Transparent and accountable	We believe in the importance of being transparent and accountable, to ensure correct decisions are taken and to minimise risk. This applies both in our own operations, those we work with, and our investments.
Collaborate	We will collaborate with others whenever possible, to share ideas and best practice; to improve effectiveness and to minimise costs.

Responsible Investment

We are long-term investors who aim to deliver a truly sustainable Pension Fund; ensuring that it is affordable; delivers financially to meet the objectives of our scheme employers; and is invested responsibly.

Being responsible investors to us is to;

- 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.
- 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.

Our fiduciary duty is to act in the best long-term interests of our members. To do so properly requires us to recognise that environmental, social and governance issues can positively and negatively impact on the Fund's financial performance and that they should be taken into account in our funding and investment strategies, and throughout the funding and investment decision-making process. Full details are contained in our [Responsible Investment Policy](#), and other associated policies, notably our [Policy to Address the Impacts of Climate Change](#).

Managers are expected to comply with these policies when implementing the mandates on our behalf.

The Brunel Pension Partnership Investment Principles clearly articulate our commitment, and that of each Fund in the Partnership and its operator (Brunel Company), to be responsible investors and as such recognise that social, environment and corporate governance considerations are part of the process in the selection, non-selection, retention and realisation of assets. One of the principal benefits, outlined in the BPP business case, achieved through scale and resources arising from pooling is the improved implementation of responsible investment and stewardship.

Every portfolio, in every asset class, under the Brunel Pension Partnership, explicitly includes responsible investment and an assessment of how social, environment and corporate governance considerations may present financial risks to the delivery of the portfolio objectives. The approach undertaken will vary in order to be the most effective in mitigating risks and enhancing shareholder value in relation to each portfolio and its objectives. More information is on the [BPP website](#).

Both our Pensions Committee and Pension Board have member representatives who actively engage with beneficiaries and other stakeholders to ensure the Fund is aware and can respond effectively to all member concerns. We also actively use our website, newsletters and member webinars to engage directly. We also respond, track and report all member and stakeholder enquires as part of standard quarterly reporting. The Fund is accredited with Customer Service Excellence which requires high standards of stakeholder engagement.

We became the first Local Government Pension Scheme (LGPS) signatory of the UNPRI in July 2006. The UNPRI is an investor initiative in partnership with UNEP Finance Initiative and the UN Global Compact. The principles reflect the view that ESG issues can affect the performance of investment portfolios and therefore must be given appropriate consideration by investors if they are to fulfil their fiduciary duty. The UN Global Compact asks companies to embrace, support and enact, within their sphere of influence, a set of core values in the areas of human rights, labour standards, the environment and anti-corruption.

We do not exclude investments in order to pursue boycotts, divestment and sanctions against foreign nations and UK defence industries, other than where formal legal sanctions, embargoes and restrictions have been put in place by the Government.

Investment objectives

The EAPF is an open, defined-benefit pension fund with strong employer backing, positive cash-flows and pension obligations stretching to the end of this century. In setting our investment strategy we seek to balance twin objectives: first, to achieve sufficient long-term returns for the scheme to be affordable to employers now and in the future, and second, minimising risk of having to increase the contribution rate in the future.

To achieve this, the fund needs to invest in assets which differ from our pension liabilities. We seek to develop an investment portfolio with exposure to these return seeking assets in the most risk efficient way. We look to build a portfolio which has high probability of exceeding the asset outperformance target assumed by our actuary, while minimising the risk of the funding level falling below 80% at future valuations, as this should be effective at substantially avoiding the need to increase the contribution.

It is not possible to control the absolute return on investments but over the long-term the Fund believes its investment strategy should result in a high probability of achieving the objectives of its Funding Strategy Statement.

In the short-term, returns are measured against a Fund-specific benchmark and the Actuary prepares quarterly intra-valuation updates on the Fund's funding level. Further details on the expected returns from investments and how they interact with the Actuary's formal triennial valuation of the Fund's assets and liabilities are included in the Funding Strategy Statement.

Each active manager has an outperformance target against its benchmark, and taking these together with other actions we have set ourselves the target that, as a whole, the Fund should outperform its strategic benchmark by 1% per annum, averaged over several years (or £20-£30m in cash terms). Over the long term this will lead to significantly lower contributions than would otherwise occur.

The suitability of different types of investment

The Fund may invest in any investment it considers appropriate. In selecting categories of investments to invest in, the Fund has regard, inter alia, to return potential, financial risk, liquidity, management costs and any potential environmental, social and governance risks and opportunities. In accordance with our principles above, we seek to invest in areas contributing to long term economic activity rather than assets where returns are based on speculation or short term trading.

Assets currently held include equities (both listed and private), index-linked gilts, corporate and other bonds, private debt and real assets including property, infrastructure, forestry and agriculture assets.

Certain asset classes are not considered suitable for the EAPF, particularly if they are not compatible with our investment principles. Asset classes where returns are based on short term speculation or trading, or where it is not clear how they generate an underlying return are generally not considered suitable. Other assets classes are found not to be suitable after review on the grounds of high costs, inadequate returns for the risk involved, unclear or unquantifiable risks, insufficient diversification or effective duplication of existing allocations.

The range of assets we choose to invest in are always reviewed as part of our investment strategy review process. At our latest strategy review process a number of possible new areas were considered but none were considered appropriate for the EAPF at this time.

Social and sustainable Investments

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:

- a) Social investments and those with significant revenues (in excess of 20%) involved in energy efficiency, alternative energy, water and waste treatment, public transport together,
- b) property, infrastructure, agriculture or forestry investments with a low carbon or strong sustainability criteria , and
- c) 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. We report a breakdown of the types of investment in our annual report and financial statements.

Asset allocation

The strategic asset allocation of the Fund is the principal way we achieve a diversity of assets of different types. It is set after considering the results of our funding strategy modelling and our asset allocation and risk modelling. This considers various asset allocation mixes, return objectives and risk levels. Having too modest a return target will reduce short term risks but will increase the likelihood that longer term returns are insufficient, resulting in contribution increases and undermining the affordability of members' benefits. Too high a return target, while it may increase average long term returns and the potential for contribution reductions, will increase overall risk resulting in a wider range of outcomes, including a higher risk of deficits and the need to increase contributions. Clearly, for a particular level of return, we seek to minimise the level of risk taking through efficient diversification and appropriate allocation. It is this analysis that determines the overall appetite for risk in the Fund. Should the analysis fail to find a satisfactory balance of risk and return, with too high a risk of contribution instability or falling funding levels, then the funding strategy may need to be revisited.

