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To: Cllr Ted Palmer (Chair)

Councillors: Dave Hughes, Jason Shallcross, Sam Swash and Antony Wren

Co-opted Members:

Steve Hibbert, Cllr. Andrew Rutherford, Cllr Gwyneth Ellis and Cllr Anthony Wedlake

9 February 2023

Dear Sir/Madam

NOTICE OF REMOTE MEETING CLWYD PENSION FUND COMMITTEE WEDNESDAY, 15TH FEBRUARY, 2023 at 9.30 AM

Yours faithfully

Steven Goodrum
Democratic Services Manager

The meeting will be live streamed onto the Council's website. A recording of the meeting will also be available, shortly after the meeting at https://flintshire.publici.tv/core/portal/home

If you have any queries regarding this, please contact a member of the Democratic Services Team on 01352 702345.

AGENDA

1 APOLOGIES

Purpose: To receive any apologies.

2 DECLARATIONS OF INTEREST (INCLUDING CONFLICTS OF INTEREST)

Purpose: To receive any Declarations and advise Members accordingly.

3 **MINUTES** (Pages 5 - 16)

Purpose: To confirm as a correct record the minutes of the last meeting

held on 23 November 2022.

4 **CLIMATE CHANGE ANALYSIS UPDATE** (Pages 17 - 102)

Purpose: To provide Committee Members with the proposed Taskforce

for Climate-Related Financial Disclosures (TCFD) Report and the analysis from the Analytics for Climate Transition (ACT),

for note and comment.

5 **INVESTMENT STRATEGY REVIEW AND STATEMENT** (Pages 103 - 164)

Purpose: To provide Committee Members with recommendations

following the Investment Strategy review, and the proposed

Investment Strategy Statement for approval.

6 **FUNDING STRATEGY STATEMENT** (Pages 165 - 222)

Purpose: To provide Committee Members with the Funding Strategy

Statement for approval, following consultation with employers.

7 **INVESTMENT AND FUNDING UPDATE** (Pages 223 - 282)

Purpose: To provide Committee Members with an update of investment

and funding matters for the Clwyd Pension Fund.

8 **ASSET POOLING UPDATE** (Pages 283 - 298)

Purpose: To provide Committee Members with an update on Pooling

Investments in Wales.

9 <u>ECONOMIC AND MARKET UPDATE AND INVESTMENT STRATEGY AND MANAGER SUMMARY</u> (Pages 299 - 334)

Purpose: To provide Committee Members with an economic and market

update and performance of the Fund and Fund Managers.

10 FUNDING, FLIGHT-PATH AND RISK MANAGEMENT FRAMEWORK

(Pages 335 - 360)

Purpose: To update Committee Members on the funding position, and

the implementation of the Flight path and risk management framework including recommending updates to the Scheme of

Delegation relating to the Fund's Risk Management

Framework for approval.

11 **PENSION BOARD MINUTES** (Pages 361 - 378)

Purpose: To provide Committee Members with the Pension Board

minutes from 30th September 2022, for note.

12 **FUTURE MEETINGS**

Purpose: Future meetings of the Clwyd Pension Fund Committee will

take place at 9.30am on:

Wednesday 29th March 2023 Wednesday 21st June 2023 The Chair will open the meeting and introduce themselves.

The meeting will be attended by a number of Councillors. Officers will also be in attendance to present reports, with Democratic Services officers acting as hosts of the meeting.

All attendees are asked to ensure their mobile phones are switched off and that any background noise is kept to a minimum.

All microphones are to be kept muted during the meeting and should only be unmuted when invited to speak by the Chair. When invitees have finished speaking they should go back on mute.

To indicate to speak, Councillors will use the chat facility or use the electronic raise hand function. The chat function may also be used for questions, relevant comments and officer advice and updates.

The Chair will call the speakers, with elected Members addressed as 'Councillor' and officers addressed by their job title e.g. Chief Executive' or name. From time to time, the officer advising the Chair will explain procedural points or suggest alternative wording for proposals, to assist the Committee.

If and when a vote is taken, the Chair will explain that only those who oppose the proposal(s), or who wish to abstain will need to indicate, using the chat function. The officer advising the Chair will indicate whether the proposals are carried.

If a more formal vote is needed, this will be by roll call – where each Councillor will be asked in turn (alphabetically) how s/he wishes to vote

At County Council and Planning Committee meetings speaker's times are limited. A bell will be sounded to alert that the speaker has one minute remaining

The meeting will be live streamed onto the Council's website. A recording of the meeting will also be available, shortly after the meeting at https://flintshire.public-i.tv/core/portal/home

CLWYD PENSION FUND COMMITTEE 23 November 2022

Minutes of the meeting of the Clwyd Pension Fund Committee of Flintshire County Council, held remotely at 9.30am on Wednesday, 23 November 2022.

PRESENT: Councillor Ted Palmer (Chairman)

Councillors: Dave Hughes, Jason Shallcross (left for item 4-8), Antony Wren, Sam Swash, Anthony Wedlake

CO-OPTED MEMBERS: Mr Steve Hibbert (Scheme Member Representative).

<u>ALSO PRESENT (AS OBSERVERS)</u>: Elaine Williams (PFB Scheme Member Representative).

<u>APOLOGIES</u>. Councillor Andy Rutherford (Other Scheme Employer Representative), Gwyneth Ellis (Denbighshire County Council),

<u>Advisory Panel comprising</u>: Philip Latham (Head of Clwyd Pension Fund), Karen McWilliam (Independent Adviser – Aon left for item 12), Gary Ferguson (Corporate Finance Manager), Sharon Carney (Corporate Manager, People and Organisational Development), Paul Middleman (Fund Actuary – Mercer – left for item 12) and Kieran Harkin (Fund Investment Consultant – Mercer – left for item 12) and

Officers/Advisers comprising: Debbie Fielder (Deputy Head of the Clwyd Fund), Karen Williams (Pensions Administration Manager), Sandy Dickson (Investment Adviser – Mercer – left for item 12), Nick Page (Investment Adviser – Mercer – left for item 12), Megan Fellowes (Actuarial Analyst – Mercer – taking minutes – left for item 12) and Ieuan Hughes (Graduate Investment Trainee).

Guest speakers presenting comprising:

Sabel Wiliam (Audit Wales – left after item 9), Michelle Phoenix (Audit Wales – left after item 4) and Byron Lloyd-Jones (Aon Cyber Solutions – joined for item 13).

The Chairman welcomed Cllr Wedlake from Wrexham County Borough Council to his first meeting.

213. **DECLARATIONS OF INTEREST (including conflicts of interest)**

Mrs McWilliam and Mr Harkin, on behalf of all Mercer attendees, highlighted their declaration of interest in relation to item 12 and left the meeting for item 12.

Cllr Wedlake highlighted his declaration of interest as a member of the Pension Fund and Coedpoeth Community Council. He is also a member of the Socialist Environmental Research Association.

There were no other declarations of interest.

214. MINUTES 31 AUGUST 2022

Mr Hibbert commented on the section regarding Michael Lynk's letter and the 17 companies oppressing the Palestine peoples. He stated he wanted to clarify he was suggesting a way to potentially disinvest from those companies and not be accused of partaking in an illegal boycott. This was noted by the Chairman.

The minutes of the meeting of the Committee held on 31 August 2022 were agreed.

RESOLVED:

The minutes of 31 August 2022 were received, approved and will be signed by the Chairman.

215. CLWYD PENSION FUND ANNUAL REPORT 2021/22

Mrs Fielder presented this item. She confirmed that, since the draft accounts were considered at the last Committee meeting, there had only been two minor changes to the accounts. She confirmed the following key points:

- Highlighted on paragraph 1.08 was a statement in the accounts that was corrected. This related to the private market valuations at December due to an uplift of c£1.3 million received as a result of the receipt of outstanding March valuations.
- Given the market turmoil in September, a post balance sheet event note was added.
- Page 199 included the letter of representation that confirmed all of the information disclosed was true and accurate. She recommended that the Committee approved this.

Ms Wiliam as audit lead for Clwyd Pension Fund Audit noted the following key points:

- International standards on auditing meant certain matters were required to be brought to the Committees attention before approving the accounts. Audit Wales could not give complete assurance that the accounts were correctly stated but worked to a level of materiality over which the accounts could be misleading. The amount of materiality this year was set to £24.917 million and a lower level of £1,000 was applied to related party disclosures in respect of key management personnel.
- Audit Wales remained independent to the Fund during the audit and intended to issue an unqualified audit opinion once the signed letter of representation was received. The auditor would sign this on 28 November 2022.
- There were no uncorrected misstatements in the accounts, however, there were amendments which were detailed in Appendix 3. After the audit was complete, Audit Wales would meet with the finance team to discuss how the project went.

Ms Wiliam thanked Mrs Fielder and the finance team for all of their help during the audit.

Cllr Hughes asked whether there had been any interest regarding the vacant Fund accountant position. Mrs Fielder confirmed that this was currently with the Council's Human Resources Department as they were evaluating the post before it could be advertised. This was also the situation with the vacant governance administration assistant position.

RESOLVED:

- (a) The Committee approved the Fund's Annual Report for 2021/22 including the Statement of Accounts.
- (b) The Committee considered the Audit of Accounts Report
- (c) The Committee approved the final Letter of Representation

216. **DRAFT FUNDING STRATEGY STATEMENT**

Mr Middleman explained that the purpose of the Funding Strategy Statement ("FSS") was to balance the affordability of employer contributions against long-term sustainability of contributions and the financial health of the Fund. He noted the following key points regarding the draft FSS:

- The draft FSS will be included in the consultation with employers over their employer contribution rates effective from 1 April 2023.
- He emphasised that whilst the FSS was a structure to support sustainable contributions, it is also the responsibility of employers to consider this in the context of their own budgets, now and in the future. The importance of communication with employers is therefore paramount on this issue as taking materially reduced contributions now, due to the improved funding positions, makes sustainable contributions in the future more difficult to achieve. Written communication and discussions would take place including at the AJCM in December 2022 and feedback from employers on various factors would be brought to the next Committee for final sign off of the FSS in February 2023.
- A minimum contribution requirement for employers is set via the FSS parameters to target sustainability in the future, and the flexibility within these parameters exists for employers to pay more than the minimum depending on their circumstances.

Regarding the key parameters for assumptions from paragraph 1.05 onwards, Mr Middleman noted the following:

- Benefit payments are related to inflation and therefore liabilities are driven by inflation. This was a key assumption as part of the 2022 valuation.
- There were many viewpoints regarding the current high level of inflation and how long it would persist, and it is important that the Fund makes reasonable allowance for it over the next few years. It was proposed to increase the long-term average level of inflation from 2.4% p.a. to 3.1% p.a., which was a reflection of the expectation that inflation would stay high for the next few years and then tail off.
- The other aspect regarding inflation is the fact that the pension increase awarded was based on inflation in the 12 months to September each year. So it is now expected that the 2023 pension increase is going to be 10.1%. Therefore, allowance for known inflation was built in to refine the Fund's cashflows i.e. the liabilities.
- Employer contributions are essentially driven by the relationship between the expected return on the assets (the discount rate) and the rate of inflation, as this determines the proportion of benefits paid for by asset returns in the long-term versus those paid for by employer contributions.
- At the valuation date, Mr Middleman had a picture of what might be a reasonable assumption for the discount rate and inflation but from March 2022 onwards, there was a drastic change in interest rates, expectations and the global economic outlook. This was considered and it was concluded that the assumptions were still reasonable

- as they had anticipated the increased inflation/lower growth scenarios to a reasonable extent.
- Mr Middleman proposed to reduce the discount rate above inflation from the previous valuation by 0.25% (from CPI +1.75% to CPI +1.50%). A similar reduction was proposed in relation to future service liabilities i.e. from CPI + 2.25% to CPI+ 2.0%.
- The pre 2014 liabilities relating to McCloud costs were based on the member's final salary at date of retirement or leaving the Fund and therefore from paragraph 1.08, Mr Middleman proposed to retain the same long-term assumptions (i.e. CPI +1.25%). An option was also built in for employers to adjust their own pay-growth assumption based on their own pay expectations in the short-term.
- The demographic analysis outlined in paragraph 1.09 reflected that the improvement in life expectancy was slowing down. Compared to 2019, the 2022 analysis showed that pensioners currently aged 65 were expected to live for less time in retirement and therefore, this reduced the liabilities at the 2022 valuation. The other demographic factors considered had less of a financial impact e.g. ill-health and cash commutation. The analysis showed that less members on average were opting for cash, so this has been reflected in the assumptions.
- Recovery periods depended on whether an employer was in deficit or surplus as highlighted from paragraph 1.10. Mr Middleman proposed that if an employer was in deficit at the 2022 valuation, they would be reduced by 3 years to achieve a funding level target of 100% as quick as possible. For those employers in surplus, they would aim to keep the same recovery period as the 2019 valuation, which slowed down the payback of surplus to the employer. Both of these proposals were trying to achieve sustainability of contributions and intergenerational fairness to tax payers.
- McCloud costs were now included in the liabilities and therefore within the balance sheet, as instructed by the Government. It was noted McCloud costs ceased at 31 March 2022 so do not affect the future service rate.

Paragraph 1.16 highlighted the provisional valuation results at 31 March 2022. Therefore, Mr Middleman summarised that the Fund is in a positive position with an average funding level of 105% compared to a funding level of 91% at the 2019 valuation. This was driven mainly by the strong investment performance between 2019 and 2022 plus the deficit contributions paid. However, this was offset by some of the actuarial assumptions i.e. the discount rate change and the rate of inflation, but the demographic assumptions slightly improved the position.

Future service rates were more sensitive to the reduction in discount rate versus inflation as there was no positive asset performance to offset these costs. The future service rate increased on average from 17.3% to 18.7%.

Generally, when looking at individual employers, there were stronger funding levels across the Fund but higher future service costs, therefore overall for a number of employers, the proposed FSS results in a reduction in contributions to reflect this improvement. As noted earlier, the consultation with employers will focus on some of the risks for employers around inflation and the global economic outlook in the context of contribution sustainability, to encourage those employers who could afford it to pay more than the minimum contributions.

Mr Ferguson mentioned that the climate had changed for employers and their budgets, citing the difference in pay awards compared to nine months ago and was pleased

that the Fund was in surplus given the current financial climate. He believed it was reasonable to allow employers to take some flexibility around future contributions and welcomed the flexibility proposed in the draft FSS.

Regarding the climate change funding level scenario analysis, Cllr Swash highlighted from page 207 that a section of the FSS was not finalised as the Actuary had not completed the analysis of the physical and climate transition risks. He noted that this was an important factor in considering the draft FSS. Mr Middleman confirmed the analysis was expected to be completed by the next Committee. Mr Middleman also explained that the long-term assumptions proposed in the FSS incorporated implicit allowance for these climate change risks even though the scenarios were not currently populated. It was noted these scenarios would be a snapshot of what could happen in specific circumstances around the transition.

RESOLVED:

- (a) The Committee approved the proposed key actuarial assumptions and funding parameters, in paragraphs 1.05 to 1.10 of the report, which will be incorporated into the Funding Strategy Statement.
- (b) The Committee approved the draft Funding Strategy Statement for consultation with employers (noting some information can only be included when the actuarial valuation is complete) and note the provisional results in paragraph 1.16.
- (c) The Committee delegated the refinement and finalisation of the draft FSS to the Head of Clwyd Pension Fund, before formal consultation with employers, having regard to the advice of the Fund Actuary.

217. FUNDING, FLIGHT-PATH AND RISK MANAGEMENT FRAMEWORK

Mr Page noted the following key points:

- The funding position as at 30 September 2022 had fallen to 102%, from 105% at 31 March 2022. Since then, there had been an increase in funding level which was good news for the Fund despite the volatility in the markets in Q3 2022.
- The risk management framework had been put through its paces, particularly during September and October 2022 but nevertheless, the framework had served the Fund well. The report highlighted the performance of each different strand of the risk management framework.
- Equities fell but were protected by the synthetic equity portfolio and so the protection on that portion of the portfolio added value over the quarter.
- Sterling weakened significantly over the quarter, and losses were made on the FX hedging strategy. However, due to the 100% hedge, the FX losses made had been offset by gains made on the physical assets that are invested in overseas.
- The LDI strategy was the main focus given the recent gilt market volatility. The level of interest rate hedging had been increased within the market trigger framework from approximately 20% to 50%. The inflation hedging remained at 40% at 30 September 2022, providing valuable protection from rising inflation over the year.
- There was extreme market volatility in gilts to a point where it was almost dysfunctional and the chart on page 282 demonstrated the tracking throughout September and October 2022 and how fast moving this period was. Despite the volatility, this had been managed well by the robust collateral framework in place.

- After the mini-budget was announced, there had been a rapid rise in gilt yields and rapid fall in the value of gilts. In the space of a few days, gilt yields fluctuated, increasing by 2.5% and then decreasing by 2.5%, which was unprecedented. The Bank of England then stepped in and stabilised the market for a 2 week period and gilt yields fell back down but then started to steadily increase. During the two week period, the pension scheme industry sold a large amount of assets to de-leverage the LDI portfolios. However, there were still concerns regarding gilt yields spiking again but due to the support by the Bank of England and the new Chancellor who rolled back the policies, the market was stabilised.
- Mr Page was pleased with the Fund's very strong governance framework, with the Fund not only in a position to withstand this type of market volatility, but to also take opportunities. The Fund had a framework in place where it would take the opportunity to invest in gilts as they became cheap, with those yield levels being pre-defined. Furthermore, the officers had already completed a review of the yield levels in September and these yield levels were increased. This meant that the Fund bought gilts at cheaper levels, which was a benefit. Over the course of September, the exposure to interest rates had been increased from 20% to 50% of assets, and then the framework had been paused to take stock given the volatility, which again was a positive move.
- However, like most pension funds, due to the value of the collateral within the flightpath strategy, action was taken quickly to bolster this to support the framework. There was £200 million in terms of physical equities sold for cash and moved over into the risk management framework to increase the collateral position. The reduction in the £200 million exposure was then replicated using equity derivatives to ensure the strategic allocation to equities remained the same and therefore, the expected return on the Fund was unaffected. This move improved the collateral position without impacting the Fund's overall strategic asset allocation.

The Funding and Risk Management Group were continuing discussions around further opportunities the Fund could take.

RESOLVED:

The Committee noted and considered the contents of the report and the increase in the level of hedging and the various actions taken.

218. <u>ECONOMIC AND MARKET UPDATE, AND INVESTMENT STRATEGY AND MANAGER</u> SUMMARY

Mr Harkin noted the following key points relating to the general economy and markets:

- The market position detailed in the report covered 1 July to 30 September 2022, which had been a challenging period for the markets. For the UK, as with many other regions, the most difficult position remained the ongoing persistence of high inflation.
- Over the three months to 30 September 2022, the Fund's total market value decreased by £64.2 million to £2,216 million.
- Major developed economies continued to deal with the difficult position around inflation through additional monetary policy tightening. While during the quarter there

was some relief for the short-term inflation, nevertheless, this dissipated at the end of the period and therefore risk assets rose and most major asset classes ended the quarter with negative returns.

- This was one of the worst quarters for equity and bond portfolios in the history of holding these assets together in combination and this highlights how difficult 2022 has been for investors.
- There was no clear path forward but whilst there are indications that the US inflation rate could be levelling off, this was not the case for the UK inflation rate.

Mr Dickson updated the Committee on some key points regarding the Funds investment strategy:

- Page 314 outlined that the Fund achieved an investment return of -2.5% over Q3 2022, this being an extremely challenging period.
- Over the last 12 months, the Fund achieved an investment return of -6.5% and over 3 years the Fund had a positive performance with an investment return of 4.1%.
- The outperformance vs the strategic benchmark added value over all of the periods as shown in the table on page 314.
- On page 317, it could be seen that the Fund's significant allocation to private markets, had a strong beneficial effect, with returns over a 12 month period of 24.6%.
 This was a strong driver of the total investment return, given the high weighting allocated to private markets.

RESOLVED:

The Committee noted the performance of the Fund over periods to the end of September 2022 along with the Economic and Market update which effectively sets the scene.

219. **INVESTMENT AND FUNDING UPDATE**

Mrs Fielder noted the following key points:

- Regarding the business plan, the investment strategy review had been delayed due
 to the difficult economic environment. This would be brought to the next Committee in
 February 2023.
- The climate change report and TCFD requirements were also slightly delayed. Work was continuing and a training session was due to be held for Committee members on 1 February 2023.
- The Stewardship Code was submitted by the 31 October 2022 deadline after a draft submission was presented at the August Committee meeting. The Fund will not know the outcome until March 2023. If any members wished to see the final submission, they could contact Mrs Fielder.
- The Fund had expected various consultations regarding LGPS investment related developments but only the one relating to governance and reporting on climate risk has been issued.
- As outlined in paragraph 1.02, the Department for Levelling Up, Housing and Communities ("DLUHC") published a consultation, which closed on 24 November 2022, on proposals to require LGPS administering authorities to report on climate change risks. The consultation was in line with recommendations made by the

Taskforce on Climate Related Financial Disclosures ("TCFD"). Mrs Fielder explained that in 2017, a set of recommendations were published with the aim of improving financial related risks. In November 2020 it was announced that TCFD disclosures would become mandatory in the UK by 2025. DLUHC's view is that the requirement for LGPS should be set as high a standard as for private pension schemes. The private pension schemes were the starting point for the proposals but did not take into account the unique features of the LGPS including local administration and democratic accountability. Mrs Fielder highlighted the draft Fund's consultation response in Appendix 2. Overall, the Fund was supportive of DLUHC's proposals in the consultation. A significant amount of the proposals surround scenario analysis and metrics, and the Fund had already undertaken modelling and would be doing so again as part of the Fund's investment strategy review. The Fund's response to the consultation summarises how climate change was already embedded into the Fund's governance, investment and funding strategies. This provided further evidence of the Fund being committed to best practice in this area, and the Fund intended to carry out their own TCFD reporting early in 2023, before the Government deadline. This adhered to the principles laid out in the consultation document. Mrs Fielder highlighted that the Committee were being asked to approve the draft consultation response.

- Paragraph 1.04 outlined the Additional Voluntary Contribution ("AVC") review that the Fund were currently undergoing with AVC providers, Prudential and Utmost through Mercer. Under the LGPS regulations, all administering authorities were required to provide members with details and access to an AVC provider. Mercer had not raised any specific issues as part of the review but made a recommendation that the Fund should communicate with members to remind them to regularly review their AVC investments and also to confirm their retirement ages.
- The Fund conducted a transition of assets in October and November 2022 as noted in paragraph 1.15. There was a redemption of £125 million from the Blackrock Global ESG Equity Fund and £90 million from the Wales Pension Partnership Emerging Market Equity Fund. This reduced the Fund's physical equity exposure from 20% to 10%.
- For the private market allocation a further two commitments to investments within the private equity portfolio were made, including £20 million to ECI12 (which the Fund had invested with since 1998) and £11 million to Activate Capital II.
- There were a number of changes to the risk register including the update regarding the valuation to risk F4 and the funding level reducing to risk F2, both of which reduced from significant likelihood to low.

RESOLVED:

- (a) The Committee considered and noted the update.
- (b) The Committee approved the "Governance and reporting of climate change risks" draft consultation response.

220. **GOVERNANCE UPDATE**

Mr Latham congratulated Mrs Fielder and Mrs K Williams who were both nominated and shortlisted for the Women in Pensions Award. He also highlighted Mrs K Williams had

received a highly commended award. The Committee congratulated Mrs Fielder and Mrs William.

Mr Latham noted the following key points:

- Paragraph 1.01 outlined the business plan update, on which Mr Latham confirmed good progress was being made. He reminded the newer Committee members who were unable to attend sessions of the induction training to confirm when they had watched the relevant recordings.
- The TPR Single Code of Practice and the Good Governance Review consultation were still outstanding and so had been moved forward in the business plan.
- Mrs E Williams, wo had been originally appointed as the non-trade union scheme member representative of the Pension Board for the three years to February 2023, had been reappointed in this role for a further two years.
- National issues that the Committee were required to be aware of were listed in paragraphs 1.06 to 1.11.
- The Governance Policy and Compliance Statement had been reviewed and proposed changes were highlighted in Appendix 3. This includes incorporating the changes relating to the Head of Clwyd Pension Fund taking over responsibilities from the Chief Executive. Mr Latham asked the Committee to approve the updates to the Policy and Statement.
- The annual review of the objectives measures for governance related policies and strategies was included in Appendix 4. Most areas were on target, but some areas still require some work to be completed.
- As outlined in paragraph 1.14, it was good to see a high percentage of members attending the training. There was a list of future training events and Mr Latham asked Committee members to note these dates and attend if possible.
- There were currently recruitment and retention issues which was causing additional strain due to the amount of additional work due to factors outside of the Fund's control, such as the Pensions Dashboard and the McCloud remedy. Further work was also being carried out to understand whether increases in administration workflow from a membership perspective would continue.

Mrs Fielder mentioned that an email had been sent out regarding the upcoming LGC investment seminar at Carden Park. She asked if members could let her know as soon as possible if they wished to attend so the Fund could take advantage of the early bird discount, noting it was always a valuable event to attend and was local.

RESOLVED:

- (a) The Committee considered the update.
- (b) The Committee noted the changes to timescales in the business plan for items G3 and G5, due to Government delays in taking forward The Pension Regulator's Single Code and the SAB Good Governance review outcomes.
- (c) The Committee approved the changes to the Fund's Governance Policy and Compliance Statement as shown in Appendix 3.

221. ADMINISTRATION AND COMMUNICATIONS UPDATE

Mrs K Williams noted the following key points from the report:

- A6 and A7 in the business plan 2022/23 update in paragraph 1.01 outlined the review of the policies and strategies and also the pensioner existence checking. It was highlighted that both of these actions were underway but were running slightly behind schedule due to conflicting priorities and increased workloads.
- The refresh of the Communication Strategy had been behind schedule due to the vacant Communications Officer position. However, this position was now filled and good progress was now being made.
- Two key areas causing large increases in workloads were the backdated pay award for 2021/22 and number of eligible deferred members taking their benefits. Both of these issues are impacting the Fund's ability to complete business as usual work within regulatory deadlines and internally agreed service standards.
- The backdated pay award for 2021/22 was agreed and paid in March 2022. However, it resulted in a full recalculation of benefits for many members who had left the scheme during 2021/22. For 2022/23, due to the value of the pay award the impact was much more significant and resulted in a high volume of requested recalculations. There were already over 1,100 requests for the 2022/23 award which was a lot of additional work compared to 2021/22. The team are unable to do the recalculations in bulk due to the individual circumstances of each member. Therefore, all recalculations are done on an individual basis.
- The team run a monthly report to identify the number of eligible deferred members approaching age 60 that may wish to take their pension benefits. The figures are increasing each month, both those on the report who all need to be written to, and those then choosing to take their benefits following that initial correspondence. The Administration Manager is investigating any possible trends to ensure the team is resourced appropriately going forward. The outstanding cases chart in appendix 3 showed outstanding cases had decreased from over 10,000 in 2018 to 5,000 at current date. The team were continuing to look for efficiencies through more automated processes. Mrs K Williams is also considering the future team structure including a potential project team to ensure business as usual services do not deteriorate
- Despite the current vacancies, the number of cases completed for the last quarter was 8,552 compared to 7,731 in the same reporting period last year.
- The number of incoming cases was 9,171 compared to 9,210 for the same period last year. However the 9,210 cases included a backlog of new starters from a particular employer and also a significant TUPE transfer) and therefore, these numbers were not a true reflection of the team's normal workload last year.
- Appendix 4 outlined the performance of the team against the target key performance indicators. Team members responsible for processing retirement cases were also responsible for the estimate calculations and the surviving partner benefit calculations, and therefore the two points relating to pay awards and increases in deferred retirements will impact those key performance indicators.
- There was a positive response following the recent adverts for vacancies. The team were in the process of interviewing fourteen candidates and hoped to fill the five vacant positions. Mrs K Williams confirmed she would identify whether any suitable candidates not appointed to the five vacant positions could potentially provide support for the extra work the team had, subject to a business case being approved.

- Mrs McWilliam suggested that the Fund's urgency delegations could be used if necessary to approve additional temporary positions.
- The longer term plan was to potentially create a project team to protect the team members dealing with core business as usual tasks, so that the everyday work would not be affected by areas such as pay awards or the pensions dashboard. She also noted that a lot of the team were above the age of 55 and this was a key risk which is noted in the risk register.
- The team had lost key members of staff in recent months and therefore Mrs K Williams wanted to be very open with the team about resource planning, progression and opportunities.

Mrs K Williams highlighted the new logo and branding shown on page 553. She explained that website and accessibility regulations had been taken into account in the new design. The intention is to go live with the new branding in April 2023. This would be shared at the AJCM with employers on 13 December 2022. Cllr Swash commented that the new logo looked professional.

Cllr Wedlake recognised the difficulty with recruitment and retention, and thanked the team for their hard work despite these staffing issues.

Mrs McWilliam said that all of the branding work had been completed internally and involved the recently recruited Communications Officer. This showed the value of having additional expertise within the team.

RESOLVED:

The Committee noted the update

222. **ASSET POOLING**

The Chairman stated that this item was for noting and more details were covered in the next agenda item.

During the item Mr Hibbert noted generally that the virtual format of Committee meetings made it extremely difficult given that he did not have an easily accessible copy of the meeting papers and was working with one screen. Therefore he was unable to follow his documents and therefore raise points at the meeting. Cllr Hughes agreed with Mr Hibbert and wondered if the Committee meetings could move to hybrid meetings going forward. Officers agreed to take this forward with Democratic Services.

RESOLVED:

The Committee noted the update

LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985 – TO CONSIDER THE EXCLUSION OF THE PRESS AND PUBLIC

RESOLVED

That the press and public be excluded for the remainder of the meeting for the following items by virtue of exempt information under paragraph(s)14 of Part 4 of Schedule 12A of the Local Government Act 1972 (as amended).

223. SUPPLIER CONTRACTS - CONFIDENTIAL

Due to conflicts of interest, representatives of Mercer and Aon left the meeting and re-joined from paragraph 1.09. This item of the agenda was presented and discussed.

RESOLVED

- (a) The Committee extended the contract with Aon until 31 March 2025.
- (b) The Committee extended the contract with Mercer until 31 March 2025.
- (c) The Committee agreed to continue the contract with Heywood on a 12 month rolling basis until February 2028.
- (d) The Committee noted and discussed the update on Link Fund Solutions.

LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985 – TO CONSIDER THE EXCLUSION OF THE PRESS AND PUBLIC

RESOLVED

That the press and public be excluded for the remainder of the meeting for the following items by virtue of exempt information under paragraph(s) 18 of Part 4 of Schedule 12A of the Local Government Act 1972 (as amended).

224. CYBER STRATEGY WORK PROGRAMME - CONFIDENTIAL

This presentation was received from Byron Lloyd-Jones (Aon Cyber Solutions)

RESOLVED:

The Committee noted the contents of the report and the presentation from Aon's cyber security experts.

The Chairman thanked everyone for their attendance and participation. He also mentioned the forthcoming training sessions including the WPP session on 5 December, the essential training sessions on 18 January 2023 and 1 February 2023 and the AJCM on 13 December 2022. The next formal Committee meeting is on 15 February 2023. The meeting finished at 12:30pm.

| Chairman |
|----------|



CLWYD PENSION FUND COMMITTEE

| Date of Meeting | Wednesday, 15 February 2023 |
|-----------------|--------------------------------|
| Report Subject | Climate Change Analysis Update |
| Report Author | Head of Clwyd Pension Fund |

EXECUTIVE SUMMARY

The purpose of this report is to provide the Committee with the following documents which relate to climate change analysis of Clwyd Pension Fund's assets:

- The initial draft of the Fund's first Task Force on Climate-Related Financial Disclosures ("TCFD") report
- The latest Analytics for Climate Transition ("ACT") analysis carried out for the Fund.

These documents both cover the periods ending 31 March 2022, and are attached as appendices to this report.

The report and the appendices include key findings in relation to the Fund's decarbonisation and actions for the future.

A useful glossary of terms is available at the end of this report.

| RECOMMENDATIONS | |
|-----------------|---|
| 1 | That the Committee consider, discuss and note the reports on TCFD and |
| | ACT over periods to the end of March 2022. |

REPORT DETAILS

| 1 00 | Climate change analysis of Chand Bension Fund Assets |
|------|---|
| 1.00 | Climate change analysis of Clwyd Pension Fund Assets |
| 1.01 | The Committee recognise climate change as a risk that could impact the assets of the Fund if it is not properly measured and managed. |
| | Within the Fund's Investment Strategy Statement (ISS), the Fund has already documented its beliefs in relation to managing climate risk, and agreed targets to measure progress made towards decarbonisation. Along with all large pension funds there will be a requirement in the future for LGPS funds to report on how they are managing climate risk. This is known as Task Force on Climate-Related Financial Disclosures ("TCFD"). |
| | Although this is not a requirement for LGPS funds yet, it was decided in the Fund's business plan for 2022/23 that the Fund would report this information on a voluntary basis, given that the targets and monitoring of carbon emissions is already being carried out. |
| | Officers believe there is more work required in relation to the language included and how the TCFD report is positioned. Given the version as at 31 March 2023 will be provided to the September Committee meeting, work will focus on improving the language and positioning of that TCFD report, rather than the attached one. |
| 1.02 | Task Force On Climate-Related Financial Disclosures (TCFD) report |
| | The introduction of TCFD reporting will provide greater transparency and understanding in relation to how this risk is being managed for the Clwyd Pension Fund. The initial draft of the Fund's first TCFD report is included in Appendix 1. |
| | Section 3 of the attached TCFD report provides more background on the requirements and framework. The report covers the following key areas: • Governance • Strategy • Risk Management • Metrics and targets |
| 1.03 | Governance |
| | The Fund already has strong governance through the Committee, the Pension Board, the Advisory Panel, a Scheme of Delegation as well as expert advisers including in relation to regulated investment advice. This proven governance structure is being applied in relation to how the Fund manages climate risk. |
| | As some of the Fund's assets are invested through the Wales Pension Partnership (WPP), it is important that we work with WPP to deliver the climate beliefs of Clwyd Pension Fund. |
| 1.04 | Strategy |
| | The Committee has previously considered the impact of climate change on the investment performance of the Fund (based on the Investment Strategy at that time). |

Analysis showed that in most scenarios, climate change would have a negative impact on the Fund's investment performance unless the implementation of the strategy continues to evolve as the world decarbonises.

The Committee previously approved a number of climate beliefs within the Investment Strategy which are:

- Climate change presents a systemic risk to the overall stability of every economy and country, with the potential to impact on the members, employers and all of the holdings in the Fund's investment portfolio.
- Considering the impacts of climate change is not only the legal or fiduciary duty of the Fund, but is also consistent with the long term nature of the Fund. The Fund's investments need to be sustainable to be in the best interests of all key stakeholders.
- Engagement is the best approach to enabling the change required to address the Climate Emergency, however selective risk-based disinvestment is appropriate to facilitate the move to a low carbon economy.
- As well as creating risk, climate change also presents opportunities to make selective investments that achieve the required returns, whilst at the same time make a positive social and environmental impact, such as environmental infrastructure and clean energy.

Analysis carried out as at March 2022 also supported the initiatives that the Fund had previously agreed including:

- A 5% strategic allocation to sustainable equity
- Engagement with managers on matters pertaining to ESG within private markets
- Supporting investments with strong sustainability / impact focus
- Looking into investment alignments with United Nations' Sustainable Development Goals (UNSDG)
- Allocating 4% of the total portfolio to local / impact focused investments within private markets
- Endeavouring to make impact-focused allocations within other private market asset classes (Private Equity, Private Debt, Infrastructure and Real Estate) where possible.

The separate Committee report on the proposed changes to the Fund's Investment Strategy includes further actions to assist with meeting the Fund's climate beliefs.

1.05 | Risk management

The Fund already has a Risk Management Strategy in place which is being applied to managing climate risk in the same way as it is used to manage all other investment risks.

1.06 | Metrics and targets

The Committee has previously agreed a target for the investments in the Clwyd Pension Fund, as a whole, to have net zero carbon emissions by 2045, with an interim target of carbon reduction of 50% by 2030. Underlying this headline commitment, the plan also has a number of other key targets as outlined below: a) for the Fund as a whole:

 to have at least 30% of the Fund's assets allocated to sustainable investments by 2030

- to expand the measurement of the carbon emissions of the Fund's investments to include all assets by the end of 2023.
- b) within the Listed Equity portfolio:
 - to achieve a reduction in carbon emissions of 36% by 2025 and 68% by 2030
 - to target at least 30% of the Listed Equity portfolio to be invested in sustainable assets by 2030
 - to reduce fossil fuel exposure relating to oil and gas by 70% by 2025 and 90% by 2030
 - to reduce fossil fuel exposure relating to coal by 90% by 2025 and 95% by 2030
 - to engage with the biggest polluters within the Fund's Listed Equity portfolio as part of an overarching stewardship and engagement strategy, to achieve:
 - by 2025, at least 70% of organisations in carbon-intensive sectors have clearly articulated and credible strategies to attain net zero or are subject to engagement to achieve this objective.
 - by 2030, at least 90% of organisations in carbon-intensive sectors have clearly articulated and credible strategies to attain net zero or are subject to engagement to achieve this objective.

A summary of the Fund's performance against these targets is included in the ACT report in Appendix 2.

In order to be able to measure whether the Fund is achieving these targets, the following climate-related metrics are being used:

- Absolute emissions metric
- Emissions intensity metric: Carbon Footprint
- Emissions intensity metric: Weighted Average Carbon Intensity (WACI)
- Portfolio alignment metric: Implied Temperature Rise (ITR)
- Portfolio alignment metric: Science Based Targets Initiative (SBTi).

1.07 | Analytics For Climate Transition (ACT)

The ACT report is included in Appendix 2. It provides the more detailed analysis and information on the Fund's climate transition plan.

Purpose of analysis

The ACT analysis provides an updated understanding of the Fund's climate transition progress and potential ("transition capacity") as at 31 March 2022 using the Mercer Analytics for Climate Transition (ACT) tool. It is the second year of this analysis.

The analysis within the report was carried out on the Fund's listed equities (Global and Emerging Markets (EM) Equity), synthetic equity and multi-asset credit (MAC) portfolios, as well as on part of the Best Ideas Tactical Asset Allocation (TAA) portfolio. This results in c.40.5% of the total Fund being analysed.

The aim of the analysis is to:

- Monitor progress against the Fund's listed equity targets across decarbonisation, exposure to fossil fuels (oil, gas, coal) and explore the proportion of emissions within high impact sector that are currently under engagement or aligned with a low carbon future.
- Understand the transition capacity of the Fund's listed equity, MAC and TAA

portfolios.

 Present an updated high level implementation plan for listed equities that incorporates further asset classes over time.

To date, the recommended targets have been set on scope 1 and 2 emissions, and when the level of corporate reporting of scope 3 emissions improves, we recommend including scope 3 emissions within the Fund's emissions baseline and target setting framework.

Carbon footprint is now being used as the primary metric for monitoring the decarbonisation progress. Progress is also monitored against absolute emissions and weighted average carbon intensity (WACI). Last year targets were set on an absolute emissions basis.

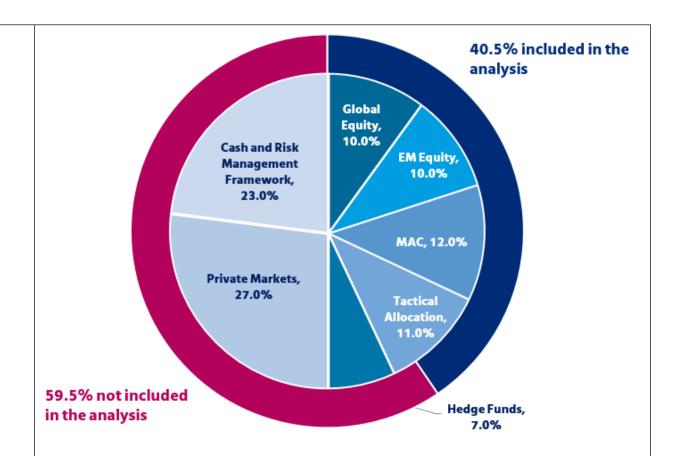
1.08 | Holdings analysed

Carbon metrics have been provided on 40.5% of the Fund's Strategic Asset Allocation. Consistent with the previous year's analysis, the baseline consists of the Fund's global and emerging market equity mandates.

As the Best Ideas Tactical Asset Allocation portion of the Strategic Asset Allocation is tactical and short term by its very nature, this portion of the portfolio was excluded from the initial baseline analysis and assessment of progress versus listed equity portfolio targets. In relation to this analysis (as at 31 March 2022), whilst the majority of the TAA portfolio was analysed from a metrics perspective, the Commodity and the Sterling Liquidity Funds were not able to be analysed owing to data availability in the case of the former. Also some of the TAA portfolio can be cash, and therefore is excluded from the analysis.

In relation to other areas of the Fund's assets, there is an active ongoing exercise to gather carbon metrics data on the property holdings.

Over time as consensus around methodology for less conventional asset classes grows, this analysis will cover a greater proportion of the Fund.



Notes: The data analysed excludes, for example, cash and derivative allocations within the funds analysed. Where there is partial coverage of a portfolio the absolute emissions is scaled up to estimate coverage for 100% of the mandate. Within the Cash and Risk Management Framework there is exposure to synthetic global developed equity and this is included in the analysis.

Detailed analysis on each of the asset classes analysed is shown within appendix 2.

1.09 Key findings and areas for focus

Slides 7 and 8 in appendix 2 provide the overview of the Fund's progress against its targets. Key findings from the ACT analysis are summarised below:

- Decarbonisation progress over the period: the listed equity portfolio, on a carbon footprint basis, has increased by 9.7% and is behind target. This was driven by the transition of the legacy Emerging Market mandates to WPP's Emerging Market Equity Fund (i.e. as a result of the move to pooling) which transpired to be more intensive at 31 March 2022. Please refer to slides 15 to 21 in appendix 2 for more detail.
- On a more positive note, weighted average carbon intensity (WACI) decreased over the same period by 6.3%. This indicates that at the most granular level, the companies that the Fund ultimately invests in are less carbon intensive now than they were a year ago. As a result, collectively these companies are less susceptible to transition risk than they were 12 months ago. (Note that Mercer's transition capacity methodology has been updated over the year so the figures are not directly comparable year on vear).
- Fossil fuel exposure has fallen meaningfully across oil, gas and coal.
- The proportion of the listed equity portfolio's financed emissions within the most material sectors that have a strategy that is currently aligned with net-Page 22

| | zero or are under active engagement is on track at 67%. |
|------|---|
| 1.10 | Recommended key areas of focus for the next 12 to 18 months are summarised below: |
| | Setting more granular targets across: Sustainable / climate solutions Transition alignment (SBTi – transition to net zero) Engagement and Stewardship Expand the net zero approach beyond the listed equity portfolio to property, infrastructure, private equity and multi-asset credit (data permitting) Integrate climate risk into the Best Ideas Tactical Asset Allocation guidelines Consider connections to biodiversity / natural capital. Overall, the insights and areas of focus should be used to help shape discussions with WPP and support climate change reporting (TCFD). |

| 2.00 | RESOURCE IMPLICATIONS |
|------|---|
| 2.01 | None directly as a result of this report. |

| 3.00 | CONSULTATIONS REQUIRED / CARRIED OUT |
|------|---|
| 3.01 | None directly as a result of this report. |

| 4.00 | RISK MANAGEMENT |
|------|--|
| 4.01 | This report addresses some of the risks identified in the Fund's Risk Register. Specifically, this covers the following (either in whole or in part): • Governance risk: G2 • Funding and Investment risks: F8, I1, I2 |

| 5.00 | APPENDICES |
|------|---|
| 5.01 | Appendix 1 – Task Force on Climate-Related Financial Disclosures (TCFD) – 31 March 2022 Appendix 2 – Analytics for Climate Transition (ACT) – 31 March 2022 |

| 6.00 | LIST OF ACCESS | IBLE BACKGROUND DOCUMENTS | |
|------|--|--|--|
| 6.01 | Analytics for Climate Transition (ACT) period ending 31 March 2021 | | |
| | Contact Officer: Telephone: E-mail: | Philip Latham, Head of Clwyd Pension Fund 01352 702264 philip.latham@flintshire.gov.uk | |

| 7.00 | GLOSSARY OF TERMS |
|------|---|
| 7.01 | A list of commonly used terms are as follows: |
| | a) Carbon footprint: The amount of carbon dioxide (or other greenhouse gasses) released into the atmosphere as a result of the activities of a particular individual, organization or community. Carbon footprint is calculated for each company as (Scope 1 and 2 carbon emissions / \$m investments). See also Scope 1, 2, 3 emissions and Weighted Average Carbon Intensity (WACI). |
| | b) Carbon intensity: The amount of emissions of carbon dioxide (or other greenhouse gasses) released per unit of another variable such as revenue, gross domestic product (GDP), per \$1million invested etc. See also Weighted Average Carbon Intensity (WACI). |
| | c) Carbon price: The price for avoided or released carbon dioxide (CO2) or CO2-equivalent emissions. This may refer to the rate of a carbon tax, or the price of emission permits. In many models that are used to assess the economic costs of mitigation, carbon prices are used as a proxy to represent the level of effort in mitigation policies. |
| | d) Carbon neutrality: Achieved by offsetting emissions by paying for credits (usually certified via new forestry equivalents that provide carbon removal). Carbon neutrality is similar to net zero targeting – the latter requires actual emissions reductions to meet targets though (rather than purchasing offsets). See also Net Zero CO2 emissions. |
| | e) Decarbonisation: The process by which countries, individuals or other entities aim to achieve zero fossil carbon existence. Typically refers to a reduction of the carbon emissions associated with electricity, industry and transport. |
| | f) Global warming: The estimated increase in global mean surface temperature expressed relative to pre-industrial levels unless otherwise specified. See also Pre-industrial. |
| | g) Greenhouse gases: Gases in the planet's atmosphere which trap heat. They let sunlight pass through the atmosphere but prevent heat from leaving the atmosphere. Greenhouse gases include: Carbon Dioxide (CO2), Methane (CH4), Nitrous Oxide (N2O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur Hexafluoride (SF6), Nitrogen Trifluoride |

(NF3).

- h) **Inevitable policy response:** A scenario that expects an acceleration of climate-related policy announcements in 2023–2025, which has been supported by the Principles for Responsible Investment (PRI).
- i) **Mitigation (of climate change):** A human intervention to reduce emissions or enhance the sinks of greenhouse gases.
- j) Mitigation strategies: In climate policy, mitigation strategies are technologies, processes or practices that contribute to mitigation, for example, renewable energy (RE) technologies, waste minimization processes and public transport commuting practices.
- k) Net zero CO2 emissions: Net zero carbon dioxide (CO2) emissions are achieved when CO2 emissions are balanced globally by CO2 removals over a specified period. The term "net zero" is also typically associated with the 2050 date or earlier, as this is aligned with the scientific recommendations to achieve a 1.5°C scenario. See also Carbon neutrality (which differs slightly).
- I) Paris Agreement: The Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC) was adopted on December 2015 in Paris, at the 21st session of the Conference of the Parties (COP) to the UNFCCC. The agreement, adopted by 196 Parties to the UNFCCC, entered into force on 4 November 2016 and as of May 2018 had 195 Signatories and was ratified by 177 Parties. One of the goals of the Paris Agreement is "Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels", recognising that this would significantly reduce the risks and impacts of climate change. Additionally, the Agreement aims to strengthen the ability of countries to deal with the impacts of climate change.
- m) **Physical risks:** Dangers or perils related to the physical or natural environment that pose a threat to physical assets e.g. buildings, equipment and people. Mercer's scenario analysis grouped these into the impact of natural catastrophes (for instance sea level rise, flooding, wildfires, and hurricanes) and resource availability (particularly water). See also Transition risks.
- n) **Pre-industrial:** The multi-century period prior to the onset of large-scale industrial activity around 1750. The reference period 1850–1900 is used to approximate pre-industrial global mean surface temperature.
- o) Principles for Responsible Investment (PRI): Non-profit organisation which encourages investors to use responsible investment to enhance returns and better manage risks. It engages with global policymakers and is supported by, not but part of, the United Nations. It has six Principles for Responsible Investment that offer a menu of possible actions for incorporating ESG issues into investment practice.
- p) **Resilience:** The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or

- reorganising in ways that maintain their essential function, identity and structure while also maintaining the capacity for adaptation, learning and transformation.
- q) **Scope 1, 2, 3 emissions:** Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.
- r) Stranded assets: Assets exposed to devaluations or conversion to "liabilities" because of unanticipated changes in their initially expected revenues due to innovations and/or evolutions of the business context, including changes in public regulations at the domestic and international levels.
- s) Task Force on Climate-related Financial Disclosures (TCFD): framework designed to improve and increase reporting of climate-related financial information
- t) Taskforce on Nature-Related Financial Disclosures (TNFD): market-led, science-based TNFD framework enabling companies and financial institutions to integrate nature into decision making
- u) **Transition alignment:** the process of moving away from high-carbon intensive processes towards business models and assets aligned with a low carbon future and the Paris agreement. Different sectors will have different pathways to net zero.
- v) **Transition risks:** Risks from policy changes, reputational impacts and shifts in market preferences, norms and technology as the economy moves to a low carbon approach. See also Physical risks.
- w) Weighted average carbon intensity (WACI): The carbon intensity of a portfolio, weighted by the proportion of each constituent in the portfolio. Carbon intensity is calculated for each company as (Scope 1 and 2 carbon emissions / \$m revenue). See also Carbon footprint.



Clwyd Pension Fund

Climate change governance and reporting in line with the recommendations of the

Task Force on Climate-Related Financial Disclosures ("TCFD")

Clwyd Pension Fund

Reporting period: 12 months to 31 March 2022

TCFD Report Clwyd Pension Fund

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Section 1

Introduction

Welcome to our first climate change report, which has been prepared in line with the recommendations of the Task Force on Climate-Related Financial Disclosures ("TCFD").

The Committee of the Clwyd Pension Fund ("the Fund") recognises climate change as a risk that could impact the Fund's ability to achieve its required long term investment returns if it is not properly measured and managed.

An assessment of climate-related risks and opportunities has been carried out based on information that is currently available, both in terms of data from the companies and assets in which the Fund invests and in consideration of the different global warming scenarios. This data is subject to change as climate change reporting improves.

Climate change is one risk amongst many that the Fund measure, monitor and manage. To this extent, climate change needs to be considered alongside these other risks in a balanced and proportionate way. The Fund also recognises that climate change presents an opportunity, by investing in companies or assets that are expected to perform well in an economy that is positioned to address climate change. However the Fund will continue to invest in companies where there is a sufficiently attractive investment case and the asset manager believes there is an opportunity to engage and influence change in the behaviour and actions of a company.

This report has been split into several sections to help readers understand:

- Governance: How the Fund incorporates climate change into its decision making;
- Strategy: How potential future climate warming scenarios could impact the Fund; and
- **Risk Management:** How the Fund incorporates climate-related risk in its risk management processes;
- **Metrics and Targets:** How the Fund measures and monitors progress against different climate-related indicators known as metrics.

The final section sets out the methodology and assumptions used to produce the information contained in this report.

As always, members are encouraged to contact the Fund if there are comments you wish to raise. You can contact the officers below:

- **Philip Latham** (Head) philip.latham@flintshire.gov.uk
- **Debbie Fielder** (Deputy Head) debbie.a.fielder@flintshire.gov.uk
- **leuan Hughes** (Investment Officer of the Clwyd Pension Fund) leuan.Hughes@flintshire.gov.uk

Cllr. Ted Palmer

Chair Clwyd Pension Fund Committee

Section 2

Executive Summary

The Committee recognises that the risks and opportunities associated could impact the long term financial viability of the Fund, there is also a recognition that this is a complex and multifaceted issue.

It is therefore vitally important that the Committee understands the position of the Fund, in terms of its current, ongoing, carbon impact. In order to understand this the Fund monitors three main, backward looking ongoing carbon metrics: (1) absolute emission, (2) carbon footprint, (3) weighted average carbon intensity ("WACI").

Absolute Emissions, this is the total equivalent amount of CO₂ that the Fund's invested asset release into the atmosphere every year. Absolute emissions are significantly influenced by the level of assets invested, the more assets the higher the absolute emissions.

In order to allow a fairer comparison the Committee monitor two carbon intensity metrics, Carbon Footprint and Weighted Average Carbon Intensity. Carbon Footprint takes the total absolute carbon emissions of the portfolio and divides it by the current value of the portfolio. This allows comparison between Funds of different sizes, as well as a fair comparison through time as the Fund's own assets will fluctuate year on year. Weighted Average Carbon Intensity takes each underlying companies absolute carbon emissions and divides it by the company's revenue. This provides the Committee with an indication of whether the underlying companies are decarbonising over time and shows how sensitive the underlying investments are to climate transition risk.

The Committee conducted base line analysis on the Fund's investments as at 31 March 2021, and ultimately agreed a range of targets, full details on all of the Fund's targets can be found in Section 7 of the Report, with the key targets being:

- to target a net zero investment portfolio (covering all assets) by 2045 or earlier.
- shorter-term target of a 50% or more reduction in carbon emissions by the end of 2030.
- targets relating to its Listed Equity holdings, seeking a reduction in carbon emissions of 36% by 2025 and 68% by 2030, whilst also targeting a reduction in fossil fuels.

The ultimate target of being net zero across all the portfolio is still some way off, in part this is also due to the availability of data. Outside of listed equities, the carbon data quality is less robust. The Fund accepts it will take time to improve carbon data quality to be of sufficient quality to review all assets and so the focus of this report is on the listed equity portfolio (target three above).



The chart above shows the changes in the three carbon metrics detailed earlier as at 31 March 2021 (the baseline date) and 31 March 2022 for the listed equity portfolio only.

The absolute emissions of the Fund's listed equity portfolio has increased by 20.0% over the one year period from 31 March 2021 to 31 March 2022.

The carbon footprint increased by 9.7% over the same time period, whilst the Weighted Average Carbon Intensity (WACI) decreased over the same period by 6.3%.

The increase in absolute emissions and carbon footprint, whilst unwelcomed, is understood. Absolute emissions have increased, in part this is due to the assets analysed being c.14% higher than in 2021. The increase in assets is the predominant driver, however the increase in carbon footprint highlights that the increase in absolute emissions is also due to an increase in the carbon intensity of the underlying investments. The primary driver of this increase was the change in the Emerging Market (EM) equity investments. These assets were moved into the WPP EM fund, which, in comparison to the previous EM investments has a higher carbon footprint. The Fund is committed to pooling and continues to engage with WPP and the underlying asset managers to ensure that all funds have decarbonisation targets.

On a more positive note the fall in WACI indicates that at the most granular level, the companies that the Fund ultimately invests in are less carbon intensive now than they were a year ago. As a result, collectively these companies are less susceptible to transition risk than they were 12 months ago.



Fossil fuel reduction is also a key target of the Fund (specific targets shown in section 7). Over the 12 month period to 31 March 2022, within listed equity portfolio, **Total Potential Emissions have decreased by 29.2%**, from 2021 to 2022. **Thermal Coal Emissions decreased by 72.7%**. **The Oil and Gas Emissions decreased over the same period by 14.0%**. Snapshot shown above, with further information provided within section 7 of the report.

The Fund has already taken actions to support the initiatives that the Fund has previously agreed, including:

- 5% strategic allocation to sustainable equity and engaging with the WPP to support the development of a new active sustainable equity sub-fund;
- Engagement with managers on matters pertaining to ESG within private markets;
- Supporting investments with strong sustainability/ impact focus by allocating 4% of the total portfolio to local/ impact focused investments within private markets;
- Endeavouring to make impact-focused allocations within other private market asset classes (Private Equity, Private Debt, Infrastructure and Real Estate) where possible.

During the period of 31 March 2021 - 31 March 2022 the Fund has substantially increased its commitments to Impact focused portfolios within its Private Market mandates, allocating a further £102m across 5 additional commitments. These commitments are as follows:

| Private Market Manager | Fund Name | Capital Committed (£m) |
|---|---|------------------------|
| Capital Dynamics | Clwyd Clean Energy Wales | 50 |
| Brookfield Asset Management ("Brookfield") | Brookfield Global Transition Fund ("BGTF") | 12 |
| Copenhagen Infrastructure Partners | Energy Transition Fund I | 17 |
| Circularity Capital | European Growth II | 10 |
| Generation Investment Management | Generation IM Sustainable Solutions Fund IV | 13 |

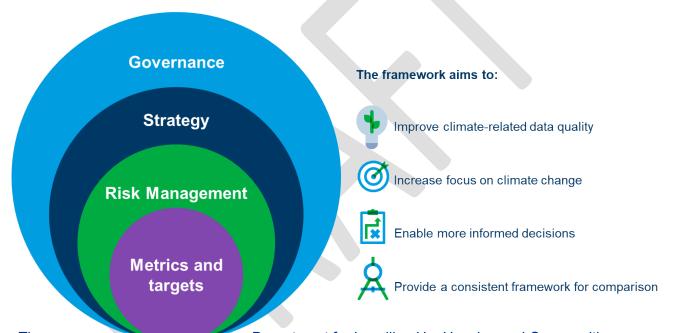
The remainder of the report sets out the disclosures of the Pension Fund Committee of the Clwyd Pension Fund under the Task Force on Climate-related Financial Disclosures ("TCFD") framework, and covers the Fund year ending 31 March 2022. As such, it focuses on the areas of Governance, Strategy, Risk Management and Metrics and Targets.

Section 3

The TCFD Framework

The Financial Stability Board, an international body established by the G20 that monitors and makes recommendations about the global financial system, created the Task Force on Climate-related Financial Disclosures ("TCFD") framework in 2015. TCFD was created to improve and increase reporting of climate-related financial information that can promote more climate-informed investments. In 2017, the TCFD recommended a framework for disclosing how climate-related risks and opportunities are measured, monitored and managed by companies, asset managers and asset owners.

The recommendations are in four key areas:



The Department for Levelling Up, Housing and Communities (DLUHC) has recently consulted on proposals for new requirements on LGPS ("Local Government Pension Schemes") administering authorities. Proposals for LGPS on governance and reporting of climate change risks are summarised in the next two pages. The Fund responded to the consultation and will continue to engage on this vitally important topic.