In setting the strategic asset allocation we seek a long-term rate of return sufficient to meet our investment objectives. Based on our funding strategy and long term investment analysis we estimate an appropriate overall expected return of +3.5% over the expected return on gilts will be sufficient, but also consider the possible range of return outcomes and in particular the likelihood of lower returns. We also consider the challenges presented by volatile market conditions, changes to the benefit structure of the LGPS, the demographics of the Fund, and possible transfers out; all of which potentially impact on the most suitable investments and the appropriate allocation to them.

At the highest level our asset allocation splits the investment portfolio into three broad areas: equities, bonds, and diversifying growth assets. Equities and bonds are traditional asset classes. Equities provide good long term returns but have significant risks. Bonds are much lower risk, and indeed are closely correlated with our liabilities, but returns are low. Diversifying growth assets covers a range of assets that we consider to offer reasonably attractive returns but without many the risks associated with equities. It is split into 3 areas: real assets: (property, infrastructure, and agriculture); illiquid credit/private debt (direct lending to companies and investments); and growth fixed income (bond investments offering higher returns but lower correlation to conventional fixed income).

We have adopted a flexible approach to asset allocation using three levels. The first level provides a broad framework, identifying key asset classes and setting allocation ranges to these areas. The second level is to define our medium-term strategic asset allocation target, which indicates the allocation we are moving towards. The final level is the current Fund benchmark, reviewed at least each year, which reflects the practical limitations and the pace at which we can invest (e.g. due to the time taken to invest in illiquid assets) and provides a fair comparator for performance measurement purposes.

The framework is intended to provide a degree of high level risk control, ensuring asset allocation remains broadly appropriate and diverse, while being flexible enough to enable the Fund to respond to changes in funding levels, market conditions and other factors. The asset allocation framework is reviewed at least annually by the Pensions Committee. The actual asset allocation may vary outside the target ranges because of movements in markets and the availability of suitable investment opportunities.

Within this Framework the medium-term target asset allocation is set, with the input of the Fund's advisers, after considering current funding level, the return requirements and acceptable risk of the Fund, as well as market conditions and valuations. The medium term target is typically expected to be achieved in around 3 years. We have updated the target this year, reducing equities and increasing real assets and private debt. The Investment Sub-Committee then sets the current benchmark. This reflects the medium-term target asset allocation but allows for the fact that our investments in illiquid assets may take some time to achieve, and therefore sets current allocations to these assets at realistic levels. The underweight exposure (against the medium-term target) to diversifying growth assets is then reallocated to bonds and equity on an appropriate basis.

Previous %	Asset Class	Framework Range %	Medium Term Target Allocation %
	Equities	40-60	45
50-63 5-12	Public Global Equities of which emerging markets	35-55 5-12	40
4-6	Private equity / specialist opportunities	0-6	5
	Diversifying Growth assets	15-30	27
9-14	Real assets including:	9-20	15
3-6	property	3-10	6
0-4	infrastructure	0-10	7
0-4	farmland and timberland	0-5	2
-	Illiquid Credit / Private Debt	0-10	7
-	Growth Fixed Income	0-6	5
	Fixed income assets	25-40	28
5-20	Index-Linked gilts	5-20	7.5
13-28	Corporate bonds	13-25	20
<3	Cash	<3	0.5

The asset allocation results in a significant weight being given to equities, which we consider appropriate given the long term nature of our liabilities profile and our investment objectives, but this is spread across a range of managers with different approaches and styles (see below). As our funding level permits we are also gradually reducing the allocation to equities to reduce our overall investment risks, although we expect to retain a significant equity allocation.

Allocations to certain areas (real assets; illiquid credit/private debt; private equity/specialist opportunities) are illiquid and the actual level of investment will depend on the rate of drawdown once investments are identified, any changes in value and the pace at which capital is returned. They may therefore vary significantly from target levels. In particular, should the above ranges be exceeded as a result of market movements, while new investments will not be made, there will be no immediate requirement to reduce exposure through forced sales.

We regularly review the balance between exposure to growth assets (equities and diversifying growth assets) and lower risk assets (fixed income and cash), and if they vary by more than a certain amount from the benchmark asset allocation, we will rebalance the portfolio back towards the benchmark asset allocation as much as practical.

The Fund's strategic benchmark and manager performance targets and their achievement are publicly disclosed within the Fund's Annual Report and Financial Statements.

Managers and Mandates

Within each asset class the Fund seeks to have a well-diversified portfolio. This is achieved by ensuring each investment manager holds an appropriate spread of investments and, within certain asset classes, working with a range of managers to ensure a diversity of styles and expertise.

We have a specialist fund manager structure with managers appointed with a mandate to manage assets in a specific area. This enables us to access managers with particular expertise and skills. Each mandate has a detailed specification, including a mandate-specific benchmark, performance target and risk controls.

Subject to compliance with both this Investment Strategy Statement and associated policies, and the terms of their Investment Management Agreements, which includes the requirement to maintain a diversified portfolio, all the managers have full discretion over the choice of individual investments.

The Fund uses a combination of passive (indexed), and active approaches to investment management, based on consideration of availability, cost, flexibility and return potential. Passive approaches aim to deliver the return of the underlying market index and consequently contain a very large number of holdings. They are used for gilts, equities and corporate bonds, in both pooled and segregated approaches. We consider the case for integrating responsible investment within our passive investments, particularly where suitable indices exist. Within global equities, a significant allocation has also been made to 'smart beta': to both a fund based on an alternative index using fundamental value, and to mandates managed using quantitative low volatility approaches. These aim to provide improved risk/return characteristics over conventional passive approaches. We have also introduced a buy-and-maintain approach, in corporate bonds, which has a quasi-passive approach to investing but does not seek to follow a benchmark index. This is useful particularly where benchmarks are deficient from the Fund's perspective.

The remainder of the Fund is managed on an active basis, using investment managers to select the investments they consider to have the best return potential, with an average outperformance target of +1.5% p.a. This portion of the Fund is spread across UK equities, global equities, corporate bonds, property/real assets, and private equity. The decision to appoint active managers is only made after careful consideration of the likely costs, the likelihood that the manager will be able to add value after fees, the impact on risk, and the ability of the manager to implement the responsible investment strategy. Once appointed, managers are carefully scrutinised for value for money, and any reasonable opportunities to reduce costs will be pursued.