LGPS: Governance and reporting of climate change risks

| Area | Proposal |
|----------------------|--|
| Overall | Each LGPS Administering Authority (AA) must complete the actions listed below and summarise their work in an annual Climate Risk Report . |
| Proper advice | We propose to require that each AA take proper advice when making decisions relating to climate-related risks and opportunities. |
| Scope and Timing | Will apply to all LGPS AAs. The first reporting year will be the financial year 2023/24, and the regulations are expected to be in force by April 2023. The first reports will be required by December 2024. |
| Governance | AAs will be expected to establish and maintain, on an ongoing basis, oversight of climate related risks and opportunities. They must also maintain a process by which they can satisfy themselves that officers and advisors are assessing and managing climate-related risks and opportunities. |
| Strategy | AAs will be expected to identify climate-related risks and opportunities on an ongoing basis and assess their impact on their funding and investment strategies. |
| Scenario Analysis | AAs will be required to carry out two sets of scenario analysis . This must involve an assessment of their investment and funding strategies. One scenario must be Paris-aligned (meaning it assumes a 1.5 to 2 degree temperature rise above pre-industrial levels). Scenario analysis must be conducted at least once in each valuation period. |
| Risk Management | AAs will be expected to establish and maintain a process to identify and manage climate-related risks and opportunities related to their assets. They will have to integrate this process into their overall risk management process. |

LGPS: Governance and reporting of climate change risks (continued)

| Area | Proposal |
|-----------------------------|--|
| Metrics | The proposed metrics that must be measured and disclosed annually, are set out below. 1. An absolute emissions metric. Under this metric, AAs must, as far as able, report Scope 1, 2 and 3 greenhouse gas emissions. 2. An emissions intensity metric. We propose that all AAs should report the Carbon Footprint of their assets as far as they are able to. Selecting an alternative emissions intensity metric such as Weighted Average Carbon Intensity (WACI) will be permitted, but AAs will be asked to explain their reasoning for doing so in their Climate Risk Report. 3. Data Quality metric. Under the Data Quality metric, AAs will report the proportion the value of its assets for which its total reported emissions were Verified, Reported, Estimated or Unavailable. 4. Paris Alignment Metric. Under the Paris Alignment Metric, AAs will report the percentage of the value of their assets for which there is a public net zero commitment by 2050 or sooner. |
| Targets | AAs will be expected to set a target in relation to one metric. The target will not be binding. Progress against the target must be assessed once a year, and the target revised if appropriate. The chosen metric may be one of the four mandatory metrics listed above, or any other climate related metric recommended by the TCFD. |
| Disclosure | AAs will be expected to publish an annual Climate Risk Report. This may be a standalone report, or a section in the AA's annual report. Scheme members must be informed that the Climate Risk Report is available in an appropriate way. |
| Scheme Climate Report | Scheme Advisory Board (SAB) should prepare an annual Scheme Climate Report including a link to each individual AA's Climate Risk Report (or a note that none has been published) and aggregate figures for the four mandatory metrics. Report would also include a list of the targets which have been adopted by AAs. |

Section 4

Governance

Governance approach

The Committee have ultimate responsibility for ensuring effective governance of climate-related risks and opportunities. The Fund maintains an Investment Strategy Statement (ISS), which details the key objectives, risks and approach to considering Environmental, Social and Governance ("ESG") factors, such as climate change, as part of its investment decision making. The document is reviewed on at least a triennial basis.

The Fund recognises the importance of its role as stewards of capital and the need to ensure the highest standards of governance and promoting corporate responsibility in the underlying companies in which its investments reside. The Fund recognises that ultimately this protects the financial interests of the Fund and its beneficiaries. The Fund has a commitment to actively exercising the ownership rights attached to its investments, reflecting the Fund's conviction that responsible asset owners should maintain oversight of the companies in which they ultimately invest and recognising that companies' activities impact upon not only their customers and clients, but more widely upon their employees, other stakeholders and also wider society.

The Fund defines a Responsible Investment (RI) as:

"Incorporating sustainability considerations within the investment process, including environmental, social and governance (ESG) factors for a broader perspective on risk and return opportunities."

In developing its approach to RI, the Fund seeks to understand and manage the ESG and reputational risks to which it is exposed. This policy sets out the Fund's approach to this.

The foundations of the Fund's approach to RI are its Principles which are set out below:

- The Fund's fiduciary duty is to act in the best interests of its members and employers. The Fund recognises that ESG issues create risk and opportunity to its financial performance, and will contribute to the risk and return characteristics. The Fund believes, therefore, that these factors should be taken into account in its Funding and Investment Strategies and throughout the decision making process.
- The Fund is a long-term investor, with pension promises for many years, and because of this, it seeks to deliver long-term sustainable returns.
- The Fund integrates ESG issues at all stages of the Fund's investment decision making process.
- The Fund seeks to apply an evidence based approach to the implementation of Responsible Investment.
- The Fund recognises that transparency and accountability are important aspects of being a Responsible Investor and will demonstrate this by publishing its RI policy and activity for the Fund.

- The Fund has a duty to exercise its stewardship responsibilities (voting and engagement) effectively by using its influence as a long-term investor to encourage corporate responsibility.
- The Fund recognises the significant financial risk of not being a Responsible Investor and it seeks to ensure that this risk is mitigated through its Investment Policy and implementation.
- The Fund recognises the importance of Social/Impact investments which can make a positive social and environmental impact whilst meeting its financial objectives, and it will make selective investments to support this aim.

Oversight of climate change risks

The Fund recognises the importance in addressing the financial risks associated with climate change through its investment strategy, and believes that:

- Climate change presents a systemic risk to the overall stability of every economy and country, with the potential to impact on the members, employers and all of the holdings in the Fund's investment portfolio.
- Considering the impacts of climate change is not only the legal or fiduciary duty of the Fund, but is also consistent with the long term nature of the Fund. The Fund's investments need to be sustainable to be in the best interests of all key stakeholders.
- Engagement is the best approach to enabling the change required to address the Climate Emergency, however selective risk-based disinvestment is appropriate to facilitate the move to a low carbon economy.
- As well as creating risk, climate change also presents opportunities to make selective investments that achieve the required returns, whilst at the same time make a positive social and environmental impact, such as environmental infrastructure and clean energy.

Net Zero Commitment

As part of its commitment to RI the Fund has undertaken to evaluate and manage the carbon exposure of its investments to assist in ensuring an effective transition to a low-carbon economy. As part of this work, on 10 November 2021 the Clwyd Pension Fund Committee approved a strategy to achieve net-zero carbon emissions from its investment portfolio. This included carbon emissions analysis of the listed equity portfolio to provide a baseline for the Fund. Specifically, the Committee agreed a target for the investments in the Clwyd Pension Fund, as a whole, to have net zero carbon emissions by 2045, with an interim target of carbon reduction of 50% by 2030. Underlying this headline commitment, the plan also has a number of other key targets which are outlined later in the report.

The Fund will monitor and report against these targets annually, and may review and revise them as appropriate, particularly to ensure that targets and ambitions are in line with national and international developments and initiatives.

Pension Committee

The Fund is governed by the Clwyd Pension Fund Committee who have the responsibility for all Fund matters including governance, investment and funding strategies, accounting,

employer and scheme member engagement, communications, and administration. The Pension Fund Committee delegates the day-to-day running of the Fund to officers. The Head of Clwyd Pension Fund has overall delegated powers for the management of the Fund on a day-to-day basis.

The Pension Fund Committee's principal aim is to carry out the functions of Flintshire County Council as the Scheme Manager and Administering Authority for the Clwyd Pension Fund in accordance with LGPS legislation. The Fund's management powers and responsibilities have been delegated by Flintshire County Council to the Committee including but not limited to the setting and delivery of the Fund's strategies, the allocation of the Fund's assets and the appointment of contractors, advisors and fund managers.

The members on the Clwyd Pension Fund Committee are not trustees of the Fund, however, they do have a fiduciary and public law duties to the Fund's scheme members and employers, which is analogous to the responsibilities of trustees in the private sector and they could be more accurately described as 'quasi trustees' responsibilities.

The Committee may also delegate a limited range of its functions to one or more officers of Flintshire County Council, which it does so under a formal Scheme of Delegation, which ensures timely decision making at an appropriate level.

No matters relating to Flintshire County Council's responsibilities as an employer participating within the Clwyd Pension Fund are delegated to the Pension Fund Committee, ensuring a clear separation of responsibility between the employer and the "quasi trustee" responsibilities.

Pension Board

The Pension Board assists the Fund in ensuring the effective and efficient governance and administration of the Pension Fund and assists the Fund in securing compliance with the LGPS Regulations and any other legislation relating to the governance and administration of the Fund. The Pension Board is not a decision making body in relation to the management of the Fund.

The Pension Board operates independently of the Pension Fund Committee.

LGPS Asset Pooling – Wales Pension Partnership (WPP)

The Wales Pension Partnership (WPP) for which Clwyd Pension Fund is a partner, is responsible for the implementation of the investment strategy of pooled funds. Non-pooled assets remain under the responsibility of the Fund and are overseen by the investment officers.

As part of the structure of the Wales Pension Partnership, a Joint Governance Committee (JGC) has been established which oversees the pooling of the investments of the eight Local Government Pension Scheme funds in Wales. The JGC meets a minimum of 4 times a year at one of the constituent authority offices and each meeting is webcasted. The JGC comprises one elected member from each Constituent Authority and a co-opted (non-voting) scheme member representative. The Fund's representative on the JGC is Cllr Ted Palmer, Chair Clwyd Pension Fund Committee (and currently Vice Chair of the JGC).

The WPP's Joint Governance Committee (JGC) has approved a responsible investment policy and a climate risk policy for the WPP. The policies represent a broad range of

investment beliefs within the pool and show the desire of the WPP to be a leader in responsible investment. The WPP are currently a signatory of the UK Stewardship Code 2020.

The Fund currently has officer representation on the WPP's Responsible Investment Sub-Group, who are responsible for formulating and delivering WPP's Responsible Investment Workplan, as well as liaising with the WPP's Voting and Engagement Provider (Robeco). The group meet twice a quarter.

The Responsible Investment Sub Group has worked to develop reporting on the ESG and climate risk characteristics of Sub-Funds and intends to cascade this information down to Constituent Authorities. This reporting is being prepared independently of the reporting provided by the investment manager, serving to verify the information that is otherwise made available. Robeco also provide quarterly reporting on Voting and Engagement activity which has been shared with Constituent Authorities.

Fund's Advisors

Investment Consultant

The Committee of the Fund have appointed Mercer as Investment Consultant to the Fund. Mercer's role is to provide ongoing advice on investment strategy and manager appointments (where relevant). This includes advice on managing and monitoring investment-related risks, such as climate change and is considered at quarterly meetings. Mercer will assist in the production of the Fund's TCFD report on an annual basis.

Actuarial Advisor

The Committee have appointed Mercer Limited as the Fund's actuary, who has the following roles and responsibilities (amongst others):

- Act as a member of the Clwyd Pension Fund Pension Advisory Panel and the Funding and Risk Management Group
- To prepare valuations including the setting of employers' contribution rates at a level to ensure fund solvency, including the review of contributions between valuations
- To help the Fund to understand the potential funding impact of climate change (including the impact on financial and demographic assumptions and providing input into the climate risk analysis driving strategic asset allocation decisions).

Independent Advisor

The Committee have appointed Aon as the Independent Advisor to the Fund. Aon carries out an annual review of the governance of the Fund as a whole, against Aon's best practice governance framework. By seeking external assurance from an independent third party, the Fund and its stakeholders can be confident of an unbiased and unprejudiced view of the effectiveness of the Fund's stewardship processes. The Independent Advisor also acts as a member of the Clwyd Pension Fund Pension Advisory Panel.

Annual assessment of advisors

On an annual basis the Head of the Clwyd Pension Fund, Philip Latham completes review meetings with all service providers including but not limited to, the Fund's Investment Consultant and Independent Advisor.

Committee training and engagement

During the year to 31 March 2022, the Committee received training from its Investment Consultant, Mercer Limited ("Mercer"), covering climate-related investment risks and reporting requirements in line with the TCFD recommendations.

Climate change forms an explicit agenda item at least annually for the Committee. The Committee allocates an appropriate amount of time to climate change considerations at meetings and will allocate further time at future meetings if any analysis or wider industry research requires additional review and consideration.

Day-to-day implementation

The implementation of the management of climate change-related risk with respect to specific securities is delegated to WPP and third party portfolio managers. Each manager's approach to ESG issues and how these are integrated into their investment process is assessed as part of the manager selection and monitoring process.

Section 5

Strategy

The effects of climate change will be felt at different times in the future and to different extents. The Committee believe it is important to understand how the Fund's exposure to climate-related risks may change over time, when the risk exposure may be greatest and what actions can be taken now, or in the future, to avoid those risks becoming financially material to the Fund.

To help with this assessment, the Fund has defined short-, medium- and long-term time horizons for the scenario analysis of climate related risks. The scenario analysis conducted was done on the whole of the Fund's assets. The climate-related risks and opportunities that are relevant to the Fund vary over these periods. The Fund expects to revisit the relevance of these time periods in its next report.

Short Term (period to 2030)

Short term risks may present themselves through rapid market re-pricing as:

- Scenario pathways become clearer. For example a change in the likelihood of a 2°C scenario occurring.
- Market awareness grows. For example, the implications of the physical impacts of climate change become clearer to markets.
- If policy changes catch markets by surprise. For example, if a carbon price is introduced across key markets to which the portfolio is exposed, at a sufficiently high price to impact behaviour.

Medium Term (period to 2050)

Over the medium term, risks associated with the transition to a low carbon economy are likely to dominate. These include the development of technology and low carbon solutions. Policy, legislation and regulation are likely to also play a key role at the international, national and subnational level. Technology and policy changes are likely to produce winners and losers both between and within sectors and lead to stranded asset risks.

Long Term (period to 2100)

Over the long term, physical risks are expected to come to the fore. This includes the impact of natural catastrophes leading to physical damages through extreme weather events. Availability of resources is expected to become more important if changes in weather patterns (e.g. temperature or precipitation) affect the availability of natural resources such as water.

Strategic actions undertaken to manage climate risks

The Fund have committed to a 5% strategic allocation to sustainable equity to support the Fund's net zero ambitions by 2045 and the interim targets. Over the period in question these assets were held within the BlackRock World ESG Equity Fund.

The Fund has always been committed to making responsible decisions and acting in a responsible manner. In 2012, the Fund engaged with managers on matters pertaining to ESG by sending out surveys to all the private market managers on such matters. In 2017, the Fund had a sustainability policy in place which was well before any formal requirement for such. The Fund at the time supported investments with strong sustainability / impact focus and increased its allocation to infrastructure from 4% to 8%, with a clean energy emphasis. The Fund also wrote to all private equity and real asset managers to determine how aligned the current investments were to the United Nations Sustainable Development Goals (UNSDG).

Clwyd have a strategic target to allocate 4% of their total portfolio to Local/Impact investments within private markets. Outside of this specific Local/Impact bucket, Clwyd also endeavour to make impact-focused allocations within their other private markets asset classes (Private Equity, Private Debt, Infrastructure and Real Estate) where possible, subject to the availability of investable opportunities in the market.

From 2006 to March 2021, the Fund had committed £141.8m to Impact focused investments. During the period of 31 March 2021 – 31 March 2022 the Fund has substantially increased its commitments to Impact focused portfolios within its Private Market mandates, allocating a further £102m across 5 additional commitments. These commitments are as follows:

| Private Market Manager | Fund Name | Capital Committed (£m) |
|---|---|------------------------|
| Capital Dynamics | Clwyd Clean Energy Wales | 50 |
| Brookfield Asset Management ("Brookfield") | Brookfield Global Transition Fund ("BGTF") | 12 |
| Copenhagen Infrastructure Partners | Energy Transition Fund I | 17 |
| Circularity Capital | European Growth II | 10 |
| Generation Investment Management | Generation IM Sustainable Solutions Fund IV | 13 |

When making private markets commitments, the Fund receives a Research Report from Mercer on all potential commitments. In these reports, each fund is given an ESG score and there is a section of the report dedicated to ESG. Clwyd takes these ESG scores into account when deciding whether or not to commit to a particular private markets manager.

The Fund takes a long-term view with regards its investment and funding strategies, given the long-term nature of the payments due to beneficiaries over multiple decades. The Fund's primary investment objective therefore is to achieve sufficient excess investment returns relative to the growth of liabilities to meet the funding objectives set out above on an ongoing basis, whilst maintaining an appropriate balance between long-term consistent investment performance and the funding objectives. This means that the Fund inherently

takes a long term view to investing in order to align its investments with its long term liabilities.



Investment strategy climate change scenario analysis

In 2020, the Committee commissioned strategic climate change scenario analysis on the Fund's strategic asset allocation to assess the potential implications of climate change.

The analysis covers the Fund's whole portfolio, modelling three forward looking climate change scenarios. Each of the scenarios reflect different climate change policy ambitions that result in varying $\rm CO_2$ emissions pathways and levels of economic damages related to climate change. These have been developed using existing climate change models (Cambridge Econometrics' E3ME model) and through an extensive literature review. The three scenarios used in the modelling are outlined below.

- 2°C scenario: a low carbon economy transformation most closely aligned with both successful implementation of the Paris Agreement's ambitions and the greatest chance of lessening physical damages
- **3°C scenario:** some climate change action but a failure both to meet the Paris Agreement 2°C objective and meaningfully alleviate anticipated physical damages
- 4°C scenario: reflecting a fragmented policy pathway where current commitments are not implemented and there is a serious failure to alleviate anticipated physical damages

Summary results of climate change scenario analysis

Annualised climate change impact on portfolio returns – to 2030, 2050 and 2100

| | | Strategic Asset Allocation |
|-----------|--------------------|----------------------------|
| | 2030 | 0.30% |
| 2°C | 2050 | 0.09% |
| | 2100 | -0.02% |
| | 2030 | -0.01% |
| 3°C | 2050 | -0.06% |
| | 2100 | -0.10% |
| | 2030 | -0.07% |
| 4°C | 2050 | -0.13% |
| | 2100 | -0.19% |
| ≤ -10 bps | > -10 bps, < 10bps | ≥ 10 bps |

Key Findings

A summary of the key findings from the climate change scenario analysis are shown below:

- **Key Finding 1** A 2°C scenario leads to superior economic outcomes relative to other climate change scenarios assessed in this model. Therefore policy-makers, companies, and investors have an incentive to work towards a 2°C scenario, which presents an investment opportunity.
- Key Finding 2 Prioritise key asset classes that capture low carbon transition opportunities
- **Key Finding 3** Prioritise key listed equity sectors to manage low carbon transition risks and opportunities
- Key Finding 4 Stress tests help consider sudden surprises

For further detail on scenario methodology, key findings and a summary of portfolios analysed, please refer to Appendix A.

The Fund will incorporate funding level analysis into future climate change scenario modelling. Future analysis will also be done using the latest climate change scenario modelling methodology available at the time.



Section 6

Risk Management

A key part of the Committee's role is to understand and manage risks that could have a financially material impact on both the Fund's investments and the wider funding position. Climate change is one of the risks that the Fund consider alongside other financially material risks. These risks could impact the Fund's ability to achieve the require investment returns to ensure that the Fund remains affordable for employers and members.

This section summarises the primary climate-related risk management processes and activities of the Fund. These help the Committee understand the materiality of climate-related risks, both in absolute terms and relative to other risks that the Fund is exposed to. The Fund prioritise the management of risks primarily based on its potential impact on the financial stability of the Fund and contribution rates.

Governance

- The Fund's Investment Strategy Statement is reviewed on a triennial basis and sets out how investment climate-related risks are managed and monitored
- A risk register is maintained which includes explicit climate risks, the risk register is reviewed quarterly by officers, advisors and the Committee
- The Committee receive training at least annually on climate-related issues. The training allows the Committee to challenge whether the risks and opportunities are effectively allowed for in their governance processes and wider activities, and to be able to challenge their advisors to ensure the governance support and advice adequately covers the consideration of climate-related risks and opportunities.

Strategy

- Mercer will take climate-related risks and opportunities into account as part of the wider strategic investment advice provided to the Fund.
- Climate scenario analysis for the Fund will be reviewed at least triennially, or more
 frequently if there has been a material change to the strategic asset allocation. A
 summary of the Fund's climate scenario analysis is included in the strategy section of
 this report.
 - The Fund also undertook further transition capacity analysis of the Fund using Mercer's Analytics for Climate Transition ("ACT") tool, which carried out analysis on the Fund's Listed Equities (Global and Emerging Markets Equity), Synthetic Equity and Multi-Asset Credit (MAC) portfolios, as well as on part of the Tactical Asset Allocation (TAA) portfolio as at 31 March 2022. Overall, the tool analysed c.40.5% of the total Fund. The aim of the analysis was to:
 - Monitor progress against the Fund's listed equity targets across decarbonisation, exposure to fossil fuels (oil, gas, coal) and explore the proportion of emissions within high impact sector that are currently under engagement or aligned with a low carbon future
 - Understand the transition capacity of the Fund's listed equity, MAC and TAA portfolios

 Present an updated high level implementation plan for listed equities that incorporates further asset classes over time

Reporting

- The Committee will receive annual reports of climate-related metrics and progress against targets in respect of the assets held in the Fund. The Committee, through delegation to officers, may use the information to engage with the investment managers.
- The Fund receives voting and engagement activity information on a quarterly basis and reports on an annual basis within the annual report and accounts and its annual Stewardship Code submission.
- The Fund have delegated all voting rights to the Wales Pension Partnership (WPP), who in turn, have appointed Robeco to undertake engagement on its behalf. Robeco have a dedicated team of engagement specialists and voting analysts who work closely with the sustainable investment research analysts and portfolio managers on financially material ESG issues.
- Robeco provide the eight Constituent Authorities within the WPP (of which Clwyd Pension Fund is one) voting and engagement information on a quarterly basis. In addition, the WPP Responsible Investment sub-group discuss engagement with Robeco at regular meetings.
- In addition, officers and JGC also receive Responsible Investment & Climate Risk Reports from Hymans Robertson, who are the currently advisor to the WPP.

Manager Selection and Monitoring

- The Committee, with advice from Mercer in its role as Investment Consultant and the
 officers, will consider an investment manager's firm-wide and strategy-specific
 approach to managing climate-related risks and opportunities when appointing a new
 manager and in the ongoing review of a manager's appointment.
- Mercer rates investment managers on the extent of integration of ESG factors (including climate change) into their processes. A manager's stewardship process forms part of the rating assessment. This is considered at the firm level and at the investment strategy/fund level.
- Until the WPP are able to take on the Fund's commitments to Private Markets, the Fund is taking recommendations from its Investment Consultants in the allocation of Private Market funds. The Fund has mandated that priority is given to impact and sustainable funds and/ or those with a high ESG rating (ESG1 and ESG2) assigned by the Mercer following the detailed due diligence process.
- In 2022, the Fund has in consultation with Mercer, developed a monitoring template which it will use to monitor all of its Private Market managers going forward. The template specially picks up information from managers on ESG and impact, including but not limited to:
 - Does the manager have a Sustainable Investment Policy?

- Is the manager doing anything to contribute to net zero or a specified carbon emissions reduction target?
- Impact/ ESG considerations that will help with TCFD and future TNFD reporting

Active Stewardship

Stewardship is the responsible allocation, management and oversight of capital to create long-term value for clients and beneficiaries leading to sustainable benefits for the economy, the environment and society. Stewardship activities can help hold companies to account and ensure they are taking a meaningful approach in this area.

The Financial Reporting Council (FRC) first published the UK Stewardship Code in 2010, and revised it in 2012. In October 2019 the FRC issued an updated and increasingly demanding version, the UK Stewardship Code 2020. The Code sets out a number of areas of good practice to which the FRC believes institutional investors should aspire.

In practice the Fund continues to apply the requirements of the Code both through its arrangements with its asset managers and through membership of the Local Authority Pension Fund Forum (LAPFF).

The Fund is committed to reviewing its compliance against the latest code and has submitted its Stewardship report for the year ending 31 March 2022 in October 2022. At the time of writing, the Fund is waiting on the outcome of the submission.

As a member of the WPP, the Fund expects both WPP and the underlying fund managers to comply with the Stewardship Code. WPP has appointed Robeco as its Voting and Engagement provider and they are assisting in maintaining a voting policy and engagement principles that are in keeping with the LAPFF. In addition, Robeco are responsible for implementing the voting policy and reporting on it.

Climate Risks and Opportunities

The effects of climate change will be felt over many decades. The Fund has considered two types of climate-related risks and opportunities in its climate scenario analysis:

Transition risks and opportunities

This covers the potential financial and economic risks and opportunities from the transition to a low carbon economy (i.e. one that has a low or no reliance on fossil fuels), in areas such as:

- Policy and legislation
- Market
- Technology
- Reputation

Risks include the possibility of future restrictions, or increased costs, associated with high carbon activities and products. There are also opportunities, which may come from the development of low-carbon technologies. In order to make a meaningful impact on reducing

the extent of global warming, most transition activities need to take place over the next decade and certainly in the first half of this century.

Physical risks and opportunities

The higher the future level of global warming, the greater physical risks will be in frequency and magnitude. Physical risks cover:

- Physical damage (storms; wildfires; droughts; floods)
- Resource scarcity (water; food; materials; biodiversity loss)

Physical risks are expected to be felt more as the century progresses, although the extent of the risks is highly dependent on whether global net zero greenhouse gas emissions are achieved by 2050.

There are investment opportunities, for example, in newly constructed infrastructure and real estate assets that are designed to be resilient to the physical impacts of climate change, as well as being constructed and operated in a way that have low or no net carbon emissions. There are also opportunities for investment in those companies or industries that focus on energy conservation and resource efficiency.



Section 7

Metrics and Targets

Metrics and targets used to assess and manage relevant climate change-related risks and opportunities, in line with strategy and risk management

Key Metrics

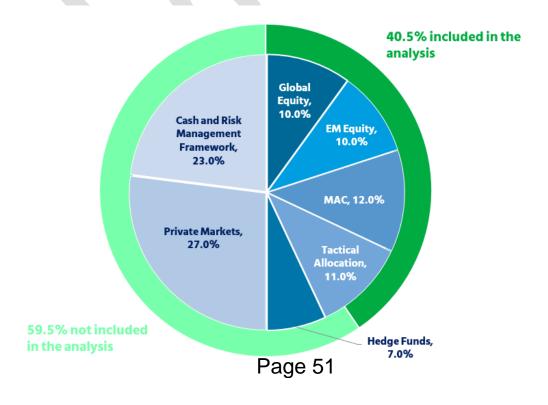
The Committee has chosen to present five climate-related metrics in this report. The climate-related metrics help the Committee to understand the climate-related risk exposures and opportunities in the Fund's investment portfolios and identify areas for further risk management, including investment manager portfolio monitoring, and voting and engagement activity and priorities. The metrics in this report are:

- 1. Absolute emissions metric
- 2. Emissions intensity metric: Carbon Footprint
- 3. Emissions intensity metric: Weighted Average Carbon Intensity (WACI)
- 4. Portfolio alignment metric: Implied Temperature Rise (ITR)
- 5. Portfolio alignment metric: Science Based Targets Initiative (SBTi)

The Fund has agreed to use the carbon footprinting metric as the primary metric for monitoring decarbonisation progress, whilst also monitoring progress against absolute emissions and weighted average carbon intensity.

The Fund has adopted a baseline date of 31 March 2021, from which all percentage reduction targets will monitored against annually.

Fund strategic asset allocation as at 31 March 2022



Carbon metrics have been provided on 40.5% of the Fund's Strategic Asset Allocation. Consistent with the previous year's analysis, the updated analysis consists of the Fund's global and emerging market equity mandates.

As the Tactical Asset Allocation portion of the SAA is tactical and short term by its very nature, this portion of the portfolio was excluded from the 2021 baseline analysis and target setting. Whilst the majority of the TAA portfolio was analysed from a metrics perspective, some of the underlying components were not able to be analysed owing to data availability.

There is an active ongoing exercise to gather carbon metrics data on the property holdings.

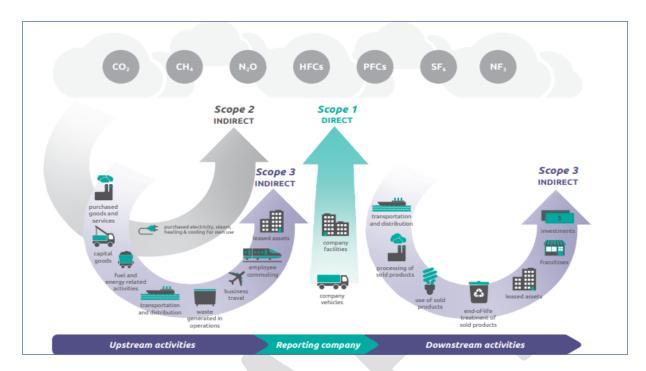
Over time as consensus around methodology for less conventional asset classes grows, this analysis will cover a greater proportion of the Fund.

The Fund recognises the challenges with various metrics, tools and modelling techniques used to assess climate change risks. The Committee with its officers aim to work with the investment adviser and investment managers to continuously improve the approach to assessing and managing risks over time as more data becomes available. The Technical Section of this report sets out the data limitations and assumptions used in collating these metrics.

Overview of each metric

Absolute Emissions

This metric represents the underlying investee company's or issuer's reported or estimated greenhouse gas emissions, where available. It includes various scopes of emissions, which are summarised in the following diagram.



Source: MSCI ESG Research LLC. Reproduced by permission.

There are seven recognised greenhouse gases, as defined by the GHG Protocol. In order to simplify reporting, each greenhouse gas is calibrated relative to carbon dioxide and is reported as 'carbon dioxide equivalent' emissions (CO2e).

For the purpose of this report, only scope 1 and 2 emissions have been reported, although in the annual analysis reviewed by Committee Scope 3 data is considered. The absolute emission metric is a proxy for the share of GHG emissions that are 'owned' by the Fund through investing in the underlying companies and issuers, including countries (referred to as 'sovereign exposure' through government debt).

Emissions intensity metric: Carbon Footprint and Weighted Average Carbon Intensity (WACI)

Carbon Footprint is an intensity measure of emissions that takes the Total GHG Emissions figure and weights it to take account of the size of the investment. This metric is calculated by taking the total carbon emissions of the investment and dividing by the current value of the investment.

Analysing a fund's Carbon Footprint assists the Committee in identifying carbon-intense companies and sector within the Fund's portfolio. The Fund has therefore chosen this metric to assist them in prioritising carbon intense parts of the investment strategy for potential reallocation or engagement as a means of mitigating associated climate-related risks.

WACI is calculated for each company as (Scope 1 and 2 carbon emissions / \$m revenue). This provides the Committee with an understanding of the potential sensitivity of underlying companies to transition risks.

Portfolio alignment metric: Implied Temperature Rise (ITR) and Science Based Targets Initiative (SBTi)

ITR is a forward-looking metric that considers the pledges, commitments and business strategy changes that underlying investee companies/issuers have made. It provides a prediction of the potential temperature rise over the rest of the century based on the activities of those companies and issuers. The metric illustrates the degree of portfolio alignment with the goals of the Paris Agreement (notably to limit warming to well below 2°C by the end of the century).

This metric has been chosen for inclusion in this report because of its simplicity in presentation and a useful way to see, at a glance, the positioning of a fund towards a low carbon economy. Asset allocations with high Implied Temperature Rise metrics are invested in companies or issuers that are not transforming their businesses or activities in order to reduce the reliance on fossil fuels. This is also a measure of climate transition risk with greater transition risk highlighted in asset allocations with a higher Implied Temperature Rise.

The Science Based Targets Initiative (SBTi) metric measures the proportion of companies in the portfolio with one or more active carbon emissions reduction target/s approved by the SBTi.



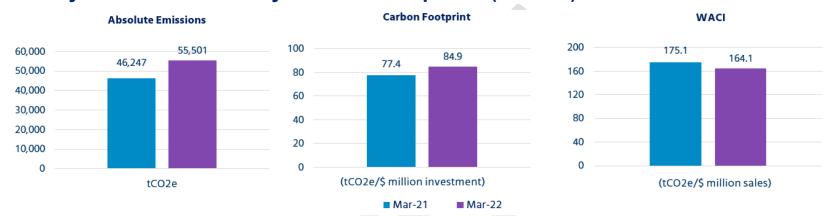
Summary of Emissions Analysis - Annual Monitoring as at 2022

| | | Portfolio | SAA Weight % | Absolute Emissions Coverage | Absolute emissions (tCO2e based on value of investment) Scope 1 + 2 | WACI/ Sovereign Carbon Intensity Coverage | WACI (tCO2e/\$million sales) / Sovereign Carbon Intensity (tCO2e / \$M PPP GDP) Scope 1 + 2 | Carbon Footprint Coverage | Carbon Footprint (tCO2e/\$million investment) | Implied Temperature Rise (°C) | SBTi Alignment* |
|-----------------------------|-----------------|---------------------------------------|--------------------|-----------------------------------|---|---|--|---------------------------------|---|-------------------------------------|--------------------|
| li ne | Global | BlackRock World ESG | 5.0 | 99.2% | 4,063 | 99.2% | 83.7 | 99.1% | 24.9 | 2.2 | 39.6% |
| Included in the Baseline | Equity | Russell WPP Global Opportunities | 5.0 | 98.0% | 11,246 | 98.0% | 116.5 | 98.0% | 68.8 | 2.4 | 26.7% |
| Incl | EM Equity | Russell WPP EM Equity | 10.0 | 95.6% | 40,193 | 95.6% | 228.1 | 95.6% | 122.9 | 2.9 | 4.0% |
| | Tot | tal Listed Equities (ex. TAA) | 20.0 | 97.1% | 55,501 | 97.1% | 164.1 | 97.0% | 84.9 | 2.6 | 18.5% |
| | Credit | Russell WPP Multi-Asset Credit** | 4.0 | 54.1% | 22,216 | 57.9% | 381.2 | 53.9% | 170.5 | 3.5 | 5.8% |
| | Total Listed Ed | quities and Corporate Bonds (ex. TAA) | 24.0 | 90.0% | 77,718 | 90.6% | 200.2 | 89.9% | 99.1 | 2.7 | 16.4% |
| Page | | BlackRock EM Equity | 1.6 | 99.4% | 7,143 | 99.5% | 320.1 | 99.4% | 134.5 | 2.8 | 5.1% |
| ge | | BlackRock European Equity | 0.5 | 99.4% | 1,004 | 99.4% | 104.5 | 99.3% | 62.6 | 2.1 | 48.6% |
| | Tactical | BlackRock US Opportunities | 1.1 | 93.5% | 1,593 | 94.1% | 180.7 | 93.5% | 43.4 | 2.7 | 19.4% |
| 55 | Allocation | LGIM Infrastructure Equity MFG | 2.0 | 99.8% | 12,085 | 99.8% | 1,084.9 | 99.8% | 184.2 | 3.5 | 29.7% |
| | | LGIM North American Equity Index | 1.1 | 98.0% | 1,176 | 98.1% | 141.2 | 98.0% | 34.2 | 2.2 | 32.9% |
| | | LGIM UK Equity Index | 0.8 | 87.1% | 2,079 | 86.7% | 128.9 | 86.7% | 75.8 | 2.3 | 36.8% |
| | | Ninety-One Global Natural Resources | 1.4 | 99.0% | 25,206 | 99.0% | 815.5 | 99.0% | 554.5 | 4.6 | 5.1% |
| | | Total Tactical Allocation | 8.5 | 97.3% | 50,285 | 97.3% | 509.4 | 97.2% | 180.5 | 3.1 | 21.8% |
| | Sovereigns | Russell WPP Multi-Asset Credit** | 2.3 | 95.5% | 21,349 | 92.0% | 272.6 | - | - | - | - |
| | Synthetic Eq. | Synthetic Equity*** | - | Į. | - | 99.8% | 138.9 | 99.7% | 37.2 | 2.2 | 39.6% |

^{*}This metric measures the proportion of companies in the portfolio with one or more active carbon emissions reduction target/s approved by the Science Based Targets Initiative (SBTi).

^{**}Percentages considering the respective asset class allocation. For Russell WPP Multi-Asset Credit, these represent a 33.2% and a 19.2% fund allocation to, respectively, corporate bonds and sovereign bonds. The remainder of the fund is allocated to asset classes not covered by the analysis, e.g., mortgages, swaps and loans. *** Synthetic Equity mandate composed of: 30% Euro Stoxx 50 Index, and 70% S&P 500 Index.

Summary of Emissions Analysis - Listed Equities (ex TAA)



The absolute emissions of the Fund's listed equity portfolio has increased by 20.0% over the one year period from 31 March 2021 to 31 March 2022. The Carbon Footprint increased by 9.7% over the same time period, whilst the Weighted Average Carbon Intensity (WACI) decreased over the same period by 6.3%.

The Fund's listed equity carbon footprint rose over the period due primarily to the changes in the Emerging Market Equity portfolio. The developed market equity exposure overall saw a fall in its carbon footprint over the period.

Conversely, the changes to the EM mandate marginally lowered the WACI of the EM portfolio over the year. This along with decreases in WACI in the developed equity holdings led to the overall listed equity WACI falling by 6.3% over the year.

In respect of absolute emissions, this increased by c.20% over the year. It should be noted that absolute emissions are impacted by both the amount of assets being analysed as well as the changes to the companies' enterprise values as well as emissions, therefore exact attribution is not yet possible. Given the listed equity portfolio has seen an increase in carbon footprint, this result is likely driven by increases in underlying carbon intensity as well as an overall increase in the amount of assets being analysed.

Fossil Fuels - Potential Emissions - Listed Equities



In 2021, the Fund set a target to reduce fossil fuel exposure relating to coal by 90% by 2025 and 95% by 2030. An Oil & Gas exposure reduction target of 70% by 2025 and 95% by 2030 was also set. Progress against these targets is measured using potential emissions, which is an intensity metric linked to the emissions that would be produced should reserves from companies held in the portfolio be burnt.

Over the year, listed equity portfolio **Total Potential Emissions have decreased by 29.2**%, from 2021 to 2022. **Thermal Coal Emissions decreased by 72.7%**. **The Oil and Gas Emissions decreased over the same period by 14.0%**.

Relative to the 2021 baseline, the decreases shown above principally reflect changes to the investment manager line-up, driven by the introduction of the Russell WPP Emerging Markets fund, which replaced the Wellington Core, Wellington Local and BlackRock EM mandates.

The BlackRock World ESG and Russell WPP Global Opportunities mandates, which were the only two common funds between both analyses, have moved in opposite directions. The Russell WPP Global Opportunities fund saw its Potential Emissions decrease across both categories, whilst the BlackRock World ESG saw increases in its Potential Emissions across both categories. Oil & Gas Potential emission are found in all three equity mandates, however with the majority found within both the WPP EM and global equity funds. We recommend focusing engagement with WPP in the first instance in order to drive further decreases.

Targets

Net Zero Commitment

As part of its commitment to RI the Fund has undertaken to evaluate and manage the carbon exposure of its investments to assist in ensuring an effective transition to a low-carbon economy. As part of this work, on 10 November 2021 the Clwyd Pension Fund Committee approved a strategy to achieve net-zero carbon emissions from its investment portfolio. This included carbon emissions analysis of the listed equity portfolio to provide a baseline for the Fund. Specifically, the Committee agreed a target for the investments in the Clwyd Pension Fund, as a whole, to have net zero carbon emissions by 2045, with an interim target of carbon reduction of 50% by 2030. Underlying this headline commitment, the plan also has a number of other key targets as outlined below:

- a) for the Fund as a whole:
- to have at least 30% of the Fund's assets allocated to sustainable investments by 2030
- to expand the measurement of the carbon emissions of the Fund's investments to include all assets by the end of 2023.
- b) within the Listed Equity portfolio:
- to achieve a reduction in carbon emissions of 36% by 2025 and 68% by 2030
- to target at least 30% of the Listed Equity portfolio to be invested in sustainable assets by 2030
- to reduce fossil fuel exposure relating to oil and gas by 70% by 2025 and 90% by 2030
- to reduce fossil fuel exposure relating to coal by 90% by 2025 and 95% by 2030
- to engage with the biggest polluters within the Fund's Listed Equity portfolio as part of an overarching stewardship and engagement strategy, to achieve:
 - by 2025, at least 70% of organisations in carbon-intensive sectors have clearly articulated and credible strategies to attain net zero or are subject to engagement to achieve this objective.
 - by 2030, at least 90% of organisations in carbon-intensive sectors have clearly articulated and credible strategies to attain net zero or are subject to engagement to achieve this objective.

As previously mentioned, the Fund will monitor and report against these targets at least annually, and may review and revise them as appropriate, particularly to ensure that targets and ambitions are in line with national and international developments and initiatives.

Suitability of additional metrics

The Committee have undertaken education on the proposed climate change metrics forming part of the upcoming regulations. They will assess the suitability of these metrics and incorporate them into next year's report.

Actions to achieve targets going forward

Officers of the Clwyd Pension Fund have been actively engaged with the WPP in the development of a new active sustainable equity sub-fund, in order to bring a solution for all of the constituent authorities in Wales who are partners within the WPP. Once the fund becomes available, the Clwyd pension Fund will invest in the sustainable listed equity fund.

Key areas of focus for the next 12 to 18 months are summarised below:

- Setting more granular targets across:
 - Sustainable / climate solutions
 - Transition alignment (SBTi transition to net zero)
 - o Engagement and Stewardship
- Expand the net zero approach beyond the listed equity portfolio to property, infrastructure, private equity and multi-asset credit (data permitting)
- Integrate climate risk into the Tactical Asset Allocation guidelines
- Consider connections to biodiversity / natural capital.

Overall, the insights and areas of focus should be used to help shape discussions with WPP and support climate change reporting (TCFD).



Appendix A

Climate Scenario Methodology

The Mercer climate change scenario model isolates transition and physical risk factors and maps the relative impact of those risk factors under three climate change scenarios. The Mercer climate change scenario modelling estimates a 'climate change impact on return', which is in addition to the returns currently expected for asset classes and industry sectors in the future. An overview of the methodology is shown in the diagram below.



Current limitations in data and methodology available for modelling climate change, and in particular physical damage risks, together with the myriad of climate change factors not yet captured by available modelling approaches, mean the resulting "climate change impact on return" magnitudes are likely to be underestimated (as highlighted in "The Sequel" public report). This, combined with long-term timeframes, means the annual "climate change impact on return" figures are relatively small in absolute terms in some cases, but are often meaningful when considered on a cumulative basis, The use of this model for strategic asset allocation decisions should be in conjunction with other relevant modelling, analysis and advice that considers the non-climate change impact on risk and return parameters and circumstances of the Fund.

Appendix B

Portfolio Analysed for Scenario Analysis

| Asset Class Category | Asset Class | SAA (%) |
|--|--------------------------------|---------|
| Global Equity | MSCI ACWI | 5.0 |
| Emerging Market Equity | MSCI Emerging Market | 10.0 |
| ESG Tracker Equity ² | Sustainable Equity (Global) | 1.25 |
| | Low Carbon Equity (Global) | 3.75 |
| Multi Asset Credit and Private Debt ³ | Global Investment Grade Credit | 4.0 |
| | Global High Yield Debt | 4.0 |
| | Emerging Market Debt | 4.0 |
| | Private Debt | 3.0 |
| Hedge Funds | Hedge Funds | 7.0 |
| Best Ideas Portfolio ⁴ | MSCI ACWI | 3.65 |
| | Global High Yield Debt | 3.7 |
| | Infrastructure | 3.65 |
| Property | UK Real Estate | 4.0 |
| Infrastructure | Infrastructure | 8.0 |
| Private Equity | Private Equity | 8.0 |
| Impact Portfolio ⁵ | Sustainable Private Equity | 4.0 |
| Liability Driven Investment | UK Gilts | 18.0 |
| Cash ⁶ | Cash | 5.0 |
| | TOTAL | 100 |

Note: Figures may not sum due to rounding. SAA = Strategic Asset Allocation.

^{1.} The Risk Management Framework is built on a Liability Driven Investment (LDI) approach and includes synthetic equity, currency hedging and equity protection, but for this modelling we have only included the physicals.

^{2.} We have modelled the BlackRock ESG Tracker Equity as 25% sustainable equities and 75% low carbon equities.

- 3. We have modelled the Multi-Asset credit as a mix of Investment Grade, High Yield and Emerging Market debt.
- 4. We have modelled the Best Ideas portfolio (Diversified Growth Fund like) as a mix of Equity, High Yield Debt and Infrastructure.
- 5. We have modelled the impact portfolio as sustainable private equity.
- 6. We modelled cash as part of Liability Driven Investment, given the climate model has limitations in the number of categories available.



Appendix C

Climate Change Glossary

Carbon footprint: The amount of carbon dioxide (or other greenhouse gasses) released into the atmosphere as a result of the activities of a particular individual, organization or community. Carbon footprint is calculated for each company as (Scope 1 and 2 carbon emissions / \$m investments). See also Scope 1, 2, 3 emissions and Weighted Average Carbon Intensity (WACI).

Carbon intensity: The amount of emissions of carbon dioxide (or other greenhouse gasses) released per unit of another variable such as revenue, gross domestic product (GDP), per \$1million invested etc. See also Weighted Average Carbon Intensity (WACI).

Carbon price: The price for avoided or released carbon dioxide (CO2) or CO2-equivalent emissions. This may refer to the rate of a carbon tax, or the price of emission permits. In many models that are used to assess the economic costs of mitigation, carbon prices are used as a proxy to represent the level of effort in mitigation policies.

Carbon neutrality: Achieved by offsetting emissions by paying for credits (usually certified via new forestry equivalents that provide carbon removal). Carbon neutrality is similar to net zero targeting – the latter requires actual emissions reductions to meet targets though (rather than purchasing offsets). See also Net Zero CO2 emissions.

Decarbonisation: The process by which countries, individuals or other entities aim to achieve zero fossil carbon existence. Typically refers to a reduction of the carbon emissions associated with electricity, industry and transport.

Global warming: The estimated increase in global mean surface temperature expressed relative to pre-industrial levels unless otherwise specified. See also Pre-industrial.

Greenhouse gases: Gases in the planet's atmosphere which trap heat. They let sunlight pass through the atmosphere but prevent heat from leaving the atmosphere. Greenhouse gases include: Carbon Dioxide (CO2), Methane (CH4), Nitrous Oxide (N2O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur Hexafluoride (SF6), Nitrogen Trifluoride (NF3).

Inevitable policy response: A scenario that expects an acceleration of climate-related policy announcements in 2023–2025, which has been supported by the Principles for Responsible Investment (PRI).

Mitigation (of climate change): A human intervention to reduce emissions or enhance the sinks of greenhouse gases.

Mitigation strategies: In climate policy, mitigation strategies are technologies, processes or practices that contribute to mitigation, for example, renewable energy (RE) technologies, waste minimization processes and public transport commuting practices.

Net zero CO2 emissions: Net zero carbon dioxide (CO2) emissions are achieved when CO2 emissions are balanced globally by CO2 removals over a specified period. The term "net zero" is also typically associated with the 2050 date or earlier, as this is aligned with the

scientific recommendations to achieve a 1.5°C scenario. See also Carbon neutrality (which differs slightly).

Paris Agreement: The Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC) was adopted on December 2015 in Paris, at the 21st session of the Conference of the Parties (COP) to the UNFCCC. The agreement, adopted by 196 Parties to the UNFCCC, entered into force on 4 November 2016 and as of May 2018 had 195 Signatories and was ratified by 177 Parties. One of the goals of the Paris Agreement is "Holding the increase in the global average temperature to well below 2°C above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5°C above preindustrial levels", recognising that this would significantly reduce the risks and impacts of climate change. Additionally, the Agreement aims to strengthen the ability of countries to deal with the impacts of climate change.

Physical risks: Dangers or perils related to the physical or natural environment that pose a threat to physical assets e.g. buildings, equipment and people. Mercer's scenario analysis grouped these into the impact of natural catastrophes (for instance sea level rise, flooding, wildfires, and hurricanes) and resource availability (particularly water). See also Transition risks.

Pre-industrial: The multi-century period prior to the onset of large-scale industrial activity around 1750. The reference period 1850–1900 is used to approximate pre-industrial global mean surface temperature.

Principles for Responsible Investment (PRI): Non-profit organisation which encourages investors to use responsible investment to enhance returns and better manage risks. It engages with global policymakers and is supported by, not but part of, the United Nations. It has six Principles for Responsible Investment that offer a menu of possible actions for incorporating ESG issues into investment practice.

Resilience: The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure while also maintaining the capacity for adaptation, learning and transformation.

Scope 1, 2, 3 emissions: Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

Stranded assets: Assets exposed to devaluations or conversion to "liabilities" because of unanticipated changes in their initially expected revenues due to innovations and/or evolutions of the business context, including changes in public regulations at the domestic and international levels.

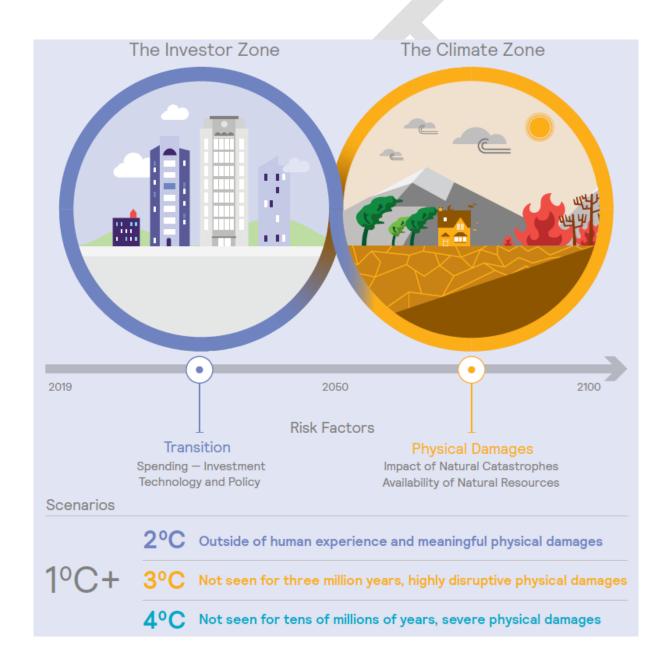
Task Force on Climate-related Financial Disclosures (TCFD): framework designed to improve and increase reporting of climate-related financial information

Taskforce on Nature-Related Financial Disclosures (TNFD): market-led, science-based TNFD framework enabling companies and financial institutions to integrate nature into decision making

Transition Alignment: the process of moving away from high-carbon intensive processes towards business models and assets aligned with a low carbon future and the Paris agreement. Different sectors will have different pathways to net zero.

Transition risks: Risks from policy changes, reputational impacts and shifts in market preferences, norms and technology as the economy moves to a low carbon approach. See also Physical risks.

Weighted average carbon intensity (WACI): The carbon intensity of a portfolio, weighted by the proportion of each constituent in the portfolio. Carbon intensity is calculated for each company as (Scope 1 and 2 carbon emissions / \$m revenue). See also Carbon footprint.



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Important notices from data providers

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Clwyd Pension Fund

Analytics for Climate Transition (ACT) 2022

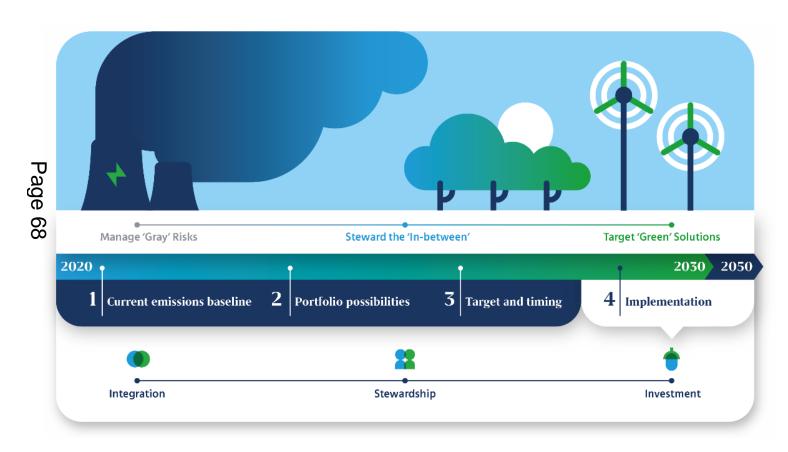
Private and confidential

February 2023

Analytics for Climate Transition

The How and What?

Mercer's Analytics for Climate Transition (ACT), follows a step by step approach to align to a net zero* outcome by 2050 or earlier.



The recommendations are in the form of a climate transition plan, including targets, and have confidence in answering key questions:

Can we reduce emissions and set aligned targets while:

- a) meeting investment objectives? &
- b) not just divesting today's high carbon companies? And can this be practically implemented and monitored?

^{*&#}x27;Net zero' means emissions are reduced as far as possible, where there are options to do so, with any remaining emissions offset by absorbing an equivalent amount from the atmosphere e.g. in nature (trees and soils) or via carbon capture and storage or use technologies



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Purpose of this Analysis

- This report provides the Fund with an updated understanding of the portfolio's transition capacity as at 31 March 2022 using the Mercer Analytics for Climate Transition (ACT) tool. It is the second year of this analysis.
- Analysis is carried out on the Fund's Listed Equities (Global and Emerging Markets Equity), synthetic equity and Multi-Asset Credit (MAC) portfolios, as well as on part of the Tactical Asset Allocation (TAA) portfolio. This results in c.40.5% of the total Fund being analysed.
- The aim of this analysis is to:
 - Monitor progress against the Fund's listed equity targets across decarbonisation, exposure to fossil fuels (oil, gas coal) and explore the proportion of emissions within high impact sector that are currently under engagement or aligned with a low carbon future.
 - Understand the transition capacity of the Fund's listed equity, MAC and TAA portfolios.
 - Present an updated high level implementation plan for listed equities that incorporates further asset classes over time.

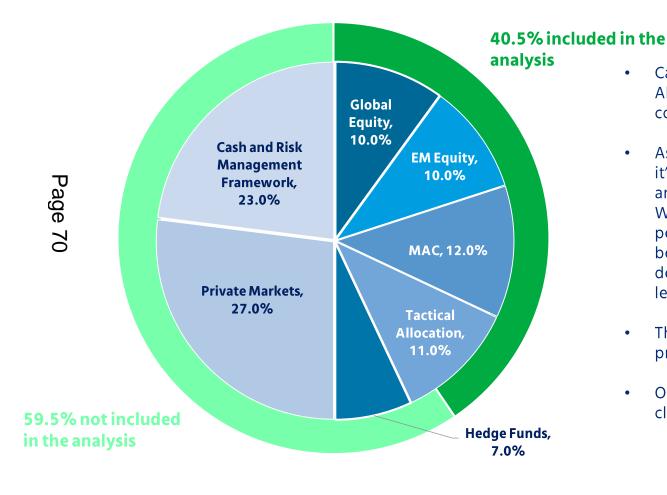
To date, the recommended targets have been set on scope 1 and 2 emissions and when the level of corporate reporting of scope 3 emissions improves we recommend including scope 3 emissions into the Fund's emissions baseline and target setting framework.

• We recommend using carbon footprint as the primary metric for monitoring decarbonisation progress, but to also monitor progress against absolute emissions and weighted average carbon intensity (WACI). This is a change to last year when targets were set on an absolute emissions basis.

The aim of this analysis is to understand the Fund's low carbon transition alignment and progress against the decarbonisation targets set and communicated in 2021.

Proportion of Holdings Analysed

Fund strategic asset allocation as at 31 March 2022



- Carbon metrics have been provided on 40.5% of the Fund's Strategic Asset Allocation. Consistent with the previous year's analysis, the updated baseline consists of the Fund's global and emerging market equity mandates.
- As the Tactical Asset Allocation portion of the SAA is tactical and short term by it's very nature, this portion of the portfolio was excluded from the baseline analysis and assessment of progress versus listed equity portfolio targets. Whilst the majority of the TAA portfolio was analysed from a metrics perspective, the Commodity and the Sterling Liquidity Funds were not able to be analysed owing to data availability in the case of the former, and lack of decision usefulness in respect of the cash fund due to the very short term lending in the portfolio.
- There is an active ongoing exercise to gather carbon metrics data on the property holdings.
- Over time as consensus around methodology for less conventional asset classes grows, this analysis will cover a greater proportion of the Fund.

Notes: The data analysed excludes e.g. cash and derivative allocations within the funds analysed. Where there is partial coverage of a portfolio we scale up the absolute emissions to estimate coverage for 100% of the mandate. Please note within the Cash and Risk Management Framework there is exposure to synthetic global developed equity.



Overview of Select Metrics

- This presentation sets out various metrics related to the greenhouse gas emissions attributable to the Fund's mandates. The metrics contained in this presentation are calculated using MSCI data, with portfolio stocklists sourced directly from the investment managers. Metrics related to the property portfolio were sourced directly from the manager.
- We measure Absolute GHG Emissions, Carbon Footprint, Weighted Average Carbon Intensity (WACI), the percentage of companies with Science Based Targets Initiative (SBTi's) targets and Data Quality. This report includes scope 1 & 2 emissions, which is required in a scheme's first year of reporting.

| Listed equities | | |
|---|--|--|
| Emissions Metrics | Overview | Description |
| Absolute GHG emissions | Total greenhouse gas (GHG) emissions: tons of CO2 equivalent (tCO2e) | Calculates an investor's share of the total emissions for each company/holding. It seeks to answer what emissions the investor is responsible for. |
| arbon Footprint (CF) | tCO2e / \$million invested | Total GHG Emissions figure normalised to take account of the size of the investment made. It seeks to answer how carbon intensive the portfolio is. |
| Weighted Average arbon Intensity (WACI) | tCO2e / \$million revenue | Average exposure (weighted by portfolio allocation) to GHG emissions normalised by revenue. It seeks to answer how carbon intensive the companies in the portfolio are. |
| Non-Emissions Metrics | Overview | Description |
| % of portfolio with SBTi targets | Alignment metric | A measure of how many companies in a portfolio have submitted climate transition plans that have been approved by the Science Based Targets Initiative (SBTi). There is more detail on SBTi in the appendix. |
| Implied temperature rise | Alignment metric | A metric that provides an indication of how companies and investment portfolios align to a global climate temperature pathway e.g. a portfolio that is Paris Aligned has an ITR of 2°C or below. Investors are increasingly targeting a 1.5°C outcome. |

How ACT analysis has been used to date and key findings

Forward look to next 12-18 months







Over the last 12 months ACT has been used to:

- Set 2025 and 2030 decarbonisation and wider targets and monitor progress
- Provide insight into transition capacity and monitor progress
- Identify the most strategically important companies from an emissions perspective (slides 28 & 29)
- Support the RI strategy and policy approach
- Cover additional asset classes and strategies beyond listed equity

Key findings in this report include:

- Decarbonisation progress over the period: the listed equity portfolio, on a carbon footprint basis, has increased by 9.7% and is behind target. This was driven by the transition of the legacy EM mandates to the more carbon intensive WPP Emerging Market Equity Fund
- Transition capacity has increased for the two funds that were common to the baseline and to the last analysis*
- Fossil fuel exposure has fallen meaningfully across oil, gas and coal
- The proportion of the listed equity portfolio's financed emissions within the most material sectors that are currently aligned or are under active engagement

Key areas of focus for next 12-18 months:

- Setting more granular targets across:
 - Sustainable / climate solutions
 - Transition alignment
 - Engagement and Stewardship
- Expand net zero approach beyond the listed equity portfolio to property, infrastructure, private equity and multi-asset credit (data permitting)
- Integrate climate risk into TAA guidelines
- Potential connections to biodiversity / natural capital

Use insights and recommendations to shape discussions with WPP and support climate change reporting (TCFD)

^{*} Please note that Mercer's transition capacity methodology has been updated over the year so the figures are not directly comparable year on year.