In keeping with our investment principles, we focus on developing successful long term partnerships with our managers. We have developed a detailed approach to investing long term, including establishing 'covenants' with our managers to outline what is expected of each other. In assessing managers we focus on long-term performance potential including aspects such as idea generation and team stability, rather than short term performance. Where managers are underperforming we seek to work with them to address any issues and improve performance.

Risk

We take the management of risk in our investments very seriously. We maintain a detailed risk register of all the investment-related risks that could affect the Fund, which monitors their severity and the implementation of mitigating actions.

To achieve the required returns, the Fund needs to invest in assets involving a degree of risk and so although we seek to manage our investment risk we cannot eliminate it. The most fundamental risk is that the Fund's assets produce lower long-term returns than those assumed by the Fund's actuary, leading to a significant deterioration in the Fund's funding position.

This risk of deteriorating Fund asset values cannot be entirely avoided (for instance if all major investment markets were to decline in unison) but it can be mitigated by ensuring that the assets of the Fund are invested across a number of different asset classes and markets. Diversifying assets across different asset classes is widely recognised as being an effective way of mitigating the risk of reductions in the value of the Fund's assets.

Different types of investment have different risk characteristics and return potential. For example, historically the returns from equities have been higher than from bonds but they are more risky, particularly short term. In setting the investment strategy we consider the expected risks and returns from various asset classes and the correlation between these returns to develop a strategy with an adequate expected return with an acceptable level of risk. Detailed modelling analyses the expected results of different strategies (in terms of funding levels and contributions) over a range of possible long term market outcomes to determine the preferred strategy. This strategy is then reflected in the Fund's strategic benchmark.

A separate investment risk is the risk of underperforming the Fund's strategic benchmark. This relative risk is less significant than the strategic risk above, but we still seek to manage it. It can arise either because asset allocation has deviated from the strategic benchmark allocation or because our fund managers are underperforming. We monitor the actual asset allocation continually and take action if required. Individual managers may, particularly over the short term (a year or less), underperform their benchmark but over the long term we expect them to add value. For the Fund as a whole, the range of managers reduces the risk of significant underperformance.

The Fund believes that climate change presents a systemic risk to the ecological, societal and financial stability of every economy and country on the planet, with the potential to impact our members, employers and all our holdings in the portfolio. As such, climate change is a long term material financial risk for the Fund, and therefore will impact our members, employers and all our holdings in the portfolio. Our Policy to Address the Impact of Climate change and the dedicated area of our website provide further details with regard to how we take the climate related financial risks into account.

The Fund is aware of the nature of its liabilities, and considers how closely its different assets match its liabilities. We have considered the case for liability-driven investments, including explicit liability hedging, but do not consider it appropriate at this time given current market levels, but will continue to keep it under review. We have preferred to focus on assets which have some liability-like characteristics, for example offering some inflation linkage, such as real assets.

The Fund reviews the potential for active hedging of any aspects of risks (e.g. currency risk). At present the Fund does not hedge the currency risk in its equity exposure, as it is not considered effective in reducing overall risk. However, any currency risk in overseas fixed interest exposure would normally be hedged, and we have introduced currency hedging for lower risk assets such as private debt and overseas infrastructure. We continue to monitor the case for hedging currency and other risks more widely.

There are also a variety of other risks to be considered, for example operational risks of loss arising from default by brokers, banks or custodians. Here, the Fund is careful only to deal with reputable service providers to minimise counterparty risks.

Liquidity and the realisation of investments

The majority of the Fund's investments will be made in bonds and stocks that are listed on recognised Stock Exchanges and may be realised quickly if required. Our corporate bond holdings are generally reasonably liquid, but may be harder to realise in certain market conditions. However, given the strong positive cash inflows of the Fund, and the long term nature of the Fund, we are satisfied that a significantly greater proportion of the Fund is held in liquid assets than is likely to be needed to meet any expected or unexpected demands for cash.

The materially illiquid assets within the Fund are those held in private equities; real assets and private debt. These are normally held through pooled funds. As a long term investor, we regard it as entirely appropriate to hold such illiquid assets. In particular as we expect such funds to benefit from an enhanced return due to an 'illiquidity premium' which compensates for the long term nature of these investments. Furthermore, all funds we invest in will have a long term strategy for the realisation of their investments, through sales, repayments or income. We do not expect to exceed a 25% allocation to illiquid assets in aggregate at present.

Stewardship and the exercise of our rights as owners

The EAPF is a signatory of the UK Stewardship Code and our Stewardship Code Compliance Statement evidences our compliance with both the UK Code and other global best principles of good stewardship.

Engagement

Our Responsible Investment Policy set outs the areas of engagement that, as a Fund, we have selected to have particular focus. These include promoting ESG as part of delivering and fiduciary duty, sustainable capitalism, water risk, climate risk and human capital management.

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 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).

All the assets of the pension fund are selected by external fund managers. This means that it is our external fund managers who make the detailed decisions about 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 spend significant time and energy, in selecting good quality managers who deliver financially and can manage the wide variety of risks that come with making investments.

Voting

The Fund believes that voting is integral part of the responsible investment and stewardship process and as such is delegated to managers to vote on 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 with these guidelines.

Stewardship in pooling

As part of the Brunel Pension Partnership (BPP) we are actively exploring opportunities to enhance our stewardship activities. More information is on the BPP website. One of the principal benefits outlined in the BPP business case, and achieved through the scale and resources arising from pooling, is the improved implementation of responsible investment and stewardship. Once established and fully operation the Brunel company will deliver best practice standards in responsible investment and stewardship as outline in the BPP Investment Principles

Collaboration

We actively engage in collaboration with other pension funds, investors, asset managers, advisers, industry bodies and associated organisations to share best practice, improve efficiencies, promote product development and save money. We actively participate in the Cross-Pool Group and its subgroups, of which we lead the sub-group on responsible investment, to be resource efficient and share best practice.

The Cross Pool (RI) Group's purpose is to provide 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, whilst recognising the diversity in the approaches by Funds and pools.

To deliver our Responsible Investment policies we work closely with organisations including the UN Principles for Responsible Investment, IIGCC (institutional Investors Group on Climate Change), UKSIF (UK Sustainable Investment and Finance Association), and the CDP (Carbon Disclosure Project). We also share our understanding and experience through speaking at investment industry events and publishing articles on-line.

Implementation: Approach to Asset Pooling

We are working with nine other Administering Authorities to pool investment assets through the Brunel Pension Partnership Ltd. (BPP Ltd). This is currently work in progress with the intention of meeting the Government's requirement for the pool to become operational and for the first assets to transition to the pool from April 2018.

Once the Brunel Pension Partnership Ltd. is established the EAPF, through the Pensions Committee, will retain the responsibility for setting the detailed Strategic Asset Allocation for the Fund and allocating investment assets to the portfolios provided by BPP Ltd.

The Brunel Pension Partnership Ltd will be a new company wholly owned by the Administering Authorities. The company will seek authorisation from the Financial Conduct Authority (FCA) to act as the operator of an unregulated Collective Investment Scheme. It will be responsible for implementing the detailed Strategic Asset Allocations of the participating Funds by investing Fund assets within defined outcome focused investment portfolios. In particular it will research and select the Manager Operated Funds needed to meet the requirements of the detailed Strategic Asset Allocations. These Manager Operated Funds will be operated by professional external investment managers.

The EAPF will be a client of BPP Ltd and as a client will have the right to expect certain standards and quality of service. A detailed service agreement is being drafted which will set out the duties and responsibilities of BPP Ltd, and our rights as a client. It includes a duty of care of BPP to act in its clients' interests.

An Oversight Board will be established. This will comprise representatives from each of the Administering Authorities. It will be set up by them according to an agreed constitution and terms of reference. Acting for the Administering Authorities, it will have ultimate responsibility for ensuring that BPP Ltd delivers the services required to achieve investment pooling.

It will therefore have a monitoring and oversight function. Subject to its terms of reference, it will be able to consider relevant matters on behalf of the Administering Authorities, but will not have delegated powers to take decisions requiring shareholder approval, which will be remitted back to each Administering Authority individually.

The Oversight Board will be supported by the Client Group, comprised primarily of pension investment officers drawn from each of the Administering Authorities, but will also draw on finance and legal officers from time to time. It will have a primary role in reviewing the implementation of pooling by BPP Ltd, and provide a forum for discussing technical and practical matters, confirming priorities, and resolving differences. It will be responsible for providing practical support to enable the Oversight Board to fulfil its monitoring and oversight function.

The proposed arrangements for asset pooling for the Brunel pool have been formulated to meet the requirements of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 and Government guidance. Regular reports have been made to Government on progress towards the pooling of investment assets, and the Minister for Local Government has confirmed that the pool should proceed as set out in the proposals made.

We have approved the full business case for the Brunel Pension Partnership. It is anticipated that investment assets will be transitioned across from our existing investment managers to the portfolios managed by BPP Ltd between April 2018 and March 2020 in accordance with a timetable that will be agreed with BPP Ltd. Until such time as transitions take place, we will continue to maintain the relationship with our current investment managers and oversee their investment performance, working in partnership with BPP Ltd. where appropriate.

Following the completion of the transition plan outlined above, it is envisaged that all of our assets will be invested through BPP Ltd. However, the Fund has certain commitments to long term illiquid investment funds which will take longer to transition across to the new portfolios to be set up by BPP Ltd. These assets will be managed in partnership with BPP Ltd. until such time as they are liquidated, and capital is returned.

Statement of compliance with the Myners Principles

We fully comply with Lord Myners' six principles codifying a model of best practice in pension fund governance, investment decision-making and disclosure. Evidence is contained within the documents referenced in our Annual Report and Financial Statements and on our website www.eapf.org.uk

Approved by the Pensions Committee on 23 March 2017 and will be reviewed in 2018.

Annex 4 – Global Stewardship Compliance Statement

Environment Agency Active Pension Fund (EAPF) is fully committed to responsible investment. We believe there is a considerable body of evidence that well governed companies produce better and more sustainable returns than poorly governed companies. We also think investors, including pension fund managers and shareholders, could influence the Board/Directors of underperforming companies to improve the management and financial performance of those companies.

Being a responsible owner

Our **Responsible Investment Policy** set outs the areas of engagement that, as a Fund, we have selected to have particular focus. These include promoting ESG as part of delivering and fiduciary duty, sustainable capitalism, water risk, climate risk and human capital management.

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)**.

All the assets of the pension fund are selected by external fund managers. This means that it is our external fund managers who make the detailed decisions about 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 spend significant time and energy, in selecting good quality managers who deliver financially and can manage the wide variety of risks that come with making investments.

Compliance with global best practice

We are global investors and apply our principles of good stewardship globally, whilst recognizing the need for local market considerations in its application. Reflecting on this, we have summarised our compliance with the various codes and principles relating to good stewardship. There are now so many codes that we no longer map each one but base our statement on the requirements principally outlined in the UK code but supplemented by additional requirements outlined in the codes of Japan and Canada (CCGG).

Policy Commitment	Our Fund fully follows this principle:	And in practice:
Institutional investors should publicly disclose their policy on how they will discharge their stewardship responsibilities.	Our Stewardship responsibilities extend over all the assets held by the Fund with our approach and principal relationships outlined above. The EAPF has a comprehensive suite of published policy documents which define how we discharge our Stewardship responsibilities, including but not limited to our Investment Strategy Statement, Responsible Investment Policy and our Voting guidelines. Roles and responsibilities with respect to the discharge of Stewardship activities are set out in our Responsible Investment Policy.	Our website provides comprehensive information on our policy commitments and evidence of implementation of our stewardship responsibilities. We have a dedicated resource to oversee Stewardship, voting activity is monitored throughout the proxy period and a dedicated area of our website on our Stewardship activities is updated regularly. All new Investment Management Agreements (IMAs) include requirements to observe the FRC's UK Corporate Governance Code and UK Stewardship Code. We do not undertake any stock lending.
Conflict of Interest	Our Fund fully follows this principle:	And in practice:
Institutional investors should have a robust policy on managing conflicts of interest in relation to stewardship and this policy should be publicly disclosed.	We have a comprehensive Conflicts of Interest Policy which is available on our website. A public register of Pensions Committee members' declaration of interests is also maintained and audited annually.	Declaration of conflict of interests is a standing agenda item at the start of all Pensions Committee and Investment Sub Committee meetings. The need to avoid conflicts of interest is also highlighted in our Investment management agreements (IMAs) and contracts with external parties. Our external fund managers make the detailed decisions about which companies we invest in (please see above).
Corporate engagement	Our Fund fully follows this principle:	And in practice:
Institutional investors should monitor their investee companies.	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. We monitor all managers and focus on the following areas; • Philosophy (investment, corporate culture) • Policies (commitment, framework) • People (numbers, retention,	Monitoring of specific investee companies is detailed in our quarterly reports and discussed at each fund manager review meeting. Each quarter we publish a report on our website on the engagement and voting activity undertaken by Hermes EOS.