U

Current Targets and Progress





| Scope | Current Target | Update on targets | Progress to Date |
|--|---|--|------------------|
| Total Fund | The Fund targets net zero by 2045. Adopt a total Fund target of 50% carbon reduction by 2030. | Target setting us currently focused on listed equity with other asset classes and strategies being incorporated over time. | |
| Total Fund | Set total Fund low carbon and sustainable allocation target of 30% by 2030. | Current allocation to the BlackRock ESG equity fund with upcoming allocation to Russell Global Sustainable Equity Fund. In addition, commitments are already being made to sustainable allocations in private markets, with a 4% allocation to local / impact opportunities. | |
| ບ Second Second | Expand net zero target setting to incorporate synthetic equity, multi asset credit, TAA, property, private markets and hedge funds over 2022/23 | This year's analysis has expanded to cover the Synthetic Equity, Multi-Asset Credit and TAA portfolio. In addition, the Fund's property managers have been contacted to assess the level of data they can provide versus the best practice Carbon Risk Real Estate Emissions Monitor (CCREEM) framework. Further work is required to set formal targets on these assets. | |

Current Targets and Progress





Progress Required

| Scope | Current Target | Update on targets | Progre | ss to Date |
|--------------------------|---|---|--------|------------|
| Listed Equities | Net zero transition trajectory: listed equity portfolio carbon reduction targets of 36% by 2025 and 68% by 2030, versus 2021 baseline position | • The listed equities portfolio is currently behind the proposed net zero transition trajectory, due to the increase in carbon footprint over the period under analysis. This increase is principally due to the transition of the legacy EM mandates into the WPP strategy. Focus on real world decarbonisation within this portfolio. The introduction of a WPP Sustainable Equity Fund is expected to improve ongoing portfolio decarbonisation. | | |
| Listed Equity Oportfolio | Target of at least 30% green and sustainable assets by 2030 | The ACT analysis identifies companies well aligned with the low carbon transition. UK and EU green taxonomies currently under development. Refine target setting as methodologies develop. | | |
| Listed Equity Portfolio | Fossil Fuel targets: within the equity portfolio the Fund is targeting a reduction in potential emissions of 70% by 2025 and 90% by 2030 for Oil & Gas. For coal the targets are a 90% reduction by 2025 and 95% by 2030. | • Over the period under analysis, the listed equities portfolio Potential Emissions have decreased by c.60%, driven primarily by changes in the investment strategy. Coal has seen material reductions of 72.7%, whilst Oil & Gas has only declined by -14%. | Coal | Oil & Gas |
| Listed Equity | Stewardship target: | 67% of financed emissions within listed equity in key sectors* | | |
| Portfolio | 70% of financed emissions in key sectors* aligned to net zero or subject to engagement by 2025. | demonstrate evidence of aligning or being under active engagement. Work with Robeco and WPP to increase this over time. | | |
| | 90% of financed emissions in key sectors* aligned to net zero or subject to engagement by 2030. | | | |

^{*}As defined by the IIGCC Net Zero Framework

Strengthening targets

Real estate

Private equity and infrastructure

Further engagement and prioritisation will be needed on property, given the limited responses received to date.

Work with managers to understand availability of carbon metrics within the private equity and infrastructure holdings.

TAA

MAC

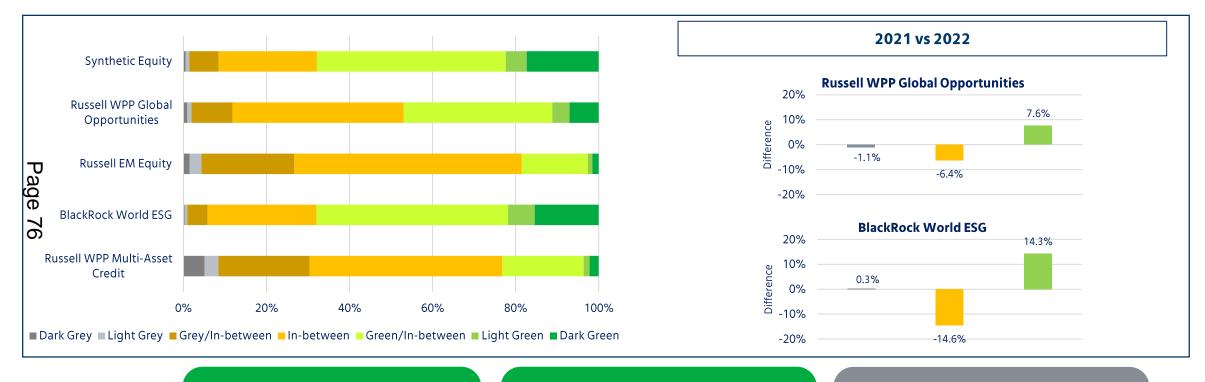
Use this year's baseline to measure progress. The TAA guidelines should be reviewed to embed SI considerations more formally into the mandate. The options on Mobius will need to be reviewed and where available, allocations switched to more ESG focused underlying funds. There will need to be a careful balance between the short term tactical views and expressing these through funds that may have different underlying characteristics.

Use the findings from this analysis as a starting point to discuss setting net zero targets on the MAC portfolio with WPP.

Page

Transition Alignment of the Portfolio

• We present the transition alignment of the listed portfolio (ex. TAA), to understand exposure to assets that are well aligned ("green") or not well aligned ("grey") or with the potential to align ("in-between") with the low carbon transition as well as the evolution since the first analysis.



Highlights & Questions

 ✓ Higher allocations to Green across both funds in common with the baseline

Retained fairly low allocations to Grey

How is WPP and Robeco engaging with the most carbon intensive and Grey companies?

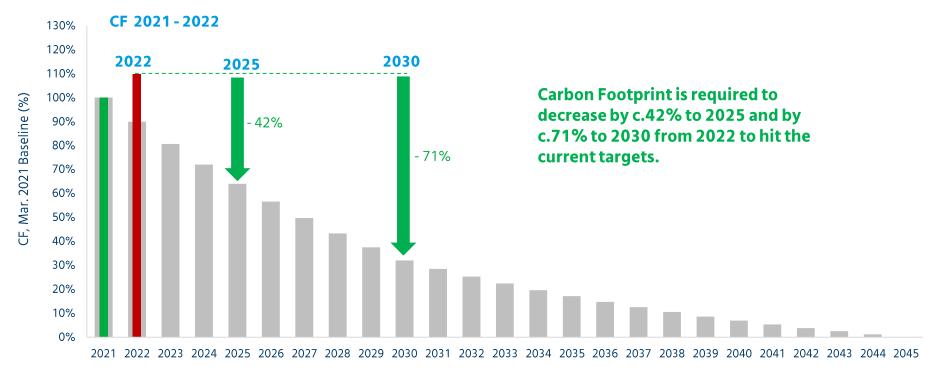
Notes: Figures may not sum due to rounding. Analysis captures carbon dioxide equivalent emissions. Where there is partial coverage of a portfolio we scale up to estimate coverage for 100% of the mandate. (see Appendix on limitations).



Decarbonisation Path – 2021 baseline

Listed Equities (ex. TAA)

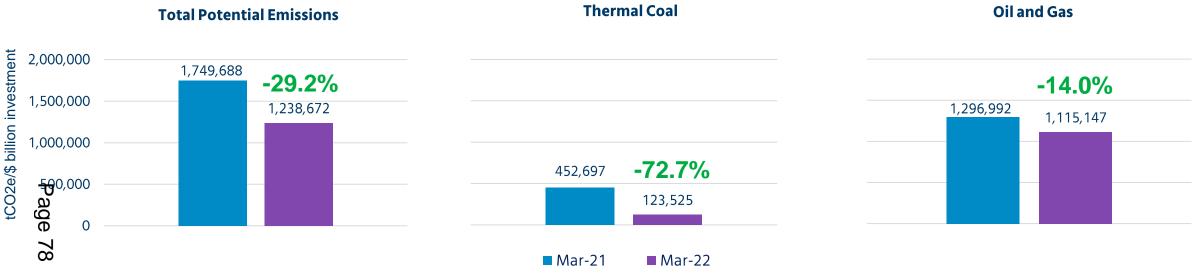
In line/below target pathway
Above target pathway



- Above is the proposed decarbonisation pathway for the Fund's listed equities portfolio, shown on a carbon footprint basis, starting with a 2021 baseline. This portion of the portfolio is shown versus the listed equity portfolio decarbonisation targets: 36% by 2025 and 68% by 2030, net zero by 2045.
- The Fund's listed equity carbon footprint has risen over the period due principally to the changes in the Emerging Market Equity portfolio, where the legacy Wellington and BlackRock EM mandates have been transitioned into the Russell WPP Emerging Market Equity mandate. The Russell WPP Global equity mandate also saw a modest increase in it's carbon footprint over the period, however this was more than offset by falls in the BlackRock World ESG Global Equity mandate. While the increase in intensity is driven by a change of strategy, it represents an opportunity to work with the emerging market companies within the portfolio to bring about real world decarbonisation. Further, the introduction of a WPP Sustainable Equity Fund is expected to drive ongoing portfolio decarbonisation.

Page

Fossil Fuel Potential Emissions Listed Equities



- In 2021, the Fund set a target to reduce fossil fuel exposure relating to coal by 90% by 2025 and 95% by 2030. An Oil & Gas exposure reduction target of 70% by 2025 and 95% by 2030 was also set. Progress against these targets is measured using potential emissions, which is an intensity metric linked to the emissions that would be produced should reserves from companies held in the portfolio be burnt.
- Over the year, listed equity portfolio Total Potential Emissions have decreased by 29.2%, from 2021 to 2022. Thermal Coal Emissions decreased by 72.7%. The Oil and Gas Emissions decreased over the same period by 14.0%.
- Relative to the 2021 baseline, the decreases shown above principally reflect changes to the investment manager line-up, driven by the introduction of the Russell WPP Emerging Markets fund, which replaced the Wellington Core, Wellington Local and BlackRock EM mandates.
- The BlackRock World ESG and Russell WPP Global Opportunities mandates, which were the only two common funds between both analyses, have moved in opposite directions. The Russell WPP Global Opportunities fund saw its Potential Emissions decrease across both categories, whilst the BlackRock World ESG saw increases in it's Potential Emissions across both categories. Oil & Gas Potential emission are found in all three equity mandates, however with the majority found within both the WPP EM and global equity funds. We recommend focusing engagement with WPP in the first instance in order to drive further decreases.

Detailed analysis

Transition Alignment and Emissions Baseline

for Annual Monitoring as at 2022

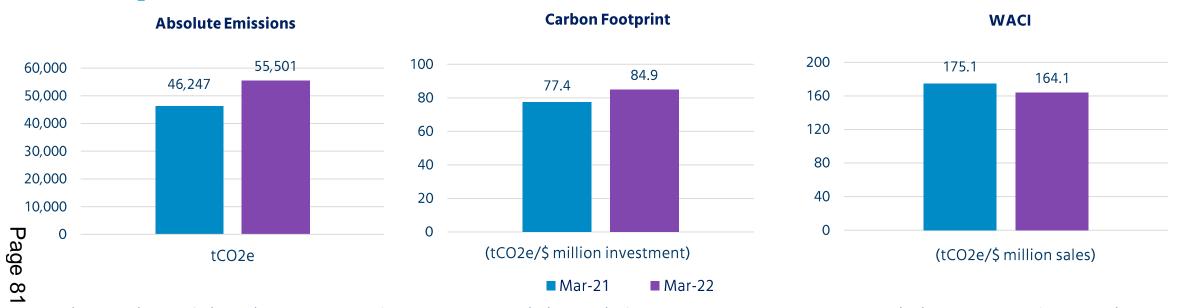
| | Portfolio | SAA Weight % | Absolute Emissions Coverage | Absolute emissions (tCO2e based on value of investment) | WACI / Sovereign Carbon Intensity Coverage | WACI (tCO2e/\$million sales) / Sovereign Carbon Intensity (tCO2e / \$M PPP GDP) | Carbon Footprint Coverage | Carbon Footprint (tCO2e/\$million investment) | Implied Temperature Rise (°C) | SBTi Alignment* |
|-----------------------------|---|--------------------|-----------------------------------|--|--|---|---------------------------------|---|-------------------------------------|--------------------|
| | Plack Dock World FSC | г О | 00.39/ | Scope 1 + 2 | 00.39/ | Scope 1 + 2 | 00.19/ | Scope1 + 2 | 2.2 | 20.69/ |
| Global Equity EM Equi | | 5.0 | 99.2% | 4,063 | 99.2% | 83.7 | 99.1% | 24.9 | 2.2 | 39.6% |
| Equity | Russell WPP Global Opportunities | 5.0 | 98.0% | 11,246 | 98.0% | 116.5 | 98.0% | 68.8 | 2.4 | 26.7% |
| EM Equi | ty Russell WPP EM Equity | 10.0 | 95.6% | 40,193 | 95.6% | 228.1 | 95.6% | 122.9 | 2.9 | 4.0% |
| T | Total Listed Equities (ex. TAA) | 20.0 | 97.1% | 55,501 | 97.1% | 164.1 | 97.0% | 84.9 | 2.6 | 18.5% |
| Credit | Russell WPP Multi-Asset Credit** | 4.0 | 54.1% | 22,216 | 57.9% | 381.2 | 53.9% | 170.5 | 3.5 | 5.8% |
| [®] Total List | ed Equities and Corporate Bonds (ex. TAA) | 24.0 | 90.0% | 77,718 | 90.6% | 200.2 | 89.9% | 99.1 | 2.7 | 16.4% |
| 80 | BlackRock EM Equity | 1.6 | 99.4% | 7,143 | 99.5% | 320.1 | 99.4% | 134.5 | 2.8 | 5.1% |
| | BlackRock European Equity | 0.5 | 99.4% | 1,004 | 99.4% | 104.5 | 99.3% | 62.6 | 2.1 | 48.6% |
| Tactica | BlackRock US Opportunities | 1.1 | 93.5% | 1,593 | 94.1% | 180.7 | 93.5% | 43.4 | 2.7 | 19.4% |
| Allocation | | 2.0 | 99.8% | 12,085 | 99.8% | 1,084.9 | 99.8% | 184.2 | 3.5 | 29.7% |
| | LGIM North American Equity Index | 1.1 | 98.0% | 1,176 | 98.1% | 141.2 | 98.0% | 34.2 | 2.2 | 32.9% |
| | LGIM UK Equity Index | 0.8 | 87.1% | 2,079 | 86.7% | 128.9 | 86.7% | 75.8 | 2.3 | 36.8% |
| | Ninety-One Global Natural Resources | 1.4 | 99.0% | 25,206 | 99.0% | 815.5 | 99.0% | 554.5 | 4.6 | 5.1% |
| | Total Tactical Allocation | 8.5 | 97.3% | 50,285 | 97.3% | 509.4 | 97.2% | 180.5 | 3.1 | 21.8% |
| Sovereig | ns Russell WPP Multi-Asset Credit** | 2.3 | 95.5% | 21,349 | 92.0% | 272.6 | - | - | - | - |
| Synthetic | Eq. Synthetic Equity*** | - | - | - | 99.8% | 138.9 | 99.7% | 37.2 | 2.2 | 39.6% |

^{*}This metric measures the proportion of companies in the portfolio with one or more active carbon emissions reduction target/s approved by the Science Based Targets Initiative (SBTi). **Percentages considering the respective asset class allocation. For Russell WPP Multi-Asset Credit, these represent a 33.2% and a 19.2% fund allocation to, respectively, corporate bonds and sovereign bonds. The remainder of the fund is allocated to asset classes not covered by the analysis, e.g., mortgages, swaps and loans. *** Synthetic Equity mandate composed of: 30% Euro Stoxx 50 Index, and 70% S&P 500 Index.



Progress versus the baseline across three emissions metrics

Listed Equities (ex. TAA)

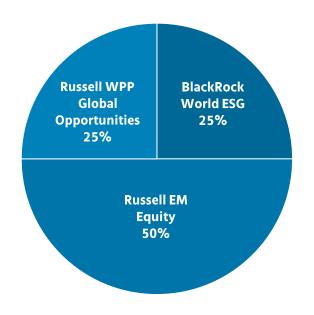


- The Fund's listed equity portfolio has increased by 20.0% on an absolute emissions basis, from 2021 to 2022. The Carbon Footprint increased by 9.7%. The Weighted Average Carbon Intensity (WACI) decreased over the same period by 6.3%.
- The Fund's listed equity carbon footprint has risen over the period due principally to the changes in the Emerging Market Equity portfolio, where the legacy Wellington and BlackRock EM mandates have been transitioned into the Russell WPP Emerging Market Equity mandate. The Russell WPP Global equity mandate also saw a modest increase in its carbon footprint over the period, however this was more than offset by falls in the BlackRock World ESG Global Equity mandate.
- Conversely, the Russell WPP EM mandate had a marginally lower WACI than the previous EM portfolio. This along with decreases in WACI in both the Russell WPP Global Equity mandate and the BlackRock Global Equity mandate has led to the overall listed equity WACI falling by 6.3% over the year.
- In respect of absolute emissions, this increased by c.20% over the year. Please note that absolute emissions is impacted by both the amount of assets being analysed as well as the changes to the companies enterprise values as well as emissions, therefore exact attribution is not yet possible. Given the listed equity portfolio has seen an increase in carbon footprint, this result is likely driven by increases in underlying carbon intensity as well as an overall increase in the amount of assets being analysed (c.14%) in 2022 versus 2021.

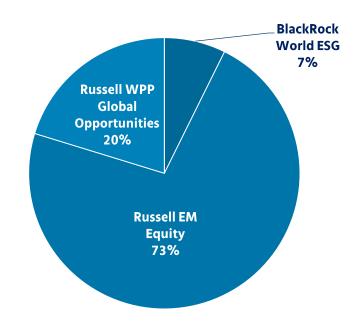


Part A: listed assets

Fund Assessment – Listed Equities (ex. TAA)



Listed Equities SAA scaled to 100%



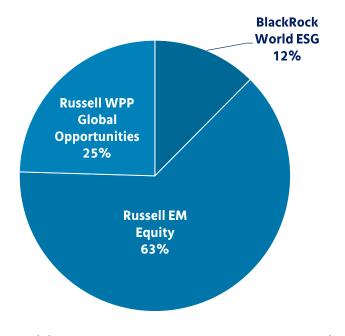
Listed Equities Scope 1+2 Carbon Footprint

- The Russell WPP EM Equity mandate represents the highest allocation of the 3 equity mandates covered, and it has an outsized contribution versus it's allocation, representing c.75% of the scope 1+2 of the portfolio's carbon footprint. This is somewhat unsurprising given the higher proportion of highly carbon intensive sectors which is typical of emerging market economies.
- Despite the Russell WPP Global Opportunities and the BlackRock World ESG mandate having the same asset allocation, the BlackRock fund represents a much smaller portion of the overall portfolio carbon footprint, reflecting its lower carbon intensity.

Notes: Figures may not sum due to rounding. Analysis of listed equities. Analysis captures carbon dioxide equivalent emissions. Where there is partial coverage of a portfolio we scale up the absolute emissions to estimate coverage for 100% of the mandate. (see Appendix on limitations).



Fund Assessment – Listed Equities (ex. TAA)



Russell WPP
Global
Opportunities
27%

Russell EM
Equity
57%

Listed Equities Scope 3 Downstream Carbon Footprint

Listed Equities Scope 3 Upstream Carbon Footprint

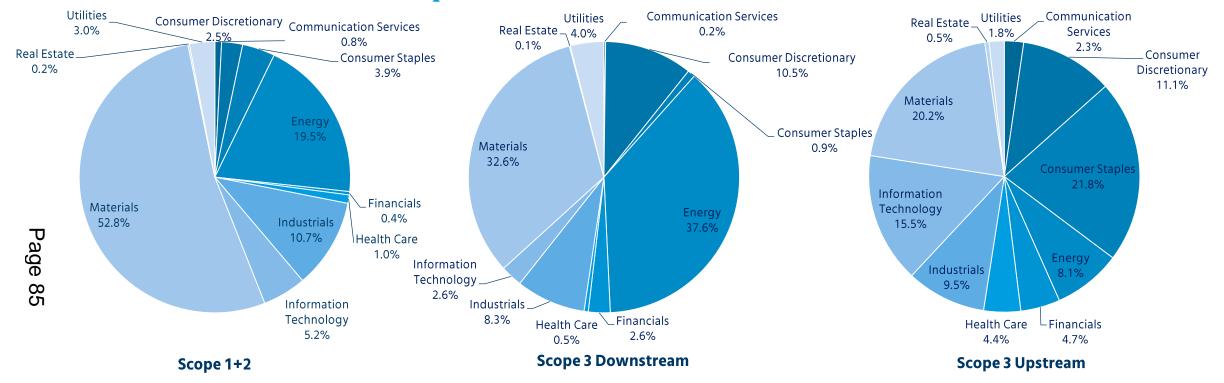
- It is important to be aware of scope 3 emissions upstream and downstream and how they can add climate risk in the investment portfolio.
- Downstream scope 3 emissions are connected to emissions down the value chain, and represent emissions connected to goods sold to customers. Upstream scope 3 emissions are connected to emissions up the value chain, and represent emissions connected to inputs to production processes. The **Russell WPP Global Opportunities** mandate represents broadly the same proportion of up- and downstream carbon footprint as its asset allocation. All three mandates are broadly consistent when comparing acorss downstream and upstream carbon footprint contribution.
- We recommend including scope 3 emissions in the Fund's target setting framework once data quality and consensus over calculation methodology are sufficiently robust.

Notes: Figures may not sum due to rounding. Analysis of listed equities. Analysis captures carbon dioxide equivalent emissions. Where there is partial coverage of a portfolio we scale up the absolute emissions to estimate coverage for 100% of the mandate. (see Appendix on limitations).



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Sector breakdown – Listed Equities (ex. TAA)



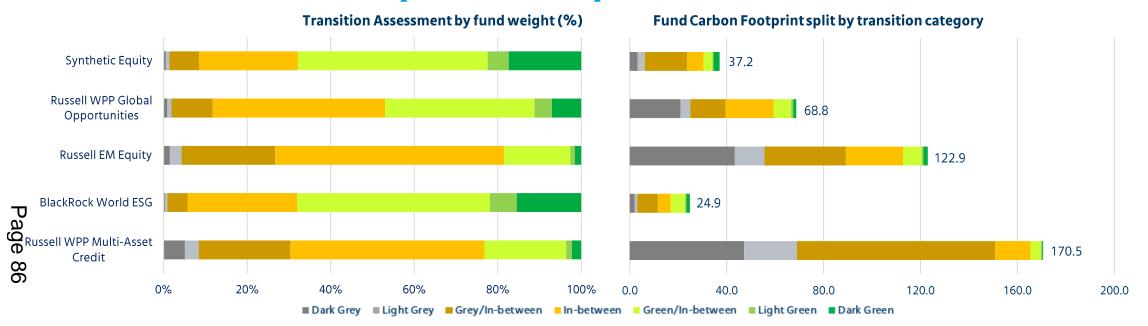
- The **Materials** sector makes up broadly half of the scope 1 and 2 carbon footprint, followed by **Energy** and **Industrials**. The **Energy** and **Materials** sectors are the top contributor to downstream scope 3 emissions, and **Consumer Staples** (closely followed by Materials) to upstream scope 3 emissions.
- We note a significant shift in emissions across scopes. **Materials** contributes the highest proportion across Scope 1+2 emissions, whilst making up a lower proportion within scope 3 emissions. **Communication Services**, **Health Care**, and **Real Estate** maintain their relatively low contributions across all scopes.

Notes: Figures may not sum due to rounding. Analysis of listed equities. Analysis captures carbon dioxide equivalent emissions. Where there is partial coverage of a portfolio we scale up the absolute emissions to estimate coverage for 100% of the mandate. (see Appendix on limitations).



Transition Alignment

Fund Assessment – Listed Equities and Corporate Bonds (ex. TAA)



- The listed assets are composed primarily of in-between and green/in-between assets. In between assets are arguably the companies where stewardship could have the greatest impact.
- All the mandates have dark grey or light grey assets within their portfolio.
 These grey assets represent c.8% of Russell WPP Multi-Asset Credit
 Corporate Bond portfolio.
- The mandates with the highest exposures to green assets are the Synthetic Equity and BlackRock World ESG, which have relatively low exposure to the Utilities, Materials and Energy sectors.
- The Russell EM Equity fund is the most carbon intensive equity mandate.
 This is mostly explained by the contribution from carbon intensive sectors (namely Materials and Energy) within emerging markets. Within this mandate, the dark grey and light grey assets account for c.45% of total carbon intensity.
- The **Russell WPP Multi-Asset Credit** mandate is more intensive than the equity funds in the baseline, with c.8% of the mandate invested in grey assets, accounting for c.40% of total carbon intensity.

Notes: Figures may not sum due to rounding. Analysis of listed equities and corporate bonds. Analysis captures carbon dioxide equivalent emissions. Where there is partial coverage of a portfolio we scale up the absolute emissions to estimate coverage for 100% of the mandate. (see Appendix on limitations).

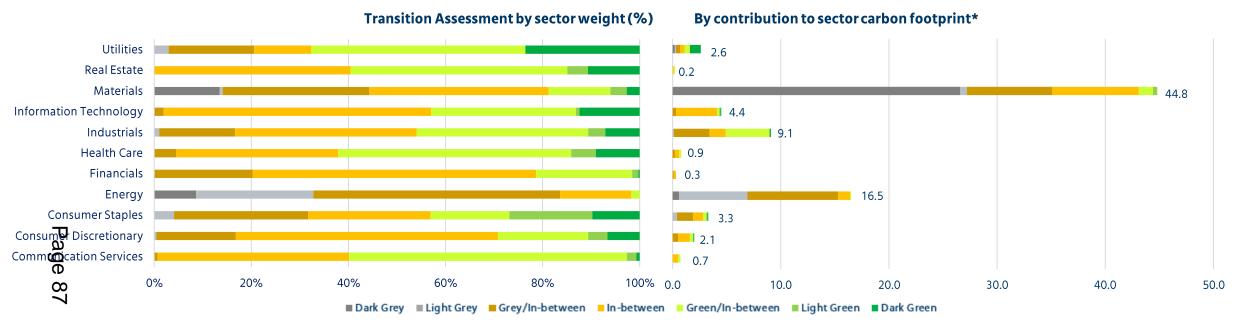


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Transition Alignment

Sector Assessment – Listed Equities (ex. TAA)



- Dark grey assets are found within the Materials,
 Energy, and Utilities sectors.
- These carbon intensive sectors will be required for future energy needs. It is important to encourage these companies to transition and ensure they formalise their transition plans.

- Materials, Energy, and Industrials are the highest contributing sectors to the overall listed equity carbon footprint. Although the latter does not hold any dark grey assets, the contribution from grey/in-between and green/In-between holdings is still significant.
- Utilities, Real Estate, Health Care and Communication Services are mainly composed of green/in-between or green assets, and associated very low carbon intensity metrics.

Notes: Figures may not sum due to rounding. Analysis of listed equities and corporate bonds. Analysis captures carbon dioxide equivalent emissions. Where there is partial coverage of a portfolio we scale up the absolute emissions to estimate coverage for 100% of the mandate. (see Appendix on limitations).



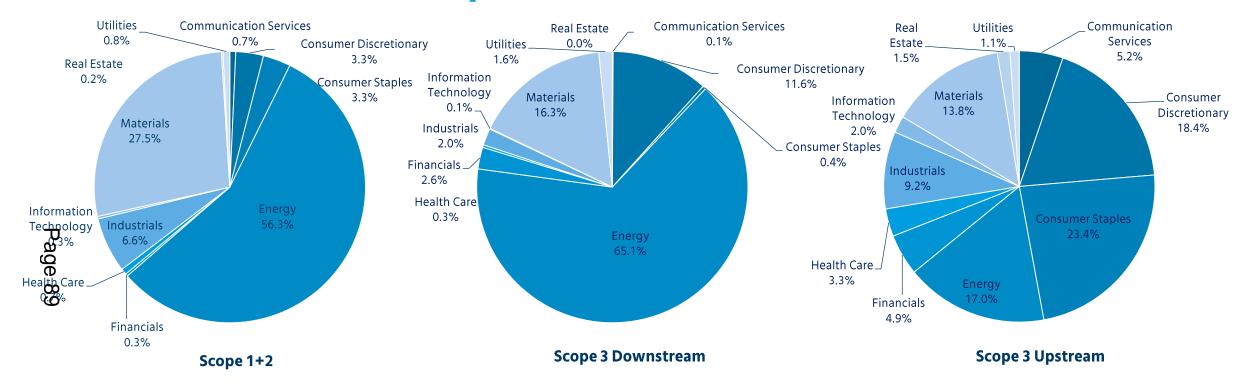
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Part B: Multi-Asset Credit

Sector breakdown – MAC - Corporate Bonds



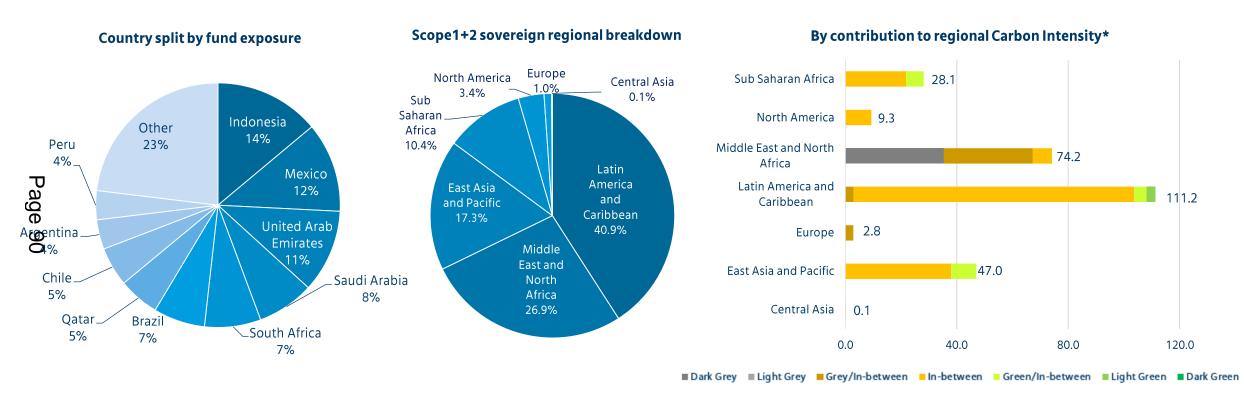
- The **Energy** sector is the most material sector to scope 1 and 2 emissions and to downstream scope 3 emissions, representing more than half of the total carbon footprint of the mandate (c.56% and c.65% respectively).
- Consumer Staples represents the biggest portion of upstream scope 3 emissions (c.23%), followed by Consumer Discretionary (c.19%) and Energy (c.17%).