	cognitive diversity) - Processes (investment, reporting, stewardship) - Participation (thought leadership) - Partnership (working together) Our primary engagement work is undertaken by our managers our specialist engagement provider. In addition to the requirement for all our managers to consider how environmental, social and governance factors might impact companies sustainability, we have a target to maintain our investment of 25% of the Funds assets in clean and sustainable companies by 2020.	We will participate in engagement activities directly as part of support of LAPFF. We publish the quarterly LAPFF engagement report. A dedicated Responsible Investment report is presented to our quarterly Investment Group and summarised in Pensions Committee reports.
Enhancing value & integration	Our Fund fully follows this principle:	And in practice:
Institutional investors should establish clear guidelines on when and how they will escalate their activities as a method of protecting and enhancing shareholder value. Common understanding to solve problems. Incorporating corporate governance and sustainability considerations.	Our Responsible Investment Policy details our engagement policies. We have specific objectives and targets in relation to engagement. These are specifically focused on climate change, water risk, fiduciary duty as well specific occupations e.g. investment consultants, actuaries, etc. We review each manager's policies on engagement and escalation prior to appointment and during regular review meetings with our fund managers we review their engagement activity and support the planned escalation of activity.	Our primary corporate engagement approach relating to climate change is based on the analysis from the Transition Pathway Initiative (TPI). Escalation is incorporated in the analysis. EAPF policy clearly states that insufficient progress can lead to disinvestment, we believe this to be the ultimate intervention. A public report on engagement activity undertaken on our behalf by Hermes EOS (external engagement provider) is available on our website. We identify engagement plans with each active equity manager on an annual basis. We analyse our own portfolio looking at ESG risks to shareholder value and work with our fund managers to address those issues in their activities.
Working with others	Our Fund fully follows this principle:	And in practice:
Institutional investors should be willing to act collectively with other investors where appropriate.	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.	All our managers work collaboratively with other parties. Collaborative engagements, research and advocacy work is detailed in our quarterly and Annual Report and Financial Statements to our Investment

	We actively work with other pension funds, asset managers and other organisations to promote responsible investment. These include, but are not limited to, the UNPRI, IIGCC, PLSA and UKSIF.	Group, Pensions Committee and beneficiaries.
Monitoring and engaging with regulators and policy makers. (Canadian - CCGG code)	Our direct engagement is focused on working with regulators, other institutional investors and services providers to the financial industry.	Engagement activity with regulators includes responding to public consultations both individually and collectively through industry groups as well as support of public advocacy events. Responses to consultations are published on our website.
Voting	Our Fund fully follows this principle:	And in practice:
Institutional investors should have a clear policy on voting and disclosure of voting activity. The policy should be designed to contribute to sustainable growth on investee companies.	The Fund believes that voting is integral part of the responsible investment and stewardship process and as such is delegated to managers to vote on all the Fund's shares at their discretion. All our equity manager have voting polices and most are publicly available. Similarly, our larger managers publish voting records on their website and others on request. For our index tracking funds, the voting us undertaken by Hermes EOS. We detail on what basis our votes are cast and the guidelines we direct our managers to use in our Responsible Investment Policy. We publish specific guidelines on our Voting on Environmental Issues.	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 with these guidelines. We actively work with our overlay provider to provide input and advice on matters relating to environmental issues and other issues if our expertise can assist. A full voting report and statistics are available on our website. This updated no less than every 6 months.

Reporting	Our Fund fully follows this principle:	And in practice:
Institutional investors should report periodically on their stewardship and voting activities. This report should include voting and be shared with clients and beneficiaries.	We include a comprehensive annual review of our activities in our Annual Report and Financial Statements and member communications. We are committed to being open and transparent and use a variety of media to communicate with our stakeholders. The EAPF team are accredited to Customer Service Excellence in which our work on responsible investment and stewardship is has been commended.	Our website provides comprehensive information on our policy commitments and evidence of implementation of our stewardship responsibilities. Public Engagement Reports are updated quarterly on our website www.eapf.org.uk We require all our managers to provide us with annual assurance on internal controls and compliance through international standard or a UK framework such as AAF01/06.
Skills and knowledge		
To contribute positively, Institutional investors should have in-depth knowledge of the investee companies and their business environment with the skills and resources needed.	We believe in being an active owner. We do this directly, through our managers or through specialist service providers. We have dedicated internal resource for Responsible Investment strategy, policy and oversight. In-depth knowledge of investee companies is delegated to the managers that select and monitor the companies on a day-to-day basis.	The capability and performance of each manager, in assessing environmental, social and governance factors of investee companies and their business environment, is a key component of our selection and retention criteria. Monitoring of fund manager performance is reviewed and reported regularly to Investment Sub-committee and forms part of formal annual review of each manager.

Approved by the Pensions Committee on 15 June 2017 and will be reviewed in 2018.

Annex 5 – Responsible Investment policy

Introduction

We are long-term investors who aim to deliver a truly sustainable Pension Fund ensuring that it is affordable, delivers financially to meet the objectives of our scheme employers and is invested responsibly.

Our fiduciary duty is to act in the best long-term interests of our members. To do so properly requires us to recognise that environmental, social and governance issues can positively and negatively impact on the Fund's financial performance and that they should be taken into account in our funding and investment strategies, and throughout the funding and investment decision-making process.

Responsible Investment Principles

Our Investment Principles fully embeds our commitment to Responsible Investment (RI) and the balance of responsibilities in delivering a sustainable and sufficient return on all our investments.

A summary of the key Responsible Investment principles;

- Apply long-term thinking to deliver long-term sustainable returns.
- Seek sustainable returns from well governed and sustainable assets.
- Apply a robust approach to effective stewardship.
- Responsible investment is core in our skills, knowledge and advice.
- Seek to innovate, demonstrate and promote RI leadership and Environmental, Social and Governance (ESG) best practice.
- Apply evidenced based decision making in the implementation of RI.
- Achieve improvements in ESG through effective partnerships that have robust oversight.
- Share ideas and best practice to achieve wider and more valuable RI and ESG outcomes.
- Be transparent and accountable in all we do and in those in which we invest.

We believe the application of these principles will enable our delivery of our commitments as a signatory to the United Nations Principles of Responsible Investment (UNPRI), best practice standards of national and global stewardship and facilitate the implementation of the Kay Principles.