Notes: Figures may not sum due to rounding. Analysis of listed equities. Analysis captures carbon dioxide equivalent emissions. Where there is partial coverage of a portfolio we scale up the absolute emissions to estimate coverage for 100% of the mandate. (see Appendix on limitations).



Transition Alignment

Regional Assessment – MAC - Sovereign Bonds



- Indonesia is the main contributor to carbon intensity, followed by Mexico and the United Arab Emirates. Together, the three countries make up c.37% of sovereign carbon intensity.
- Latin America and Caribbean & the Middle East and North Africa represent the Fund's most carbon intensive regional exposure, with a high proportion of Dark Grey assets, particularly in the Middle East and North Africa.



^{*}Carbon intensity is calculated in line with the latest PCAF methodology and is computed in units of tons co2e / USDM of PPP Adjusted GDP.

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Part C: Engagement targets

Engagement Targets Which Companies to Focus on?

It is important to continually monitor the companies that are the highest contributors to the carbon footprint as the Fund requires these holdings to decarbonise by the greatest amount to achieve the Fund's 2045 net zero target.

There are a number of important considerations for each holding:

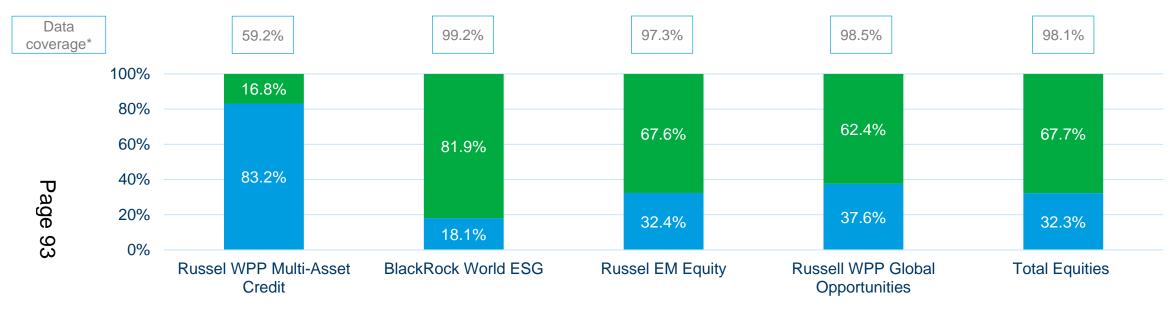
- Are they a transition risk? We detail the ACT transition category to evaluate each company's transition capacity.
- Do they have a transition plan in place aligned with Science Based Targets initiative (SBTi) and/or how well are they positioned according to the Transition Pathway Initiative (TPI) assessment? If they do have a transition plan that has been submitted to SBTi or a favourable TPI assessment it is more likely they will meet their decarbonisation targets.
 - Are the companies listed on the Climate Action 100+ focus list? Being on this list highlights that these companies have already been identified as key to driving the global net zero emissions transition and that these companies are already subject to engagement through the Climate Action 100+ framework.
 - Are WPP's engagement provider Robeco engaging with the company? Companies that have been identified as material to the Fund's
 decarbonisation progress but are not currently under engagement by Robeco should be communicated to Robeco to increase their
 coverage.

We present the top 10 contributors to carbon footprint within the listed equity and corporate bonds portfolios with details about which mandate they are held in and data points related to the above considerations.

The Fund can use its influence and the voice of WPP, as a capital provider to engage for change with these holdings.

Engagement Targets – Material Sectors' Financed Emissions

Material sectors' financed emissions that are not aligned or not subject to active engagement - Listed Equities and Corporate Bonds (ex. TAA)



- % of Material sectors' financed emissions aligned or under active engagement
- % of Material sectors' financed emissions not aligned or under active engagement
- Companies have been assessed as **under active engagement** if they are within the list of companies that Robeco are engaging with and/or captured within the Climate Action 100+ engagement list. In respect of **alignment**, companies have been deemed to evidence of aligning if they have approved SBTi targets or are categorized as aligned by the Transition Pathway Initiative ("TPI").
- Please note that owing to the different coverage levels across investment funds, it is difficult to compare the investment funds side by side, however comparing an investment fund's progress on these metrics year on year will provide useful progress indicators to engage with investment managers.

^{*}Sum of company weights that have come out of MSCI.



Part D: Implementation

Climate Transition

High level implementation plan

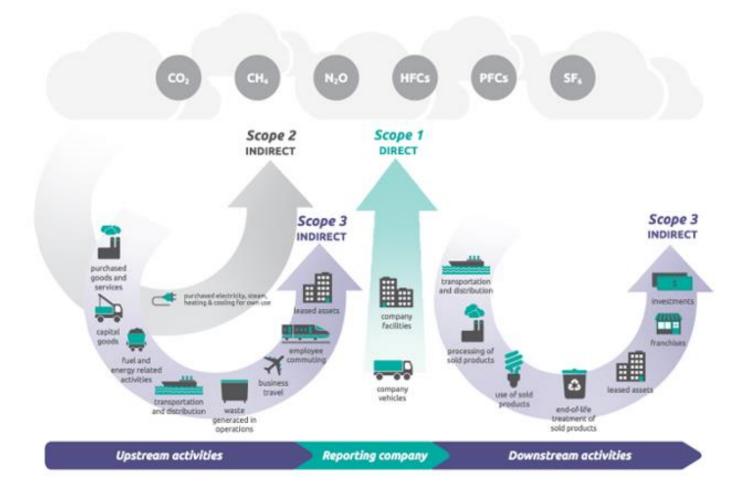
| | Integration (Risk Reduction) | Stewardship (Transition Support) | Investment (Solutions) | |
|---|--|---|--|--|
| 2022 | Communicate listed equity progress versus decarbonisation targets to key partners and members. Incorporate into TCFD reporting. | Stewardship: Discuss the companies raised in Mercer's ACT analysis as engagement priorities with WPP and Robeco. Work with WPP and Mercer to establish the extent to which financed emissions in material sectors are currently aligned to net zero or under engagement today. The target is 70% of financed emissions in material sectors are either aligned to net zero or under active engagement. | Work to better define the current target to have 30% of total Fund and listed equity portfolio in sustainable investments by 2030. This can capture climate solutions, allocations to low-carbon | |
| 2022 - 2005 80 90 90 51 | Emissions Reduction Target: Achieve a 36% reduction in emissions by 2025 versus the listed equities 2021 baseline. Monitor this principally on a carbon footprint basis, but track on a WACI and absolute emissions basis too. Wider asset classes and Scope 3: Expand net zero target setting to wider asset classes – infrastructure, property etc. – when data quality and methodologies exist. Work is ongoing to assess the property managers' data availability. Include Scope 3 within emissions reduction efforts when corporate reporting quality increases sufficiently. | Engagement targeting: Work with Mercer, WPP and Robeco to ensure that engagement progress is made, focusing on the companies that are most material to the Fund's decarbonisation journey, supported by annual ACT monitoring. Escalation: Evaluate the success of the stewardship activities with target companies. Companies that haven't produced the desired change following stewardship could be considered for replacement. | / sustainability-themed exposures, including transformative solutions. • The Fund already has a 4% target asset allocation to local / impact investments which include low carbon sustainability themed investments. | |
| 2030 | Emissions Reduction Target: Decarbonise, with 68% reduction in emissions in the listed equity portfolio by 2030 (vs 2021 baseline). Fossil Fuel Exposure: Work to reduce fossil fuel exposure in line with previously agree 2025 and 2030 targets. | Stewardship: 90% of financed emissions in material sectors are either aligned to net zero or under active engagement by 2030. 'Just Transition' Use the Fund's influence as a shareholder to encourage companies and policy makers to adapt their activities to support the transition to a low carbon economy, especially across developing nations and societies. Alignment target Set a target on increasing the % assets under management in net zero or aligning assets by 2025 and 2030. | Opportunities that could be explored include nature based solutions. Mercer's green transition alignment score provides an indication of current green exposures within the equity portfolio. | |



Appendix

Emissions Data

Understanding the Scopes





Decarbonisation – Emissions Metrics Notes on the Analysis

- The analysis focuses on the listed equity portfolio, showing contributions to Fund emission metrics. We assess carbon dioxide "equivalent" metrics.
- Caution should be exercised in interpreting individual data points, as in reality, emissions may differ, given the data coverage in the analysis is less than 100%. Where companies do not have data points, companies are assumed to have the same carbon metrics as the average of companies that we do have data points for, therefore we do not assume that companies have zero emissions because we do not have data for them.
- Emissions are likely underestimated as Scope 3 emissions are not included in the metrics presented within. Although we do present an overview of the attribution of Scope 3 emissions by fund and sector as part of our detailed analysis.

Emissions Metrics Understanding the Limitations

- Many of the IPCC's scenarios are reliant on net zero (or net negative) assumptions later this century. This can include the deployment of mitigation technologies, such as carbon capture and storage, as well as ecosystem approaches, such as land and forest conservation and restoration. There has been some scepticism as to whether such technologies and approaches are viable, at the required scale. Mercer will look to integrate further assumptions around net zero emissions in due course, as science and technology evolves.
- The focus of these decarbonisation curves is currently on Scope 1 and Scope 2 emissions. Mercer will however seek to integrate Scope 3 emissions as methodologies improve.
- Given the limitations to all of the Metrics, Mercer advocates for monitoring decarbonisation progress on absolute emissions, WACI and carbon intensity basis.



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| CLWYD PENSION FUND COMMITTEE | | | | |
|---|--|--|--|--|
| Date of Meeting Wednesday, 15 February 2023 | | | | |
| Report Subject Investment Strategy Review | | | | |
| Report Author Head of Clwyd Pension Fund | | | | |

EXECUTIVE SUMMARY

The Fund last reviewed its investment strategy in 2019. The Investment Strategy Statement requires that the Fund's asset allocation is reviewed every three or four years. This is to ensure that it continues to achieve the funding and investment objectives.

There are a number of considerations when setting an investment strategy. Some of the key elements are:

- having an appropriate target rate of investment return to ensure assets are available to pay benefits whilst keeping employer contribution rates affordable
- understanding the risks associated with that target investment return
- the economic and market environment
- the Fund's Responsible Investment Policy objectives including the decarbonisation targets
- having regard to the Government's requirements in relation to the pooling of LGPS assets.

The investment consultant has produced modelling analysis both at 31 March 2022 and 30 September 2022. The analysis concluded that the existing investment strategy still broadly achieves the funding and investment objectives. However, a number of minor changes are recommended to continue to achieve these objectives.

If the proposed strategy changes are agreed, officers and advisors will consider an implementation plan, which will feature in the 2023/24 Business Plan

The Fund is required to publish the Investment Strategy Statement which has been updated to reflect the recommended changes and other changes to bring it up to date.

| RECO | DMMENDATIONS CONTROL OF THE PROPERTY OF THE PR |
|------|--|
| 1. | To agree the changes to the Fund's Strategic Asset Allocation (as shown in paragraph 1.07) of the Fund. |
| 2. | To agree the proposed changes to the Investment Strategy Statement as highlighted in Appendix 2. |

REPORT DETAILS

| 1.00 | REVIEW OF INVESTMENT STRATEGY AND STRATEGIC ASSET | | | |
|------|--|--|--|--|
| | ALLOCATION | | | |
| 1.01 | Background | | | |
| | The Fund last reviewed its investment strategy in 2019. The Investment Strategy Statement requires that the Fund's investment strategy is reviewed every three or four years. This is to ensure that the investment strategy continues to achieve the funding and investment objectives which are: • Achieve and maintain assets equal to 100% of liabilities within the 12-year average timeframe, whilst remaining within reasonable risk parameters • Determine employer contribution requirements, whilst recognising the constraints on affordability and strength of employer covenant, with the aim being to maintain as predictable an employer contribution requirement as possible • Recognising the constraints on affordability for employers, aim for sufficient excess investment returns relative to the growth of liabilities • Strike the appropriate balance between long-term consistent investment performance and the funding objectives • Manage employers' liabilities effectively through the adoption of employer specific funding objectives • Ensure net cash outgoings can be met as/when required • Minimise unrecoverable debt on employer termination • Ensure that its future strategy, investment management actions, governance and reporting procedures take full account of longer-term risks and sustainability • Ensure that the Fund's investments are aligned with the transition to a low carbon economy through a commitment to achieving a net zero carbon dioxide emission's target by 2045 • Promote acceptance of sustainability principles and work together with others to enhance the Fund's effectiveness in implementing these • Aim to use the Wales Pensions Partnership as the first choice for investing the Fund's investment strategy and objectives (including sustainability requirements), within acceptable long-term costs to deliver the expected benefits and subject to ongoing confidence in the governance of the Partnership. These are based on the ultimate objective of ensuring there is sufficient assets to pay the benefits of the curr | | | |
| 1.02 | 2022/23 Review of the Fund's Investment Strategy | | | |
| | As agreed by Committee within the 2022/23 business plan, the Fund's investment strategy was due for review consecutively with the actuarial valuation as at 31 March 2022. As can be seen from the timelines in Appendix 1, this work commenced by the Fund officers and investment consultant in April 2022 and it was originally proposed to take recommendations to Committee in November 2022. However, due to the unexpected market conditions, further work was undertaken to ensure that any proposed changes to the investment strategy remained appropriate. | | | |

The investment strategy review work by officers and investment consultant has now concluded and the proposed changes are being brought to Committee for consideration and approval. Committee members will recall that they received training on the investment strategy on 5 October 2022 which should assist in the understanding of these recommendations.

1.03 Considerations for an investment strategy

There are a number of considerations when setting an investment strategy. Some of the key considerations are:

- having an appropriate target rate of investment return to ensure assets are available to pay benefits whilst keeping employer contribution rates affordable
- understanding the risks associated with that target investment return
- the economic and market environment
- the Fund's Responsible Investment Policy objectives including the decarbonisation targets
- having regard to the Government's requirements in relation to the pooling of LGPS assets.

1.04 | Target investment return

When undertaking the actuarial valuation, the Fund Actuary makes a number of key assumptions which were presented to the Committee in November 2022 as proposals within the draft Funding Strategy Statement. These assumptions include a required rate of investment return. Although the valuation date is 31 March 2022, the significant market volatility within the UK government bonds markets in late September/early October 2022 prompted the Fund Actuary to carry out a review of some of their assumptions as at 30 September 2022, to consider their appropriateness particularly when reviewing the Fund's investment strategy. As at 30 September 2022 the Fund Actuary has suggested an assumed future rate of return of inflation (measured by the Consumer Prices Index (CPI)) plus 2.5%. It is therefore crucial that the Fund's investment strategy achieves a return in excess of this future service rate of CPI +2.5% ("target rate of return").

1.05 Understanding the risks

In addition to the potential for investment return, the Fund's Investment Consultant also assesses the risk of not achieving the target rate of return on investments. Risk is assessed using a Value at Risk (VaR) approach: VaR is a measure of the risk of loss for investments. It estimates how much a set of investments might lose (with a given probability), given normal market conditions, in a set time period such as a day or a year.

1.06 | Analysis and results

When carrying out the review of the Fund's investment strategy, the investment consultant has produced modelling analysis both at 31 March 2022 and 30 September 2022. Further detail of the modelling is contained in Appendix 1.

The analysis concluded that the existing investment strategy still broadly

achieves the funding and investment objectives. In particular:

- there is the Cash & Risk Management strategy, which is a significant proportion (23%) of the overall strategy, that on an ongoing basis assists in managing many risks; interest rate, inflation, currency, equity protection, which is subject to regular review.
- in addition, there is the Best Ideas (tactical allocation) portfolio, which is 11% of the asset allocation, which is used to alter the risk position of the Fund on an ongoing basis, to attempt to benefit from more near term economic and market opportunities without disturbing the assets managed on a strategic basis.

However, a number of minor changes are recommended.

1.07 | Proposed changes

The table below shows the Fund's Strategic Asset Allocation, showing the current target allocations and the proposed changes which relate to four areas of the Fund's asset allocations:

| | Current target allocation (%) | Proposed allocation (Alt 1) (%) | Change |
|------------------------|----------------------------------|------------------------------------|----------|
| Global Equity | 10.0 | 15.0 | Increase |
| Emerging Market Equity | 10.0 | 5.0 | Reduce |
| Best Ideas Portfolio | 11.0 | 11.0 | - |
| Hedge Funds | 7.0 | 5.0 | Reduce |
| Multi-Asset Credit | 12.0 | 12.0 | - |
| Private Markets | | | |
| Property | 4.0 | 4.0 | - |
| Private Equity | 8.0 | 8.0 | - |
| Local/ Impact | 4.0 | 6.0 | Increase |
| Infrastructure | 8.0 | 8.0 | - |
| Private Credit | 3.0 | 3.0 | - |
| Stabilising Assets | | | |
| CRMF | 23.0 | 23.0 | - |
| Cash | - | - | - |
| Total | 100.0 | 100.0 | |

The Fund's Investment Consultant has estimated, based on long term market forecasts that the new strategy will deliver a long term (10 year) return of CPI+4.7% per annum, compared to the existing strategy which delivers an estimated CPI+4.8% per annum based on market assumptions as at 30 September 2022. This forecast return of CPI+4.7% p.a. is comfortably ahead of the Fund Actuary's suggested required rate of return of CPI+2.5% p.a. (as at 30 September 2022).

For the Clwyd Pension Fund the Investment Consultant has assessed that the target rate of return in the Fund's current investment strategy has a 95% three year VaR of £861m; meaning that there is a 95% confidence level that over a three year period the Fund's assets would not fall by more than £861m. The proposed changes to the investment strategy would result in a marginally lower three year VaR of £855m.

1.09 The overall result of this analysis is that the proposed changes to the

investment strategy would result in a marginally lower potential return than the current strategy (yet still comfortably outperforming the required rate of return assumed by the Fund Actuary) and a lower risk than the current strategy. The Fund's Investment Consultant will cover this in more detail in the presentation.

1.10 | Rational for proposed changes

The key proposed changes to the Fund's investment strategy are explained in the following paragraphs:

Reduce allocation to Emerging Market Equities and increase allocation to Global Equities

• The Investment Consultant believes that an increased de-globalised world reduces the advantages of having significant overweight exposure to emerging markets, as witnessed in the last couple of decades. The political instability in various segments of emerging markets is leading to lumpy return profiles. This change is linked to this uncertainty in markets especially around Emerging Markets. The proposed reduced allocation to Emerging Market Equities from 10% to 5% allows for an increase in the allocation to Global Equities and an introduction of a new allocation to a Sustainable Active Equity Sub-Fund with WPP, which is being established to meet the Fund's Responsible Investment Policy. It is proposed that all of Fund's allocation to Global Equities be moved to the Sustainable Active Equity Sub-Fund.

Reduce Hedge Fund allocation

• It is proposed to reduce the strategic allocation to Hedge Funds from 7% to 5%. The Fund's investment consultant maintains the view of having an asset allocation that provides diversification from equity and credit risk. Therefore having exposure to a dynamic (i.e. continually changing) strategy will continue to add value in different market environments. Following the restructure of the hedge funds during the 2019 strategy review, the fund has continued to produce returns in excess of its target and therefore it is important to retain an allocation within the strategic portfolio. It is also worth highlighting that the Fund also has the ability to hedge various investment risks within the Cash and Risk Management allocation.

Increase allocation to the Local/Impact Fund

Following the introduction of the Local/Impact Fund following the 2019 investment strategy review, the Fund has continued to allocate to a range of illiquid asset classes within this portfolio. The Local/Impact portfolio plays an important role in the Fund's asset portfolio allowing investments to be made across a range of illiquid asset classes - Private Equity, Private Debt, Infrastructure and Real Estate - as well as being a key part of implementing the Fund's Responsible Investment Policy. The forthcoming DLUHC consultation will, amongst other aspects, focus on the Levelling Up agenda and how the LGPS can play a part in this. The focus will be on LGPS Funds allocating to "local" (Local has been stated to mean UK) investments at a minimum of 5% of total assets. The Fund's investment consultant proposes an increase to the allocation from 4% to 6%, this is to be funded through the reduction in allocation to Hedge Funds.

| 1.11 | Approval and next steps |
|------|--|
| | Committee members are asked to consider and agree these changes. |
| | Officers and advisors will then consider an implementation plan, some of which is driven by the timing of the availability of the WPP Global Equity Sustainable Equity Fund and cash flow requirements. This will feature in the 2023/24 Business Plan. |
| 1.12 | Investment Strategy Statement |
| | The Fund is required to publish an Investment Strategy Statement and there is statutory guidance on its content. The Fund's Investment Strategy Statement has been updated to reflect the recommended changes and other changes to bring it up to date. The changes are highlighted. |
| | Committee members are asked to approve the Investment Strategy Statement which will then be published. |

| 2.00 | RESOURCE IMPLICATIONS |
|------|---|
| 2.01 | None directly as a result of this report. |

| 3.00 | CONSULTATIONS REQUIRED / CARRIED OUT |
|------|--|
| 3.01 | The LGPS Investment regulations require that the Fund "consults with such persons as it considers appropriate as to the proposed contents of its investment strategy". The Fund's usual process for this is to consult with its employers and seek views. However, given the investment strategy review has effectively been "light touch" in nature it is not deemed necessary to consult on this occasion. |

| 4.00 | RISK MANAGEMENT |
|------|---|
| 4.01 | This report addresses some of the risks identified in the Fund's Risk Register. Specifically, this covers the following (either in whole or in part): Governance risk: G2 Funding and Investment risks: F1 - F6 and F8 |
| 4.02 | The Fund's investment strategy has been designed to provide an appropriate trade-off between risk and return. The Fund faces three key investment risks: Equity risk, Interest Rate Risk and Inflation Risk. |
| | Diversification of the Fund's growth assets away from equities seeks to reduce the amount of the equity risk (though it should be recognised that Equities remain an important long term source of expected growth). The Flightpath Strategy manages/controls the interest rate and inflation rate impact on the liabilities of the Fund to give more stability of funding outcomes |

and employer contribution rates. The Equity Protection strategy will provide protection against market falls for the synthetic equity exposure via the Insight mandate only. The collateral waterfall framework is intended to increase the efficiency of the Fund's collateral, and generating additional yield in a low governance manner. Hedging the currency risk of the market value of the synthetic equity portfolio will protect the Fund against a strengthening pound which would be detrimental to the Fund's deficit. Hedging the currency risk of the developed market physical equity exposure will mitigate the risk of a strengthening pound.

| 5.00 | APPENDICES |
|------|--|
| 5.01 | Appendix 1 – Investment Strategy Review presentation Appendix 2 – Proposed Investment Strategy Statement (ISS) |

| 6.00 | LIST OF ACCESS | LIST OF ACCESSIBLE BACKGROUND DOCUMENTS | | | | | | | | |
|------|---|--|--|--|--|--|--|--|--|--|
| 6.01 | N/A | 4 | | | | | | | | |
| | Contact Officer: Telephone: E-mail: | Philip Latham, Clwyd Pension Fund Manager 01352 702264 philip.latham@flintshire.gov.uk | | | | | | | | |

| 7.00 | GLOSSARY OF TERMS | | | | |
|------|--|--|--|--|--|
| 7.01 | A list of commonly used terms are as follows: | | | | |
| | (a) Absolute Return – The actual return, as opposed to the return relative to a benchmark. | | | | |
| | (b) Annualised – Figures expressed as applying to 1 year. | | | | |
| | (c) Duration – The weighted average time to payment of cashflows (in year calculated by reference to the time and amount of each payment. It is a measure of the sensitivity of price/value to movements in yields. | | | | |
| | (d) Market Volatility – The impact of the assets producing returns different those assumed within the actuarial valuation basis, excluding the yield change and inflation impact. | | | | |
| | (e) Money-Weighted Rate of Return – The rate of return on an investment including the amount and timing of cashflows. | | | | |
| | (f) Relative Return – The return on a fund compared to the return on index or benchmark. This is defined as: Return on Fund minus Return on Index or Benchmark. | | | | |
| | (g) Three-Year Return – The total return on the fund over a three year period expressed in percent per annum. | | | | |

- (h) **Time-Weighted Rate of Return –** The rate of return on an investment removing the effect of the amount and timing of cashflows.
- (i) Yield (Gross Redemption Yield) The return expected from a bond if held to maturity. It is calculated by finding the rate of return that equates the current market price to the value of future cash-flows.
- (j) Value at Risk (VaR) a measure of the risk of loss for investments. It estimates how much a set of investments might lose (with a given probability), given normal market conditions, in a set time period such as a day.

A comprehensive list of investment terms can be found via the following link:

https://www.schroders.com/en/uk/adviser/tools/glossary/



Investment Strategy Review

Page

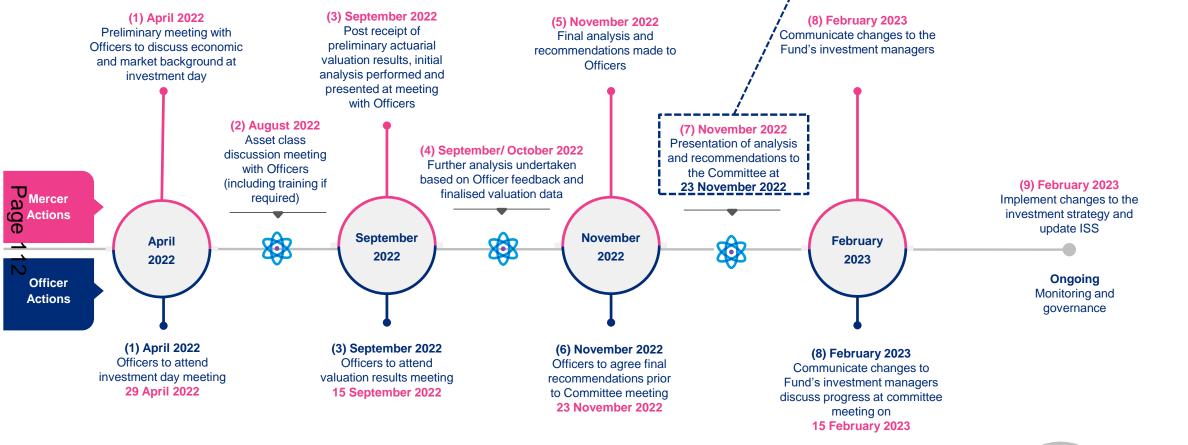
Clwyd Pension Fund Committee

February 2023

Kieran Harkin Sandy Dickson Andrew Munro

Clwyd Pension Fund Investment Strategy Review: Proposed Timeline/

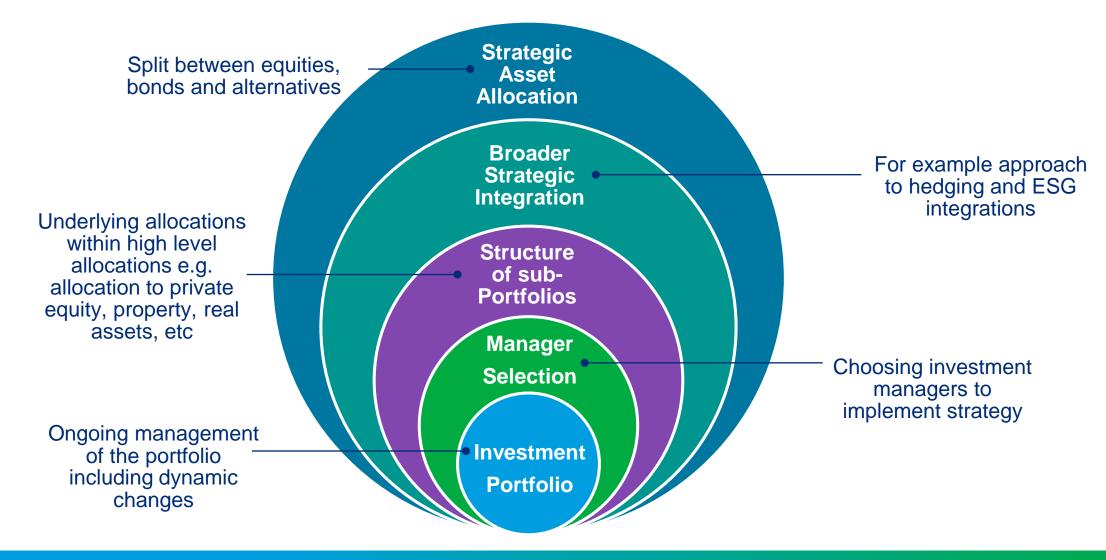
Due to market conditions Investment Strategy Review was pushed back to be taken to the Committee in early 2023



The timescales above are indicative and will depend on the amount of time taken to complete each step Numbers in brackets show stages of project plan; previous stages must be completed before subsequent stages can start



Setting the Investment Strategy



Top level strategic decisions account for 80/90% of returns and should be the area of focus

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Linking Funding and Investment

2022 Actuarial Valuation Summary (Past Service Position)

| | 31 March 2022 | 30 September 2022 | |
|----------------------------|------------------|-------------------|--|
| Past Service Discount Rate | CPI + 1.50% p.a. | CPI + 2.40% p.a. | |
| Surplus / (Deficit) | £126m | £36m | |
| Funding Level | 105% | 102% | |

The table above is based on the provisional 2022 actuarial valuation results and approximately updated to 30 September 2022.

Fund assets have grown by c£620m between 2019 and 2022 actuarial valuations

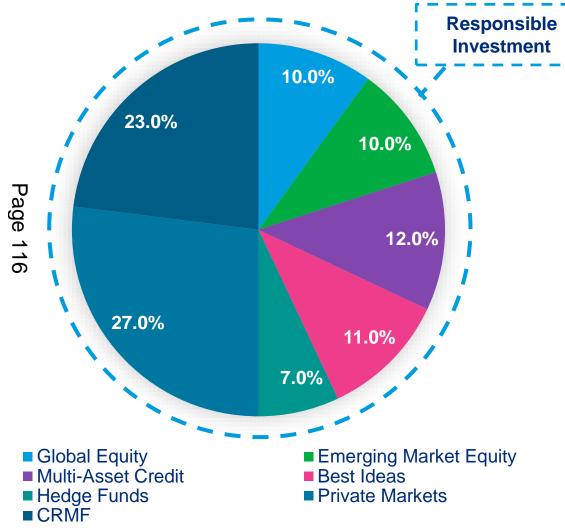
Balance of risk and return

Future Service Higher Higher returns and contributions higher risk Page 115 **FTSE** London Stock Exchange Lower returns and Investment Lower lower risk returns/risk contributions Contributions

Future cost of accrual is also an important consideration and can sit at odds with the desirable level of risk when the Funding Level is strong

Investment Strategy – various roles in Fund's asset portfolio

Current Target Position



Asset allocation position

Global Equity – Growth asset. Consider introducing new Active Sustainable Fund within the Welsh pool.

Emerging Market Equity – Growth asset. Providing risk premium returns.

Best Ideas Portfolio – Diversified portfolio of growth assets directed by the Officers. Potential to introduce sustainable assets with an ESG focus to enable decarbonisation of Fund.

Hedge Funds – Diversifier within the portfolio, providing active returns with a low correlation to other investments within the Fund.

Multi-Asset Credit – Diversified portfolio of bonds with the aim of providing moderate returns.

Cash and Risk Management Framework (CRMF)— Complex framework providing protection against a variety of risks, such as interest rates, inflation, equity, FX and cashflow.

Private Markets - Key growth assets providing access to illiquidity premium:

Property – Inflation sensitive growth asset, exposed to UK, European and US property.

Private Equity - Diversifying growth asset providing access to the illiquidity premium.

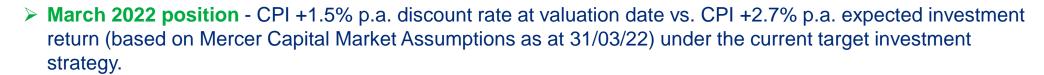
Local/ Impact – Diversifying growth asset providing access to the illiquidity premium with an impact/ sustainable focus on the underlying funds.

Infrastructure – Diversifying growth asset providing illiquidity premium and in some cases access to inflation-linked returns and positive ESG characteristics.

Private Credit – Diversifying growth asset providing access to the illiquidity premium.

Key Considerations

> Funding level remains "strong" – no need for fundamental change to "fix" a funding gap.



➤ **September 2022 position** – CPI +2.4% p.a. discount rate at valuation date vs. CPI +4.8% p.a. expected investment return (based on Mercer Capital Market Assumptions as at 30/09/22) under the current target investment strategy.

Private Market and Equity returns (and risk) continue to dominate investment strategy.- the Fund can continue to build on the progressive allocations to date made in respect of sustainability and impact

Nation risks remain prominent

- Interest rate risk officers have recently increased interest rate protection within the Cash and Risk Management Framework, the dynamic nature of the framework remains vital to ensuring it continues to add value.
- Scope to increase sustainable/impact allocations within liquid assets, the Fund will be allocating to the new Active Sustainable Equity Sub-Fund that the Wales Pension Partnership are developing.

This investment strategy review only requires "light touch" adjustments to Fund's current position



Themes and Opportunities 2023

Déjà New concept

Recovery from a global pandemic, missions to the moon, runaway energy prices due to regional conflict ...
...The early 1970s or the early 2020s? –

Both (H3N2 / COVID, Yom Kippur War / Ukraine, Apollo / Artemis).



History Rhyme

Resources conflict, weak growth, soaring inflation, and unconventional fiscal policy leave investors looking to the lessons of yesteryear on how to be equipped for whatever comes next. With the withdrawal of liquidity, markets will have to stand on their own two feet, increasing the value of capital.



Position for Transition

The decline in commodity availability has highlighted the need for energy security, energy innovation and a long overdue overhaul of ageing infrastructure. Necessity is the mother of invention, and our current challenges will drive the next wave of technologies in energy, the environment, healthcare, and beyond.



Degrees of Freedom

'Degrees of freedom' is mathematics speak for wiggle room. This theme speaks to the power of quality governance: the ability to capitalise on opportunities, the capacity to make and manage sophisticated investments, particularly in private markets, and the potential to dynamically diversify.

Page

Themes and Opportunities 2023

What Déjà New means thematically

History Rhyme



Inflation playbook

Caclical vs structural inflation risks, investing during an inflation regime

End of free money

Fed put expiry, zombies, liquidity, income comeback, policy decoupling

Balance of power

Hot and cold wars, energy, food, assess exposures

Position for Transition



Resource code

Planetary boundaries, circular economy, infrastructure

The age of engagement

Managing stakeholder needs just transition, biodiversity, impact

Mother necessity

Clean tech, hard-to-abate, adaptation, healthcare, cybersecurity

Degrees of Freedom





Private eye on the case

Accessing innovation, changing dynamics and product proliferation

Operational alpha

Governance with speed and quality helps capture dislocations

Dynamic diversification

Downside protection, dynamism within strategy, alpha, real assets



Themes and Opportunities 2023

What Déjà New means in terms of opportunities

History Rhyme



Inflation playbook

Position for transition





Resource Code

The Age of Engagement

Degrees of freedom

Process /

Action





Private eye on the case

ACT analysis

Don't blink*

Key:

Venture capital & Buyouts

Allocation

Global Real Estate Secondaries & Co-investments

Inflation-linked Bonds

Inflation regime management

Transition-aware listed infrastructure

Transition-aware natural

resources equity

Environmental Funds

Operational alpha

Governance speed test

Integrate downside protection strategy into HF program

DAA

End of free money

Bond yields

Review currency hedge

Sustainable quality core

Sustainably themed / impact

Balance of Power

Scenario Stres

Stress testing

Mother Necessity

Energy transition funds

Look-through to innovation

Dynamic diversification

Opportunities in credit

Flexible Mandates Hedge Funds

Engage right across the portfolio

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Rationale for recommended changes

Equity Portfolios Previous Proposed strategic strategic **C**hange allocation allocation Increase the strategic allocation to Global Equity to 15.0% **Global Equity** 10.0% 15.0% Decrease the strategic allocation to **Emerging Market Emerging Market Equity** 10.0 5.0% Equity to 5.0%

Page

Mercer believe that an increased de-globalised world reduces the advantages of having *significant overweight* exposure to emerging markets, as witnessed in the last couple of decades. The political instability in various segments of emerging markets is leading to lumpy return profiles.

- As a result Mercer recommend reducing the strategic asset allocation to emerging market equity and increasing the allocation to global equities to bring it
 more closely aligned with MSCI AC World Index weightings.
- In addition Mercer recommends allocating all of the Fund's proposed weight of 15% in Global Equities to the WPP Sustainable Active Equity Sub-Fund (post launch).

Rationale for recommended changes

Hedge Funds and Impact/Local portfolios

Decrease the strategic allocation to **Hedge Funds** to **5.0%**Increase the strategic allocation to **Local/Impact** to **6.0%**

Hedge Funds

Mercer recommend a reduction in the strategic allocation to Hedge Funds from a previous allocation of 7.0% to 5.0%.

- The fundamental restructure of the Hedge Funds mandate (undertaken as part of the 2019/20 investment strategy review) has produced returns in excess of the target.
- Significant market volatility in recent years has provided strong context for an asset allocation position that has a low beta to equities and exposure to a dynamic strategy aiming to add value in different market environments.
- Mercer still believe the mandate has an important role to play through its allocation in the wider asset portfolio, though the ability to hedge a range of investment risks also exists through the CRMF.
- A new strategic weight of 5% is therefore recommended.

| | Previous strategic allocation | Proposed strategic allocation | Change |
|--------------|-------------------------------------|-------------------------------|----------|
| Hedge Funds | 7.0% | 5.0% | • |
| Local/Impact | 4.0% | 6.0% | ^ |

Local/Impact

- The Local/Impact portfolio plays an important role in the Fund's asset portfolio allowing investments to be made across a range of illiquid asset classes: Private Equity, Private Debt, Infrastructure and Real Estate.
- The forthcoming DLUHC Consultation will, amongst other aspects, focus on the Levelling Up agenda and how the LGPS can play a part in this. The focus will be on LGPS Funds allocating to "local" (Local has been stated to mean UK) investments at a minimum of 5% of total assets.
- Mercer recommend increasing the strategic allocation to the Local/Impact portfolio from 4.0% to 6.0% funded through the reduction to the Hedge Funds allocation.
- Given the allocation is multi-asset in nature it does not lend itself to creating significant concentration risk and it would allow for an ambitious approach to impact to be further demonstrated.

Page•

Investment Strategy Modelling Portfolio's Modelled – 30 September 2022

| | | | | ,===== | | |
|----|-------------------------|---------|------------|-----------|-----------|--|
| | | SAA (%) | Actual (%) | Alt 1 (%) | Alt 2 (%) | |
| | Global Equity | 10.0 | 11.1 | 15.0 | 10.0 | |
| | EM Equity | 10.0 | 9.1 | 5.0 | 10.0 | |
| | MAC | 12.0 | 9.7 | 12.0 | 10.0 | |
| | Hedge Funds | 7.0 | 7.3 | 5.0 | 7.0 | |
| | Best Ideas | 11.0 | 11.6 | 11.0 | 12.0 | |
| _ | Private Markets | 27.0 | 30.2 | 29.0 | 28.0 | |
| gy | CRMF | 23.0 | 17.1 | 23.0 | 23.0 | |
| - | Cash | 1 | 3.9 | - | - | |
| Ċ | Total | 100.0 | 100.0 | 100.0 | 100.0 | |
| | | | | | | |
| | Interest Rate Hedge (%) | 50% | 50% | 50% | 50% | |
| | Inflation Hedge (%) | 40% | 40% | 40% | 40% | |
| | | | | | | |

Recommended Strategy

Investment Strategy Modelling Key return Percentiles – 30 September 2022

| Return metrics (20 years) | SAA (%) | Actual (%) | Alt 1 (%) | Alt 2 (%) |
|--|----------------|----------------|----------------|----------------|
| Expected absolute return | 8.0% p.a. | 8.0% p.a. | 7.9% p.a. | 7.9% p.a. |
| Expected return over CPI | CPI +4.8% p.a. | CPI +4.9% p.a. | CPI +4.7% p.a. | CPI +4.7% p.a. |
| Risk (3-year 95% VaR) (£m) | £861m | £873m | £855m | £857m |
| Probability of achieving Past Service Discount Rate of CPI +2.4% p.a. | 81.5% | 81.2% | 81.0% | 80.9% |
| Probability of achieving Future Service Discount Rate of CPI + 2.5% p.a. | 80.5% | 80.2% | 80.0% | 79.8% |

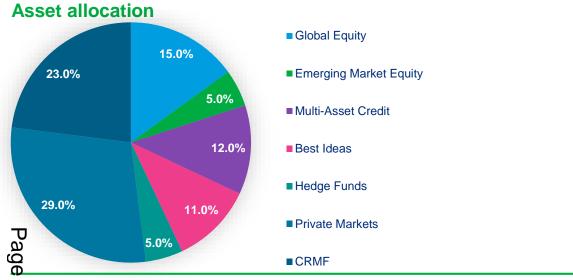
| | SAA (%) | Actual (%) | Alt 1 (%) | Alt 2 (%) |
|--|----------------|----------------|----------------|----------------|
| 60% Confidence | CPI +4.1% p.a. | CPI +4.1% p.a. | CPI +4.1% p.a. | CPI +4.1% p.a. |
| 68% Confidence (proposed past service discount rate) | CPI +3.4% p.a. | CPI +3.4% p.a. | CPI +3.3% p.a. | CPI +3.3% p.a. |
| 70% Confidence | CPI +3.4% p.a. | CPI +3.4% p.a. | CPI +3.3% p.a. | CPI +3.3% p.a. |
| 80% Confidence | CPI +2.5% p.a. | CPI +2.5% p.a. | CPI +2.4% p.a. | CPI +2.4% p.a. |

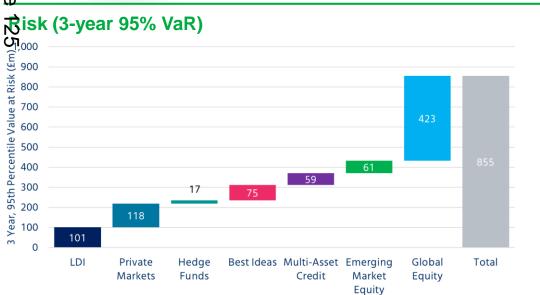
Note: Future Service Discount Rate yet to be agreed.



Investment Strategy Modelling

Alt 1 Asset Allocation





Key metrics

| | Alt 1 |
|---|----------------|
| Expected return (CPI + X) | CPI +4.7% p.a. |
| Expected absolute return | 7.9% p.a. |
| Probability of achieving Past Service Discount Rate of CPI +2.4% p.a. | 81.0% |
| Probability of achieving Future Service Discount Rate of CPI +2.5% p.a. | 80.0% |
| Risk (3-year 95% VaR) | £855m |
| | Real Return |
| 60% Confidence | CPI +4.1% p.a. |
| 68% Confidence | CPI +3.3% p.a. |
| 70% Confidence | CPI +2.5% p.a. |
| 80% Confidence | CPI +2.4% p.a. |

Hedging

| Interest Rate Hedge Ratio | 50% | |
|---------------------------|-----|--|
| Inflation Hedge Ratio | 40% | |

Recap on the Fund's Net Zero Commitments

Total Fund and Listed Equity

2020 (1) 2030 2050

For the Fund as a whole:

- to have at least 30% of the Fund's assets allocated to sustainable investments by 2030
- to expand the measurement of the carbon emissions of the Fund's investments to 25 include all assets by the end of 2023

Within the Listed Equity portfolio:

to achieve a reduction in carbon emissions of 36% by 2025 and 68% by 2030 to target at least 30% of the Listed Equity portfolio to be invested in sustainable assets by 2030 to reduce fossil fuel exposure relating to oil and gas by 70% by 2025 and 90% by 2030

- to reduce fossil fuel exposure relating to coal by 90% by 2025 and 95% by 2030
- to engage with the biggest polluters within the Fund's Listed Equity portfolio as part of an overarching stewardship and engagement strategy, to achieve:
 - by 2025, at least 70% of organisations in carbon-intensive sectors have clearly articulated and credible strategies to attain net zero or are subject to engagement to achieve this objective
 - by 2030, at least 90% of organisations in carbon-intensive sectors have clearly articulated and credible strategies to attain net zero or are subject to engagement to achieve this objective

Further climate change scenario analysis based on latest Mercer model (including three temperature scenarios) to be undertaken in Q1 2023

Summary of recommendations

| | Current target allocation (%) | Proposed allocation (Alt 1) (%) | Change | Comments |
|---|-------------------------------|------------------------------------|----------|--|
| Global Equity | 10.0 | 15.0 | Increase | Total Global Equity allocation to be held via WPP Sustainable Active Equity Sub-fund post launch |
| Emerging Market Equity | 10.0 | 5.0 | Reduce | Scale back given uncertainties in emerging markets |
| Best Ideas Portfolio | 11.0 | 11.0 | - | |
| Hedge Funds | 7.0 | 5.0 | Reduce | Reduce allocation, still role to play though hedging opportunities also via CRMF |
| Multi-Asset Credit | 12.0 | 12.0 | - | |
| Private Markets | | | | |
| Property | 4.0 | 4.0 | - | Allocation remains overweight at present vs previous strategic recommendations – belief to reduce UK exposure still strong |
| rivate Equity | 8.0 | 8.0 | - | |
| C_Local/ Impact | 4.0 | 6.0 | Increase | Fund can continue to build on progressive work to date |
| nfrastructure | 8.0 | 8.0 | - | |
| Private Credit | 3.0 | 3.0 | - | |
| Stabilising Assets | | | | |
| CRMF | 23.0 | 23.0 | - | |
| Cash | - | - | - | |
| Total | 100.0 | 100.0 | | |
| Expected return (% p.a.) | CPI +4.8% p.a. | CPI +4.7% p.a. | - | Slight decrease in overall expected returns |
| Risk (1 Year 95% Asset VaR) | £861m | £855m | - | Marginal decrease in risk |
| Probability achieving PSDR (CPI +2.4% p.a.) | 81.5% | 81.0% | - | |
| Probability achieving FSDR (CPI +2.5% p.a.) | 80.5% | 80.0% | - | |

Note: Positions above cover September Modelling. PSDR = Past Service Discount Rate (CPI +2.4% p.a. as at 30 September 2022), FSDR = Future Service Discount Rate (CPI +2.5% p.a. as at 30 September 2022) – FSDR yet to be agreed. Expected return and VaR based on Mercer's UK Capital Markets Assumptions as at 30 September 2022.



Conclusion & Next Steps



The Fund's current investment strategy only requires "light touch" changes.



The recommendations are consistent with the Fund's Responsible Investment commitments and will demonstrate further progress on sustainability and impact investment.



Subject to Committee approval of the proposed changes to the Fund's investment strategy, the proposed changes to the Fund's **Investment Strategy Statement (ISS)** will be made.



Subsequent implementation planning to be undertaken by Officers with assistance provided by Mercer.

Appendix

Investment Strategy Modelling Portfolio's Modelled – 31 March 2022

| | | SAA (%) | Actual (%) | Alt 1 (%) | Alt 2 (%) | | |
|---|-----------------|---------|------------|-----------|-----------|--|--|
| | Global Equity | 10.0 | 10.6 | 15.0 | 10.0 | | |
| | EM Equity | 10.0 | 8.9 | 5.0 | 10.0 | | |
| | MAC | 12.0 | 9.9 | 12.0 | 10.0 | | |
| | Hedge Funds | 7.0 | 6.4 | 5.0 | 7.0 | | |
| - | Best Ideas | 11.0 | 11.0 | 11.0 | 12.0 | | |
| 9 | Private Markets | 27.0 | 24.8 | 29.0 | 28.0 | | |
| | CRMF | 23.0 | 25.2 | 23.0 | 23.0 | | |
| | Cash | - | 3.2 | - | - | | |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | | |
| | | | | ~ | | | |

Recommended Strategy

| Interest Rate Hedge (%) | 50% | 50% | 50% | 50% |
|-------------------------|-----|-----|-----|-----|
| Inflation Hedge (%) | 40% | 40% | 40% | 40% |

Investment Strategy Modelling Key return Percentiles – 31 March 2022

| Return metrics (20 years) | SAA (%) | Actual (%) | Alt 1 (%) | Alt 2 (%) |
|--|----------------|----------------|----------------|----------------|
| Expected absolute return | 5.9% p.a. | 5.7% p.a. | 5.8% p.a. | 5.8% p.a. |
| Expected return over CPI | CPI +2.7% p.a. | CPI +2.5% p.a. | CPI +2.7% p.a. | CPI +2.7% p.a. |
| Risk (3-year 95% VaR) (£m) | £887m | £843m | £873m | £875m |
| Probability of achieving Past Service Discount Rate of CPI +1.5% p.a. | 66.9% | 65.2% | 67.5% | 67.3% |
| Probability of achieving Future Service Discount Rate of CPI + 2.0% p.a. | 59.7% | 57.7% | 60.1% | 60.2% |

| | SAA (%) | Actual (%) | Alt 1 (%) | Alt 2 (%) |
|--|----------------|----------------|----------------|----------------|
| 60% Confidence | CPI +2.0% p.a. | CPI +1.8% p.a. | CPI +2.0% p.a. | CPI +2.0% p.a. |
| 68% Confidence (proposed past service discount rate) | CPI +1.5% p.a. | CPI +1.5% p.a. | CPI +1.5% p.a. | CPI +1.5% p.a. |
| 70% Confidence | CPI +1.3% p.a. | CPI +1.1% p.a. | CPI +1.3% p.a. | CPI +1.3% p.a. |
| 80% Confidence | CPI +0.4% p.a. | CPI +0.3% p.a. | CPI +0.4% p.a. | CPI +0.4% p.a. |

Note: Future Service Discount Rate yet to be agreed.



Tactical Allocation Portfolio

Best Ideas Portfolio

- Take advantage of short term, tactical opportunities.
- Asset allocation decisions based on a 12 month time horizon.
- The Mercer Tactical Allocation Group meets on a monthly basis to discuss tactical views based on a one year outlook this forms a natural starting point for assessment of the Best Ideas portfolio's tactical positioning.
- Monthly meetings between Mercer and Officers on Opportunities and Threats.
- Overall asset allocation within the Clwyd Pension Fund at each point in time is considered before arriving at decisions.
- Invested on the Mobius platform accessing a wide range of managers and funds.

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FLINTSHIRE COUNTY COUNCIL

Administering Authority for CLWYD PENSION FUND

INVESTMENT STRATEGY STATEMENT

February 2023

INVESTMENT STRATEGY STATEMENT

Statutory Requirement for an Investment Strategy Statement

Flintshire County Council is the Administering Authority responsible for maintaining and managing the Clwyd Pension Fund (the Fund) on behalf of its stakeholders; the scheme members and employers participating in the Fund. These responsibilities are primarily set out in Local Government Pension Scheme regulations; the regulatory framework is set out below.

Regulation 7(1) of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 (the LGPS Investment Regulations), which replace the 2009 Investment Regulations requires administering authorities to formulate an Investment Strategy Statement (ISS) which must be in accordance with guidance issued by the Secretary of State. This replaces the existing requirement to produce and maintain a Statement of Investment Principles.

The ISS must include:

- a) A requirement to invest money in a wide variety of investments
- b) The authority's assessment of the suitability of particular investments and types of investments
- c) The authority's approach to risk, including the ways in which risks are to be measured and managed
- d) The authority's approach to pooling investments, including the use of collective investment vehicles and shared services
- e) The authority's approach on how social, environmental or corporate governance considerations are taken into account in the selection, non-selection, retention and realisation of investments and
- f) The authority's policy on the exercise of rights (including voting rights) attaching to investments.

The ISS must also set out the maximum percentage of the total value of all investments that it will invest in particular investments or classes of investments. This, in effect, replaces Schedule 1 of the 2009 Regulations.

The statement must be published by 1 April 2017 and regularly reviewed at least every three years.

The original Clwyd Pension Fund ISS was designed to comply with the guidance given by the Secretary of State and was effective from 1 April 2017. It has been reviewed on a regular basis and was updated in 2022. This updated version was presented to the Committee in February 2023 for approval.

This ISS should be read in conjunction with the following statutory documents:

Funding Strategy Statement

Governance Policy and Compliance Statement

Communications Strategy

Clwyd Pension Fund Annual Report and Accounts

Clwyd Pension Fund Actuarial Valuation.

All the above statements and documents can be found on the Fund's web site at https://mss.clwydpensionfund.org.uk/.



ABOUT THE FUND

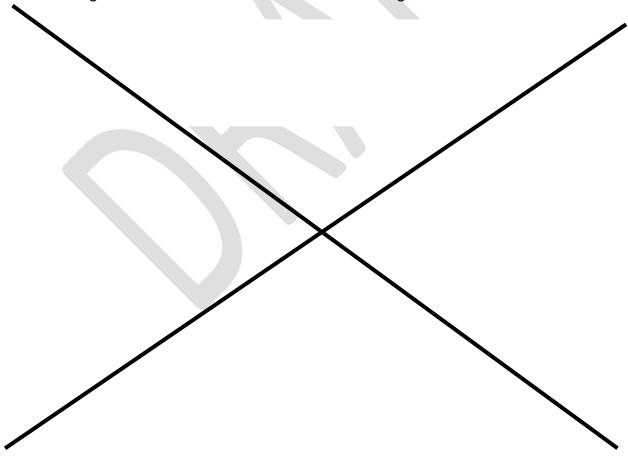
The Clwyd Pension Fund is a £2.3bn Local Government Pension Fund which provides death and retirement benefits for local government employees (other than teachers, police and firefighters) in North East Wales and employees of other qualifying bodies which provide similar services.

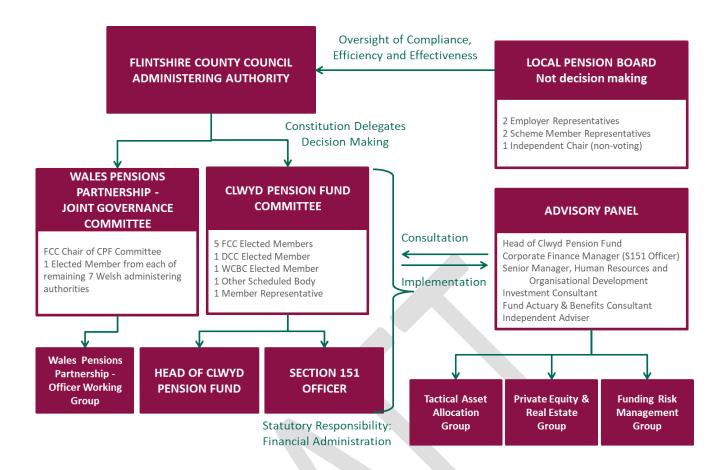
Total Fund membership at the last actuarial valuation was 48,947 with 16,996 active contributors from 51 contributing employers and 31,951 retired members, widows and deferred members.

Governance and Management of the Fund

The key decision making and management of the Fund has been delegated by Flintshire County Council (the Council) to a formal Pension Fund Committee (the Committee), supported by a Pensions Advisory Panel (AP). Before making strategic investment decisions the Fund takes advice from a regulated investment consultant; Mercer, who also provide Risk Management advice. The Council's Section 151 Officer (Corporate Finance Officer) has a statutory responsibility for the proper financial affairs of the Council including Fund matters.

The Fund's governance structure is illustrated in the diagram below.





Aims and Objectives

Our Fund's Mission Statement is:

to be known as forward thinking, responsive, proactive and professional, providing excellent customer focused, reputable and credible service to all customers.

to have instilled a corporate culture of risk awareness, financial governance, and to provide the highest quality distinctive services within the resource budget.

to work effectively with partners, being solution focused with a 'can do' approach.

This applies to the approach to investing the Fund's monies as well as managing the overall Fund. The Mission Statement has been developed to guide the management of all aspects of the Fund.

The specific objectives relating to the funding and investment management of the Fund are summarised below.

Achieve and maintain assets equal to 100% of liabilities within the 12-year average timeframe, whilst remaining within reasonable risk parameters

Determine employer contribution requirements, whilst recognising the constraints on affordability and strength of employer covenant, with the aim being to maintain as predictable an employer contribution requirement as possible

Recognising the constraints on affordability for employers, aim for sufficient excess investment returns relative to the growth of liabilities

Strike the appropriate balance between long-term consistent investment performance and the funding objectives

Manage employers' liabilities effectively through the adoption of employer specific funding objectives

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Ensure net cash outgoings can be met as/when required

Minimise unrecoverable debt on employer termination

Ensure that its future strategy, investment management actions, governance and reporting procedures take full account of longer-term risks and sustainability

Ensure that the Fund's investments are aligned with the transition to a low carbon economy through a commitment to achieving a net zero carbon dioxide emission's target by 2045

Promote acceptance of sustainability principles and work together with others to enhance the Fund's effectiveness in implementing these

Aim to use the Wales Pensions Partnership as the first choice for investing the Fund's assets subject to it being able to meet the requirements of the Fund's investment strategy and objectives (including sustainability requirements), within acceptable long-term costs to deliver the expected benefits and subject to ongoing confidence in the governance of the Partnership.

The key actions and areas of focus that have been identified to achieve these objectives are included in the Fund's business plan, to align with the key aims and objectives of this strategy.

Investment Strategy of the Clwyd Pension Fund

The following sections detail the Fund's investment strategy, which takes into account LGPS Investment Regulations 7(2)(a) and 7(2)(b) as summarised below:

Investment of money in a wide variety of investments

Regulation 7(2)(a) requires that administering authorities invest in a diversified portfolio of assets to ensure that risk is appropriately managed and volatility of overall return is reduced. The guidance does not prescribe the specific asset classes over which Fund monies must be invested.

Suitability of particular investments and types of investments

Regulation 7(2)(b) requires that in assessing the strategic allocation for the Fund, an administering authority assesses the suitability of particular investments and types of investments against the need to meet pension obligations as they fall due.

In assessing the suitability and variety of investments, and considering the risks, the starting point should be the Fund's overall objectives. The investment and funding objectives are listed in the previous section "About the Fund".

In order that these primary objectives can be achieved, the following funding and investment principles have been agreed.

Funding Principles

The Clwyd Pension Fund Funding Strategy implemented for three years at the 31 March 2022 valuation includes a number of investment return assumptions:

An investment return (discount rate) for the funding target of CPI inflation plus 1.5% p.a. (assumed 4.60% p.a.).

An investment return (discount rate) for the future service contribution rate of CPI inflation plus 2% p.a. (assumed 5.10% p.a.).

Over a three-year period, an investment return above these assumptions (updated accordingly for changes in market outlook as per the separate funding monitoring reports) will contribute to improving the funding position and thus employer contributions, providing that liability assumptions such as longevity and inflation remain on target and the membership remains broadly the same profile. The Fund's triennial valuation considers all these factors when determining employer contribution rates. New employer rates will be implemented from 1 April 2023 as part of the 2022 valuation.

A Funding Strategy Statement (FSS) was prepared in accordance with Regulation 58 of the Local Government Pension Scheme Regulations 2013. The FSS outlines the strategy for recovering the funding deficit over 12 years. A copy of the FSS can be obtained from the Fund's web site at https://mss.clwydpensionfund.org.uk/. The funding strategy will be monitored during 2023/26.