We became the first Local Government Pension Scheme (LGPS) signatory of the UNPRI in July 2006. The UNPRI is an investor initiative in partnership with UNEP Finance Initiative and the UN Global Compact. The principles reflect the view that ESG issues can affect the performance of investment portfolios and therefore must be given appropriate consideration by investors if they are to fulfil their fiduciary duty. The UN Global Compact asks companies to embrace, support and enact, within their sphere of influence, a set of core values in the areas of human rights, labour standards, the environment and anti-corruption. We complete the annual report on progress in implementing the principles and publish them on our website.

We also comply with the UK Stewardship Code and other global codes. Our Stewardship Compliance Statement is available on our website. We also require all our managers to comply and apply best practice standards of global stewardship.

Responsible investment and pooling

The Pension Fund retains all responsibility for assuring our commitment to being a responsible investor continues to be fulfilled under the new pooling arrangements. Our Fund is part of the Brunel Pension Partnership. The **Brunel Pension Partnership Investment Principles** clearly articulate the commitment for each Fund in the Partnership and its operator (Brunel Company) to be responsible investors. One of the principal benefits, outlined in the BPP business case, achieved through scale and resources arising from pooling, is the improved implementation of responsible investment and stewardship.

Implementation

We acknowledge that goals we set to demonstrate our implementation take time and perseverance. We are committed to making continual improvement to the processes that underpin the delivery and provide updates on our progress through our website, newsletters and annual reporting.

Priorities

We believe in a risk based approach to setting priorities at both a strategic and fund level. Two key priorities for the fund are reducing the impact of **climate change** and improving the communication of our work on responsible investment to all our **stakeholders**.

Through actively working with beneficiaries, asset owners, fund managers, companies, academia, policy makers and others in investment industry we address a wide range of environmental, social and governance risks. We aim to be flexible and respond to opportunities and risks as they emerge but we also identify key themes or ESG risks that as a fund will be more actively involved these include;

- **Fiduciary duty** – promoting the implementation of the Law Commission recommendations.
- **Long termism** – furthering the implementation of the Kay review recommendations and a focus on fund manager reporting.
- **Sustainable capitalism and impact investing** – communicating positive case studies from our portfolio.
- **Climate change** – engaging with pension funds and other stakeholders to develop and share best practice.
- **Water risk** – promote the risk identification and integration
- **Human capital** – promoting the business case for diversity/ inclusion and consideration of the Living Wage.

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).

Engaging our stakeholders

Both our Pensions Committee and Pension Board have member representatives who actively engage with beneficiaries and other stakeholders to ensure the fund is aware and can respond effectively to all member concerns. We also actively use our website, newsletters and member webinars to engage directly. We also respond, track and report all member and stakeholder enquires as part of standard quarterly reporting. The fund is accredited with Customer Service Excellence which requires high standards of stakeholder engagement.

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, we will disclose our own performance on diversity¹² in our Annual Report and Financial Statements.

¹² Diversity indicators relating to combine personnel within the Pension Committee, Pension Board and Officers.

Climate change

In October 2015, we made the commitment 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.

We set out our [Policy to address the impacts of climate change](#), in which we detail our beliefs, our goals to invest, decarbonise and engage. An extract from the policy is shown on the right.

We have a dedicated area on our website regarding climate change as well as all aspects of work to deliver a responsibly managed pension fund.

We also co-lead an initiative, called the **Transition Pathway Initiative**, which enables asset owners and other investors to understand how the transition to a low carbon economy could affect their portfolio. More information is available on the website www.TransitionPathwayInitiative.org

Funding strategy and strategic asset allocation

We adopt a flexible approach in our investment strategy and asset allocation so that we can respond responsibly and robustly to both the changing global economic environment and impacts of climate change. Responsible investment considerations form part of the asset allocation decisions and as such form a core component of training and briefings to ensure our Pensions Committee and Investment sub-committee maintain their high level of knowledge. ESG is integrated into our decision making for all asset classes, additional guidance on ESG risks and opportunities is available on our website and reviewed regularly.

Social and sustainable Investments

Social investment can be defined to include a wide spectrum of investment opportunities¹³. 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.

Extract from our Policy to address the impacts of climate change

Our climate change investment beliefs

We believe that:

- Climate change presents a **systemic risk** to the ecological, societal and financial stability of every economy and country on the planet, with the potential to impact our members, employers and all our holdings in the portfolio.
- Climate change is a **long term material financial risk** for the Fund, and therefore will impact our members, employers and all our holdings in the portfolio.
- Considering the impacts of climate change is both our **legal duty**¹ and is entirely consistent with **securing the long term returns** of the Fund and is therefore acting in the best long term interests of our members.
- **Selective risk-based disinvestment** is appropriate but **engagement for change** is an essential component in order to move to a low carbon economy.

Our climate change goals to invest, decarbonise and engage

We aim by 2020 to:

- Invest 15 per cent of the EAPF in low carbon, energy efficient and other climate mitigation opportunities. This will contribute to our wider target to invest at least 25 per cent of the EAPF in clean and sustainable companies and funds, across all asset classes.
- Decarbonise the equity portfolio, reducing our exposure to 'future emissions' by 90 per cent for coal and 50 per cent for oil and gas by 2020 compared to the exposure in our underlying benchmark as at 31 March 2015. '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.
- 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 investment industry.

The full policy is available here

<https://www.eapf.org.uk/investments/climate-risk>

¹³ See Global Impact investor Network for more information <https://thegiin.org/>

Our wider definition of **sustainable investments** includes:

- d) Social investments and those with significant revenues (in excess of 20%¹⁴) involved in energy efficiency, alternative energy, water and waste treatment, public transport together,
- e) property, infrastructure, agriculture or forestry investments with a low carbon or strong sustainability criteria¹⁵, and
- f) companies (often equities and bonds) with a progressive¹⁶ 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. We report a breakdown of the types of investment in our annual report and financial statements.

Working with our fund managers

All the assets of the pension fund are selected by external fund managers. This means that it is our external fund managers who make the detailed decisions about 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 in being an active owner and require our managers and other service providers operating on our behalf to have due regard to the **UK Corporate Governance Code** and, in respect of overseas investments, have due regard to relevant recognised standards. We can therefore delegate much of the day-to-day environmental, social and governance activities to our managers and overlay service provider, but with robust oversight and transparency.

Voting

The fund believes that voting is 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.

Working with others

We work collaboratively with other funds in both the public and private sector on a wide range of responsible investment topics.

We actively engage in collaboration with other pension funds, investors, asset managers, advisers, industry bodies and associated organisations to share best practice, improve efficiencies, promote product development and save money. We actively participate in the Cross-Pool Group and its subgroups, of which we lead the sub-group on responsible investment, to be resource efficient and share best practice.

¹⁴ We use the FTSE Environmental Markets classification and with the help of Impax Asset Management (our global equity manager who focuses on environment technologies) to analyse our public and private equity holdings including the pooled funds.

¹⁵ Strongly sustainable/ progressive are terms we use to describe companies or funds exceeding market norms and taking action on one or more areas of ESG that distinguishes their offering compared to their peers.

¹⁶ As above

The Cross Pool (RI) Group purposes is to provide 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, whilst recognising the diversity in the approaches by funds and pools.

A key area is working with the financial sector, particularly asset managers on supporting the development and innovation in integrating ESG into investment decision making. We actively work with and support the initiatives of other bodies with similar goals, including the **Local Authority Pension Fund Forum (LAPFF)**, **Institutional Investors Group on Climate Change (IIGCC)** and **Carbon Disclosure Project (CDP)**, **Carbon Tracker Initiative**, **Share Action** and the **UK Sustainable Investment and Finance Association (UKSIF)**,

Open and transparent

A comprehensive overview of our responsible investment approach is available on our website www.eapf.org.uk, 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 and stewardship.

Approved by the Pensions Committee on 23 March 2017 and will be reviewed in 2018.

Annex 6 – Communications Policy Statement

Introduction

The Environment Agency Pension Funds (EAPF) is part of the Local Government Pension Scheme (LGPS), and the Active Fund has three employers – the Environment Agency (EA), Natural Resources Wales (NRW) and Shared Services Connected Limited (SSCL).

The Active Fund is open to all members of the Environment Agency and to those employees of NRW and SSCL who transferred from the EA on their relevant vesting day. It has 11,205 active members, 7,339 deferred members and 6,419 pensioners.

The Closed Fund exists solely for the purpose of paying pensions and related benefits of a group of former employees in the water industry in England and Wales who did not transfer to one of the Privatised Water Companies' schemes in 1989. It has no active members, 1,639 deferred members and 12,996 pensioners. This Communications Policy Statement is effective from 15 June 2017.

We have an agreed strategy for implementing a move to more electronic communication which continues to evolve. These developments are reflected in this policy statement. In particular we have developed our website www.eapf.org.uk to provide a knowledge centre for members. Further information with details of any employer related aspects of pensions such as policies on contributions, the use of discretions etc can be found on our Fund employer's respective intranets.

Any enquiries in relation to this Communication Policy Statement should be sent to:

Pension Fund Management
Horizon House
Deanery Road
Bristol BS1 5AH
Email: info@eapf.org.uk
Tel: 0203 025 4205

Regulatory framework

With effect from 1 April 2005 regulation 106B of the Local Government Pension Scheme Regulations 1997 (as amended) required that administering authorities "...prepare, maintain and publish a written statement setting out their policy concerning communications with members; representatives of members, prospective members and employing Authorities.

Regulation 67 of the Local Government Pension Scheme (Administration) Regulations 2007, effective from 1 April 2008, states:

This regulation applies to the written statement prepared and published by an administering authority under regulation 106B of the Local Government Pension Scheme Regulations 1997.

The authority;

- Must keep the statement under review.
- Make such revisions as are appropriate following a material change in its policy on any of the matters mentioned in paragraph (3).
- If revisions are made, publish the statement as revised.

The matters are;

- The provision of information and publicity about the Scheme to members, representatives of members and employing authorities.
- The format, frequency and method of distributing such information or publicity.
- The promotion of the Scheme to prospective members and their employers.

As a provider of an occupational pension scheme, we are also obliged to satisfy the requirements of the Occupational Pension Schemes (Disclosure of information) Regulations and other legislation, for example the Pensions Act 2004. The disclosure requirements are prescriptive, concentrating on time-scales rather than quality. A summary of our expected timescales for meeting the various disclosure of information requirements is set out in the section on performance measurement, alongside those defined by the Disclosure Regulations.

Communication will always be in accordance with the provisions of Data Protection legislation.

Representation

The EA performs the roles of Administering and Employing Authorities with the Pensions Committee and Pension Board, supported by the Finance Director and the Pension Fund Management team and a variety of external advisors, taking overall responsibility for Administering Authority functions. The EA's Director of Resources and Legal Services and the HR Pensions team perform the role of Employing Authority. The day-to-day administration of the funds is outsourced to Capita.

The Pensions Committee is a sub-committee of the EA Board with 14 members made up of 4 Board members, 2 Executive members, 1 NRW Executive member, 5 employee/Trades Union nominees, 1 pensioner nominee and 1 deferred member nominee. The Committee is supplemented by an Investment Sub Group where specific advice can be provided by Officers, and external advisors. There are 2 Trade Union nominees on the Investment Sub-Group.

The Pension Board consists of 10 members, and includes members of the Pensions Committee less the 2 Executive Directors members of the Environment Agency and 2 Active Scheme Members.

Responsibilities and resources

The EAPF is responsible for the administration of the Fund but Capita carries out the day-to-day administration of the Local Government Pension Scheme (LGPS) on our behalf. Overall responsibility for communications rests with the Pensions Committee and Pension Board supported by the Pension Fund Management team in Finance, the HR Pensions' team in Resources and Legal Services and Capita.

All communications including any web based or electronic material are developed jointly by the Pension Fund Management team, Capita's Technical Consultants and Communications team, with support from the HR Pensions' teams.

One or more of these groups is also responsible for arranging all forums, workshops and meetings covered within this statement. Either the EAPF or Capita arranges design work and printing.

Where appropriate we may use external consultants to assist with the preparation and design or with the translation into Welsh of communications.

Our expenditure on our hard copy and electronic communications is inclusive in our administration contract but we estimate that it currently equates to approximately £3.00 per member.

Communication with key audience groups

Our audience

As an LGPS Administering Authority, we communicate with a number of stakeholders. For the purposes of this communication policy statement, we are considering our communications with the following audience groups:

- Active members
- Deferred members
- Pensioner members

- Prospective members
- The employing authorities – Human Resources & Payroll
- The EA Board and executive managers
- Pensions Committee members
- Pension Board members
- Recognised Trades Union representatives
- Pensions staff in Finance and HR and at the Funds' Administrator

How we communicate

General communication

The Fund continues to develop and enhance its communication program which started with the introduction of an easily recognisable brand and writing style. This was aligned to a totally restructured website using rich media (which included the use of calculators, flowcharts and audio and visual presentations) to help enhance member experience and encourage regular use.

Both our public facing website and self-service facility, EAPF Online are 'device enabled' which means they allow users to access information on any mobile phone or tablet in an easily readable format, so our members can look up information or access online tools at a time of their choosing. Following last years' customer surveys we were able to establish a view on how our members prefer to communicate and interact with the Fund.

The first improvement involved a change of emphasis in our member webinars so that the sessions were shorter and topic based, introducing new tailored sessions.

The sessions this year were supported by newsletter, a poster campaign, an E Shot and promotion through our Fund employers' internal communication channels. The EAPF has successfully transitioned to using webinars. It provides an opportunity for all members to participate and helps those who are unable to make the time commitment or can't get to a location depending on where they are based.

Introducing webinars allows us to:

- reach a wider audience nationwide
- remove the need for travel and time out of the office
- deliver more sessions based on demand and more choice

All topics are recorded and the recorded presentation slides are made available on our website.

Our Communications strategy

As part of our long term strategy, 2016/17 saw us continue our move to digital communications by analysing our pension data for the purpose of segmenting our members into 5 recognisable groups so that we could improve the way we engage, ensuring the relevance and purpose of the contact.

Our segmented groups are:

Spontaneous spender – adventure

Pension sceptic – protection

Assured saver – relaxed

Responsible worrier – detail and focus

Mature planner – companionship

2016/17 saw the Fund introduce the use of segmented 'E Shots' for the very first time, and we tested different imagery, and messaging with our different groups to establish preferences. We have started to send out specific messages to the 5 main groups. Each communication has a 'call to action' (CTA) which may be to complete a form, or to click and watch a video etc. We are able to monitor how

many messages are sent, how many are opened and how many complete the CTA, and this information is then made available in our Communication dashboard.

We'll monitor the feedback from members carefully, and will continue to collate responses to enable us to focus our messaging.

We introduced an online Self Service calculator in 2014/15 which allows members to model different retirement ages and pensions taking account of the complex protections and reductions within the Scheme. Our members told us that they still felt they needed to understand the '85 year rule' and so, this year we introduced a flowchart showing how the '85 year rule' protections would impact a member and promoted this through our newsletters and internal communications. When we were satisfied that the charts worked, we then created a 85 year rule checker tool on our public website, which allows users to just click through yes/no answers to arrive at their protection status.

The tool has been well received and used by 10% of our active membership and has led to a reduction in queries to the Pension helpdesk.

Accessibility

In accordance with the Welsh Language Act 1993, we provide key publications for pension scheme members in Wales in bilingual versions.

We do not have a policy of automatically translating our material into community languages. We do want to communicate with minority communities, so we aim to use plain English for our printed and online materials. We believe this is the most effective way to communicate with people for whom English is not their first language but we will arrange translation on request.

Our website is compliant with Shaw Trust's usability standards.

Performance measurement

To measure the success of our communications with active, deferred and pensioner members, we will use the following methods:

Timeliness

We will measure against the following target delivery timescales:

Communication	Audience	Statutory delivery period	Target delivery period
Scheme short guide	New joiners to the LGPS	Within two months of joining.	Within two weeks of joining the LGPS.
E Shot Introduction to the EAPF & video	New joiners to the LGPS	Within 2 months of joining.	Within 1 month of joining the LGPS and on receipt of email address.
Annual estimated Benefit Statements as at 31 March	Contributing & deferred members	31 August each year.	31 August each year.
Telephone calls	All	Not applicable	90% within 15 seconds
Issue of retirement benefits (at normal pension age)	Contributing members retiring	Within one month of retirement.	On day of retirement - 90% of estimate if final details not known. Balance within five days of receipt of information.
Issue of retirement benefits (early retirements)	Contributing members retiring	Within two months of retirement.	On day of retirement - 90% of estimate if final details not known. Balance within 5 days of receipt of information.
Issue of deferred benefits	Leavers	Within two months of notification.	Within two months.
Transfers in	Joiners & contributing members	Within three months of request.	Within two months.
Transfers out	Leavers & deferred members	Within three months of request.	Within two months.
Issue of forms i.e. expression of wish	Contributing & deferred members	Not applicable.	Within five working days.
Changes to scheme rules	Contributing & deferred & pensioner members, as required	Within three months of the change coming into effect.	Within three months of change coming into effect.
Pension Fund Annual Report and Accounts	All	Within two months of request.	Within two working days (once published).
Spotlight	All	Not applicable.	By 31 December each year.
Pensioner payslips	Pensioners	On change to pension amount due.	Monthly five days before pay date.

Quality

We make use of a range of mechanisms to monitor the quality of our communications which include surveys, focus groups and website activity. All our publications and our website include invitations for comment on content and offer suggestions for future editions and contact details are provided.

The EAPF are accredited with the Customer Service Excellence ® standard which tests in great depth those areas that research has indicated are a priority for customers, with particular focus on delivery, timeliness, information, professionalism and staff attitude. There is also emphasis placed on developing customer insight, understanding the user's experience and robust measurement of service satisfaction. Capita became the first pension administration provider to be awarded the Investors in Customers (IIC) accreditation. Comments received in the past have provided many useful suggestions that we have been able to incorporate in later publications.

Results

We will publish an overview of how we are performing within our annual report and financial statements and in our annual Spotlight. Full details will be reported regularly to our Pensions Committee.

Review process

We will review our communication policy to ensure it meets audience needs and regulatory requirements at least every two years. A current version of the policy statement is always available at www.eapf.org.uk. Paper copies are available on request.

Approved by the Pensions Committee on 15 June 2017 and will be reviewed in 2018.

Enquiries

Any enquiries regarding this Report should be addressed to:

Pension Fund Management
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Horizon House
Deanery Road
BRISTOL
BS1 5AH

Tel: 0203 025 4205
Email: info@eapf.org.uk

Enquiries concerning the Environment Agency Pension Scheme or entitlement to benefits should be addressed to:

Environment Agency Pensions Team
Capita
11b Lingfield Point
DARLINGTON
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Tel: 0800 121 6593
Email: info@eapf.org.uk

The Annual Report and Financial Statements are also available at: www.eapf.org.uk

www.gov.uk/government/publications

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