In managing the Fund, the key funding objectives are:

to aim for a funding level of 100% and

to aim for long term stability in employers' contribution rates, whilst recognising the constraints on affordability for employers.

A full list of the funding aims and objectives of the Fund are set out within the FSS.

The Clwyd Pension Fund was funded at 105% of liabilities (as at 31 March 2022) and employers' contribution rates are currently structured to achieve a gradual return to 100% funding by 2035 i.e. 12 years from 1 April 2023.

Whilst stability of costs from the employers' contribution rates has the higher priority, absolute cost to the employer is also important. This implies that:

the cost of administering the Fund will be constrained by the adoption of best management practice

employers will adopt appropriate and economic policies in those areas where they have discretion and where the costs of their actions fall on the Fund

the Fund's overall investment policy will be aimed at achieving superior investment returns relative to the growth of liabilities. This implies that the Fund will continue to take active risk in how it invests its assets relative to its liability profile.

The investment principles of the Fund are stated in full below and are intended to strike the appropriate balance between delivering the strategy most suitable for long-term consistent performance and achieving the funding objectives. A favourable investment performance can play a valuable role in achieving adequate funding over the longer term.

Investment Principles

The key investment objectives for the Fund are to aim for sufficient excess investment returns relative to the growth of liabilities to meet the funding objectives set out above on an on-going basis, whilst maintaining an appropriate balance between long-term consistent investment performance and the funding objectives.

The Fund's overall strategic risk and return profile is currently determined through its strategic asset allocation. In establishing the Fund's long-term strategic asset allocation, or strategic benchmark, the key factors are the overall level of return being sought, the minimum level of risk consistent with this and the impact of diversification in reducing this risk further. At asset class or mandate level, asset class weightings, appropriate benchmarks and out-performance targets are the key building blocks in framing this overall Fund strategy.

It is Fund policy to carry out a fundamental review of the Fund's investment structure and management arrangements at least every four years. The review includes research on market views for the longer-term risk, return and correlation profiles for different asset classes and a more tactical view on the global economic and market environment over the next three to five years. This research is used to determine an optimum future balance between the various assets classes and hence the Fund's fixed strategic benchmark.

The latest Fund review was undertaken in 2022 and the resulting changes will be implemented in 2023. Details of the investment strategy are included in the following sections.



Investment Strategy

Setting the Strategy

The Fund's investment strategy has been determined to meet the objectives outlined earlier in this Statement. This includes consideration for the Fund's liability profile and the attitude to risk.

The strategic benchmark highlighted later in this section takes account of the risk and return characteristics of each asset class and provides a reasonable long-term balance appropriate to the liabilities of the Fund. The Fund considers the mix of asset classes in forming an overall portfolio and considers the correlation in volatility and return of each.

The Fund recognises the benefits of diversification across asset classes, as well as within them, in reducing the risk that results from investing in any one particular market. Where they consider it advisable to do so, investment managers have been appointed to select and manage the allocations across asset classes, in particular where it would not be practical (or appropriate) for the Fund's Committee and officers to commit the resources necessary to make these decisions themselves.

In assessing the suitability of investments required to form the overall portfolio a number of characteristics of each asset class, and sub asset class, are considered. These characteristics include potential return, risk/volatility of returns, liquidity, duration and interest rate sensitivity. In setting and reviewing an overall investment strategy for the Fund the starting point is always the Actuary's assessment of the liabilities of the Fund. This assessment will include cash flow requirements and an assessment of the required return to ensure the long-term solvency of the Fund, and it is essential that the investment strategy is compatible with this.

2022 Review

The 2022 review showed, using Mercer market forecasts as at 31 March 2022, that the expected market returns over the coming ten-year period would mean that the Fund could be expected to generate a return of 5.8% p.a. (CPI inflation plus 2.7% p.a.). Investigations showed that the portfolio was, in the main, well diversified and did not need significant change. However, there were opportunities to incorporate the Fund's Responsible Investment objectives without substantially reducing return.

These opportunities led to four main areas of change:

New Sustainable equity allocation to support Responsible Investment Policy

Decrease physical listed equity allocations in Emerging Markets due to uncertainties in this asset class

Reduce existing Hedge Funds allocation

Increase allocation to Local/Impact portfolio in Private Markets portfolio

These changes meant that the expected return would decrease by 0.1%, however the changes made are appropriate for the Funds long-term objectives.

Further details in relation to the investment strategy are outlined in this section.

The Fund distinguish between three types of investment decision: strategic, tactical and stock-level.

Strategic Investment Decisions

These decisions are long-term in nature and are driven by an understanding of the objectives, needs and liabilities of the Fund.

Strategic investment decisions are made by the Committee. They do so after receiving advice from their investment consultant. Examples of such decisions and of tasks relating to the implementation of these decisions include the following:

Setting investment objectives

Determining the split between the growth and the stabilising portfolios

Determining the allocation to asset classes within the growth and stabilising portfolios

Determining the Fund benchmark

Reviewing the investment objectives and strategic asset allocation.

Tactical Investment Decisions

These decisions are short-term and based on expectations of near-term market movements. Such decisions may involve deviating temporarily from the strategic asset allocation and may require the timing of entry into, or exit from, an investment market or asset class.

These decisions are ultimately the responsibility of the Committee. However, where such decisions are made within a pooled fund, they are the responsibility of the investment manager of the respective fund. Furthermore, the Committee have delegated certain powers to the Head of the Clwyd Pension Fund taking advice from the Tactical Asset Allocation Group. The purpose of the Tactical Allocation Portfolio, managed by the group is to take advantage of short-term (approximately one year) opportunities that are consistent with the long-term risk and return goals of the Fund. The Tactical Allocation Group is bound by the Tactical Allocation Portfolio Terms of Reference.

Stock Selection Decisions

All such decisions are the responsibility of the investment managers with which the Fund invests.

Strategic Asset Allocation

In setting the Strategic Asset Allocation for the Fund the LGPS Investment Regulations require the Fund to invest in a wide variety of investments and in doing so assess the suitability of particular types of investments. Subject to satisfying these elements of the Regulations the Fund is not constrained to certain types of investments; the requirement is for the Fund to set its own limits. In reviewing the strategy, the Fund considers the existing and a range of alternative asset classes.

In setting the Strategic Asset Allocation for the Fund, the Fund has taken into consideration how it might best achieve its Responsible Investment objectives, which are noted later on in this document.

Balance between different types of investments

The LGPS Investment Regulations require the administering authority to have regard for the diversification of the Fund's investments.

The Fund will, at all times, invest across a diversified portfolio of investments to reduce investment risk. In addition to diversifying by assets, the Fund will invest across a number of managers and via different approaches and styles to investing.

The Fund may invest via pooled and segregated portfolios based on the appropriateness of each portfolio. The Fund can invest across a combination of passive, active and absolute return investment approaches based on return potential, cost and flexibility of implementation.

The investment structure agreed in the 2022/23 investment strategy review is detailed in the table below:

| Asset Class | Strategic Weight |
|------------------------------------|--------------------|
| Developed Global Equity* | <mark>15.0%</mark> |
| Emerging Market Equity | <mark>5.0%</mark> |
| Hedge Funds | <mark>5.0%</mark> |
| TAA/Best Ideas ** | 11.0% |
| Multi-Asset Credit | 12.0% |
| Cash and Risk Management Framework | 23.0% |
| Private Markets*** | |
| Property | 4.0% |
| Private Equity | 8.0% |
| Local/Impact | <mark>6.0%</mark> |
| Infrastructure | 8.0% |
| Private Credit | 3.0% |
| Total | 100.0% |

Notes:

*The Global Equity Portfolio includes a <mark>15%</mark> Strategic Weight to a the WPP Active Sustainable Global Equity Fund

**The Best Ideas Portfolio is tactically allocated according to shorter-term market views. This can be implemented by increasing the allocation to any of the asset classes listed above or by separate asset classes in any type of investment. This allocation is made through consultation with the Tactical Allocation Group, which is bound by the Tactical Allocation Portfolio Terms of Reference. The objective of the Tactical Allocation Portfolio is to add value to the overall Clwyd Pension Fund return.

***The Target allocation of the underlying asset classes in Private Markets will take some time to achieve due to the illiquidity of the asset classes involved.

The Fund's investment managers are remunerated either by way of an ad valorem fee, i.e. the fee is a percentage of the value of assets under management, or a combination of an ad valorem and performance-related fee. The principle of performance-related fees is that the base fee is lower and that the manager is only paid a higher fee if the performance objective is met or exceeded.

Asset Allocation and Long Term Expected Return on Investment

The strategic asset allocation for the Fund must be consistent with the investment return assumed in the funding strategy (updated accordingly for changes in market outlook). The investment strategy reflects the medium to long term nature of the liabilities but must also provide flexibility to manage short term volatility in markets. In addition, the investment strategy must take account of possible changes to cash flows as the membership profile of the Fund or the benefits structure changes.

The investment strategy reflects the differing return and risk profiles of each asset class. However, long term risk and return expectations are not consistently generated over all time frames and, for all asset classes, there can be periods of under or out-performance compared to the long-term expectations.

The strategic framework includes a target allocation against which strategic performance will be monitored (referred to as the Strategic Allocation). In addition, there are ranges for each asset category that allow limited deviation within the framework (referred to as the Strategic Range). The ranges enable the Fund to reflect changes in the market outlook and provide greater flexibility to implement cash management and rebalancing.

In addition to the Strategic Allocation and Strategic Ranges, a conditional medium-term asset allocation (the Conditional Range) exists, to manage major risks to the long term strategic asset allocation which may emerge between Fund reviews.

The Fund's strategic allocation, as set out below, does not assume any outperformance from the investment managers. The expected returns stated in this table are as at the date of the 2022/23 strategic review.

| Asset Class | Strategic Allocation (%) | Strategic Range (%) | Conditional Range* (%) | Expected return above inflation (CPI) p.a.** |
|--|--------------------------------|------------------------|------------------------------|---|
| Developed Global Equity | <mark>15.0</mark> | 10.0 - 20.0 | 0 – 30 | <mark>3.5%</mark> |
| Emerging Market Equity | <mark>5.0</mark> | 2.5 - 7.5 | <u>0 – 15</u> | <mark>2.1%</mark> |
| Hedge Funds | <mark>5.0</mark> | 2.5 - 7.5 | 0 – 15 | 1 <mark>.2</mark> % |
| TAA/Best Ideas*** | 11.0 | 9.0 – 13.0 | 0 – 20 | 2.5% |
| Multi-Asset Credit | 12.0 | 10.0 – 14.0 | 0 – 20 | <mark>2.5%</mark> |
| Cash and Risk Management Framework**** | 23.0 | 10.0 – 35.0 | 0 – 40 | <mark>1.3%</mark> |
| Private Markets | | | | |
| Property | 4.0 | 2.0 - 6.0 | 8 – 0 | <mark>1.2%</mark> |
| Private Equity | 8.0 | 6.0 – 10.0 | 0 – 15 | <mark>3.0%</mark> |
| Local/Impact | <mark>6.0</mark> | 4.0 - 8.0 | <u>0 – 15</u> | <mark>2.7%</mark> |
| Infrastructure | 8.0 | 6.0 – 10.0 | 0 – 15 | <mark>2.3%</mark> |
| Private Credit | 3.0 | 1.0 – 5.0 | 0 - 6 | <mark>2.2%</mark> |
| Total | 100.0 | | | |

Notes:

- * The Conditional ranges are at a total Fund level.
- ** Median expected return is expressed as an excess long-term return over CPI Inflation to reflect extra risk being taken, excluding active management. This is based on Mercer Market Forecast as at the date of the 2022/23 strategic review. CPI Inflation is used as the basis for expected returns as it is a proxy for valuing the liabilities.
- *** The Best Ideas allocation is a short term (12-month horizon) tactical allocation based on Mercer's (the Fund's Investment consultant) "best ideas". The portfolio should be liquid and cost efficient.
- **** The Cash and Risk Management Framework, a combination of Liability Driven Investment (LDI) synthetic equity instruments and cash plus funds (allocated to for collateral management efficiency), is managed as part of a risk management approach. Given the nature of this mandate i.e. protection against liability changes, it is not intended to rebalance the allocation, which can lead to a movement away from the initial strategic allocation of 23%.

The inclusion of a diversified range of assets and the scope for tactical allocation in the strategy is expected to improve the probability of the Fund achieving its long-term objectives, whilst maintaining the overall volatility of returns without significantly altering the Fund's expected long-term return. This is explained in more detail in the risk section below.

Cash and Risk Management Framework

In March 2014, the Fund set up a Risk Management Framework (now referred to as Cash and Risk Management Framework). This has evolved since its initial implementation, and now includes the following strategies that seek to manage a variety of financial risks. These strategies are implemented by Insight Investment Management (Insight). Further

information on the Framework can be found in the Funding, Flight-Path and Risk Management report which goes to each Pension Fund Committee meeting.

Funding Level Monitoring

An approximate funding level is monitored daily and reported formally to the Funding and Risk Management Group on a monthly basis. Should the approximate daily monitoring indicate that the 110% trigger has been reached, an agreed process will be followed (as agreed by the Pension Fund Committee") to formally confirm whether the trigger has been met and whether any changes to the strategy should be made. This will then be brought to Committee for approval.

Liability hedging programme, controlling the Fund's interest rate and inflation risk

In March 2014, the Fund established a liability hedging programme covering both interest rate and inflation risks. A 'flightpath' for increasing the level of protection was agreed based on market yield triggers to ensure that risk was reduced at favourable times. Since the adoption of the flightpath, a number of market triggers have been implemented.

As part of the 31 March 2022 actuarial valuation and investment strategy review cycle, the Funding and Risk Management Group (FRMG) have reviewed the flightpath and no change has been made to the interest rate and inflation triggers at this stage.

As at 30 September 2022 the interest rate and inflation hedge ratios were 50%/40%, respectively, in line with their targets.

Furthermore, as part of the strategy review new triggers have been put in place and if these are achieved then the hedge ratios will be increased and implemented in line with the delegations to the Head of Fund, after taking appropriate regulated advice, given the needs to implement quickly and efficiently in line with the overall strategic objective agreed by the Pension Fund Committee.

Synthetic equity portfolio, gaining exposure to equities whilst hedging the downside risk

The Fund implemented a synthetic equity strategy in order to increase its expected return potential in a capital efficient manner. In order to manage the downside risks associated with the synthetic equity strategy, a dynamic equity protection strategy was put in place in May 2018. This provides improved flexibility and on-going governance versus the previous static approach as it allows the structure to more easily adapt to changing market conditions.

Currency hedging strategy

The Fund has implemented a currency hedging strategy to reduce the risk of a strengthening pound devaluing the value of the Fund's physical overseas equity holdings. This was in light of the continued weakening of sterling. As holders of overseas assets, the Fund had benefitted significantly from the fall in sterling following the EU referendum and wished to reduce currency risk by locking in a portion of the gains made.

Collateral management strategy

The above strategies make use of derivatives and therefore require collateral to be set aside in order to support the positions and protect the Fund (and counterparties) from the risk of default. There is a balance between holding enough collateral to support the strategies against a material and sudden move in markets, versus holding too much that it becomes a drag on the Fund's returns.

In order to manage this balance, the Fund implemented a collateral management strategy. This ensures that the Fund holds the required amount of collateral to support the strategies, with any excess collateral held in higher yielding funds that can be sold quickly if more collateral is required. This helps generate additional return and reduces the governance burden on the Fund, leading to improved efficiency.

Realisation of investments

The Fund's investment policy is structured so that the majority of its investments (in equities and bonds) can, except in the most extreme market conditions, be readily realised.

However, the availability of alternative investment vehicles enables the Fund to invest in less liquid asset classes and to build well-diversified portfolios. Investments such as property, infrastructure and private equity/debt are long term investments which the Fund is less likely to be able to realise in a short period. "Lock-up" periods are normal practice in hedge funds (to manage the in/out flows to ensure existing clients' capital is protected) which means that these investments are not readily realisable either.

Notwithstanding this, the Fund maintains sufficient investments in liquid assets to meet its liabilities in the short and medium term as they fall due.

Cash Strategy

From 1 April 2011 the 2009 Investment Regulations required the Fund to have a separate bank account from the Local Authority.

The Pension Fund does not have a strategic allocation to cash for investment purposes but holds surplus cash for paying:

Benefits and transfers as per the Regulations.

The administration costs of the Fund.

The Investment management fees.

Commitments to real assets and private market investments.

However, in extreme market conditions cash could be used as part of the Conditional Asset Allocation. The aim is to avoid requiring to borrow for liquidity purposes, although the LGPS Investment Regulations allow Pension Funds to borrow for a maximum of 90 days.

The cash could be deposited in one of the following, subject to cash flow requirements:

The Pension Fund bank account with the National Westminster bank for daily liquidity.

A deposit account with the National Westminster Bank with instant access.

The Insight Liquidity Fund for unexpected liquidity requirements or higher rates of return.

Stock Lending

The Fund only currently invests in pooled vehicles so cannot undertake any stock lending. The stock lending policy on pooled funds is determined by the individual investment managers. Any income not retained by the fund manager and / or the lending agent is incorporated in the net asset values of each pooled fund. It has been agreed that investments made through the Wales Pension Partnership will be covered by the pool's stock lending policy.

Approach to risk, including the ways in which risks are to be measured and managed

LGPS Investment Regulation 7(2) (c) requires that funds describe their approach to risk within their investment portfolio, including summarising the key risks and detailing the approach to mitigate the risk (where possible or appropriate).

Risk Register

The Clwyd Pension Fund has a Risk Management Policy and Risk Register in place.

The Risk Register has a section dedicated to Funding & Investment Risks (including accounting and audit). Specific asset/investment risks highlighted in the risk register include those around investment markets, the failure of managers to achieve their objectives, missing out on market opportunities, and liquidity. The risk register is continually updated and key risks are considered on a regular basis at the Committee and AP meetings.

The main risk for the Fund is the mismatch between its assets and liabilities. As a consequence, if the investment returns are less than that required in the funding strategy, the funding level will deteriorate (all else being equal). The main risks within the funding strategy are interest rate, inflation and mortality risks, and investment risk arising from the investment portfolio, which is controlled through diversification of asset holdings. The Fund has a bespoke Cash and Risk Management Framework that has established objectives to ensure that the Fund's exposure to interest rate risk and inflation risk is managed and monitored on an on-going basis.

Investment, by its very nature, is a risk-based activity where the returns achieved will reflect differing levels of risk. There are a number of investment risks to consider within an investment fund, namely manager, market, credit, currency and liquidity risks. Consideration of financially material non-financial risks is considered in the Fund's Responsible Investment Policy which is explained later in this document. This includes the Fund's approach to the risks and opportunities associated with climate change, and the transition to a low carbon economy.

In considering the Fund's investment strategy, it is necessary to have regard to the balance between risk and return. In practice, the investment strategy objective will be to achieve the highest possible return whilst minimising the downside risk, within agreed parameters.

Solvency Risk and Mismatching Risk

These are measured through a qualitative and quantitative assessment of the expected development of the assets relative to the liabilities.

These are managed by setting a Fund-specific strategic asset allocation with an appropriate level of risk.

Manager Risk (including the Wales Pension Partnership)

This is assessed as the expected deviation of the prospective risk and return, as set out in the managers' objectives, relative to the investment policy.

It is measured by monitoring the actual deviation of returns relative to the objective and factors supporting the managers' investment process, and by monitoring and replacing any managers where concerns exist over their continued ability to deliver the investment mandate.

The aim of the investment strategy and management structure is to manage the appropriate level of risk for the return target which reflects the funding strategy. The Fund's external investment managers are required to invest in line with the investment guidelines set by the Fund. Independent custodians safe keep the assets on behalf of the Fund.

Liquidity Risk

This is monitored according to the level of cash-flows required by the Fund over a specified period.

Whilst ensuring that there is the appropriate liquidity within the assets held, the Fund invests in less liquid investments to take advantage of the "illiquidity premium" offered.

Despite this the Fund holds an appropriate amount of readily realisable investments. The Fund's assets are invested in pooled funds which are readily realisable and there is a significant amount of liquidity based upon the existing strategic asset allocation.

Political Risk

This is measured by the level of concentration in any one market leading to the risk of adverse influence on investment values arising from political intervention.

The Fund manages this by regular reviews of the investments and through investing in funds which give a wide degree of diversification.

Corporate Governance Risk

This is assessed by reviewing the Fund's investment managers' policies regarding corporate governance.

It is managed by delegating the exercise of voting rights to the managers, who exercise this right in accordance with their published corporate governance policies. In the future the Wales Pension Partnership will engage and exercise voting rights on behalf of the Fund. The Fund's Responsible Investment Policy explains the approach in detail and it is explained later in this document.

Legislative Risk

This is the risk that legislative changes will require action from the Committee so as to comply with any such changes in legislation.

The Committee acknowledge that this risk is unavoidable but will seek to address any required changes so as to comply with changes in legislation.

Market Risk

This is the risk the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices.

The Fund seeks to manage this risk through the strategic policy which ensures diversification of investments across a range of asset classes and markets that have low correlations with each other and across a selection of managers.

The Fund has a significant weighting to a Tactical Asset Allocation/ Best Ideas portfolio (TAA) which aims to take advantage of market risk, by making shorter term tactical allocations which suit the specific characteristics of the Fund. As most of the portfolio is exposed to market risk, the main risk to the Fund is a fall in market prices. Although market movements cannot be completely avoided, and indeed there are periods when all assets become more highly correlated, the impact can be mitigated through diversifying across asset classes and approaches to investing.

Market risk comprises of the following three types of risk:

Currency Risk

This is the risk that occurs when the price of one currency moves relative to another (reference) currency. In this context, the Fund may be invested in overseas stocks or assets, which are either directly or indirectly linked to a currency other than Sterling. There is a risk that the price of that overseas currency will move in such a way that devalues that currency relative to Sterling, thus negatively impacting the overall investment return.

The Fund seeks to address this within the TAA and has also addressed this in the Cash and Risk Management Framework from a strategic perspective.

Interest rate risk

This is the risk that an investment's value will change due to a change in the level of interest rates. This affects debt instruments more directly than growth instruments.

Inflation risk

This is the risk that the value of the Fund's liabilities, which are inextricably linked to Consumer Price Index (CPI) inflation, increase at greater rate than the assets.

The Committee also acknowledge the interest rate risk and inflation risk related to individual debt instruments. This is managed by the underlying investment managers through a combination of strategies, such as diversification, duration

and yield curve management. The Fund also invests in assets whose value moves in line with inflation such as Infrastructure.

Since 2014 the Fund has adopted a Risk Management/Flight-path approach to managing the specific inflation and interest rate risk. The Flight-path is regularly reviewed and appropriate yield trigger levels set.

Risk Budgets

When reviewing the Investment Strategy in 2022/23, as well as addressing the potential for investment return, the Fund also considered the risk of the proposed strategy when compared to the previous one. Risk is assessed by using a Value at Risk (VaR) approach. This approach measures the risk of loss for investments and estimates how much an investment strategy might lose (with a given possibility) given normal market conditions, in a set time period such as a day or a year.

The Fund needs to take risk within its Investment Strategy in order to achieve an adequate level of return above the Actuary's future service discount rate of Inflation (CPI) +2% per annum at 31 March 2022 (updated in line with market outlook).

At a total Fund level, the total expected return of the previous strategy was 5.9% per annum with a 3 year VaR of £887m. The revised strategy as described earlier in the document reduces the potential return to 5.8% per annum whilst also reducing the 3 year VaR to £873m.

Proper advice

In assessing the Fund's strategy, including an assessment of the implicit risks, and setting the maximum limits the Fund has taken proper advice from officers, the Actuary, Investment Consultants and Risk Management Advisers.

As part of the Fund's governance structure, there are regular meetings of the FRMG between the Fund's officers, the Investment Consultants, the Actuary and Risk Management Advisers. The Fund receives advice from these parties on a continuous basis.

Approach to pooling

LGPS Investment Regulation 7(2) (d) requires that all authorities commit to a suitable pool to achieve benefits of scale. It also requires that administering authorities confirm the chosen investment pool meets Government's investment reform criteria, or to the extent that it does not, that Government is content for it to continue.

The Clwyd Pension Fund is participating in the development of the Wales Pension Partnership (WPP). The proposed structure and basis on which the WPP will operate was set out in the July 2016 submission to the Government.

The WPP received confirmation from the Minister for Local Government that he was happy that the proposals met the required criteria, with the exception of the size requirement. However, the Minister confirmed in his letter to the Welsh Funds that given the special position of Wales, and the long history of collaboration he was content with the final proposal.

The agreed objectives of the WPP are:

To provide pooling arrangements which allow individual funds to implement their own investment strategies (where practical).

To achieve material cost savings for participating funds while improving or maintaining investment performance after fees.

To put in place robust governance arrangements to oversee the Pool's activities.

To work closely with other pools in order to explore the benefits that all stakeholders in Wales might obtain from wider pooling solutions or potential direct investments.

The Clwyd Pension Fund will aim to use the WPP as the first choice for investing the Fund's assets subject to it being able to meet the requirements of the Fund's investment strategy and objectives (including sustainability requirements), within acceptable long-term costs to deliver the expected benefits and subject to ongoing confidence in the governance of the Partnership.

Structure and governance of the WPP

The Pool has appointed Link Fund Solutions Ltd to establish and run a collective investment vehicle for the sole use of the LGPS funds in Wales. A diagram showing the governance structure is shown on the next page.

A Joint Governance Committee (JGC) was established in 2017 to carry out a number of responsibilities relating to WPP including overseeing the operator. The JGC comprises elected members – one from each of the eight participating funds. It is anticipated that this may be the Chairs of the respective Pensions Committees although administering authorities may choose to nominate alternative members if appropriate. This arrangement provides accountability for management of the WPP and the operator back to individual administering authorities.

The JGC is setup formally as a Joint Committee between the participating administering authorities. It operates on the basis of "One Fund, One Vote", though in practice any

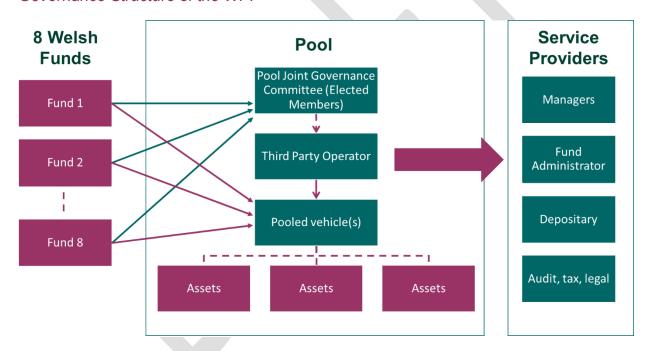
decisions are reached on a consensus wherever possible. A formal Terms of Reference for the Committee has been agreed.

Each authority has committed to the pool by agreeing and signing an Inter Authority agreement. The agreement sets out the principles behind the WPP.

The WPP Officer Working Group has been established as part of the Inter Authority Agreement to support and advise the JGC on such matters as the JGC may reasonably request or any matters relating to the pooling agreement which are raised by any of the authorities' Section 151 Officers or Monitoring Officers.

Each authority delegates to officers to the Officer Working Group. In relation to Clwyd Pension Fund, the Pension Fund Committee determines which of its officers sit on the Officer Working Group. Each authority's Section 151 Officer and Monitoring Officer are entitled to attend the Officer Working Group.

Governance Structure of the WPP



Link Fund Solutions Ltd is responsible for selecting and contracting with investment managers for each of the sub-funds as well as appointing other service providers such as a depository asset servicer, and an external valuer as necessary.

Listed bonds and equities will be invested through a UK based Authorised Contractual Scheme (ACS) in order to benefit from the tax transparent nature of the vehicle. It may be that alternative vehicles are more appropriate for some asset classes. As well as considering the options with Link Fund solutions, advice will be sort of the final proposed approach from a tax efficiency and legal compliance basis.

The process and benefits of doing so will be discussed with the operator. Given the Fund has a significant proportion of its assets in alternative, less liquid investments it may be some time before all of the Fund's assets are able to be pooled.

Approach to Environmental, Social and Governance issues and policy on exercising voting rights

Regulatory Background

In preparing, developing and implementing this Policy, the Fund has paid due regard to the regulatory background. The LGPS Investment Regulations require administering authorities to demonstrate that it considers any factors that are financially material to the performance of the fund's investments, including social, environmental and corporate governance factors, and over the long term, dependent on the time horizon over which their liabilities arise.

The LGPS Investment Regulations also require administering authorities to explain their policy on exercising rights (including voting rights) attaching to investments. The guidance refers to the Financial Reporting Council's UK Stewardship Code and requires that funds explain, where appropriate their policy on stewardship with reference to the Stewardship Code.

In addition to considering the LGPS Investment Regulations in developing the Responsible Investment Policy the Fund has taken professional advice. It has also had regard to the Well-being of Future Generations (Wales) Act 2015, guidance from the Scheme Advisory Board, the Ministry for Housing, Communities and Local Government and the Welsh Government. The Fund commits to keeping the policy reviewed in line with any future changes or updates in regulation or guidance.

The Fund has also considered, researched and reviewed a number of other areas of best practice when preparing this Policy such as the United Nations Principles for Responsible Investment, the Sustainable Development Goals and the Task Force on Climate-related Financial Disclosures (TCFD).

Responsible Investment Policy

In 2019 the Fund undertook a review of its Responsible Investment Policy in conjunction with the overall review of the Strategic Asset Allocation. The target for this review was to re-affirm the Fund's existing beliefs, supplement these with additional views if appropriate and consider ways in which these views could be implemented.

As a result of this review the Fund's long standing Responsible Investment (RI) Policy was updated to reflect current attitudes and thinking. In addition to help formally frame the policies, the Fund has set a number of high level beliefs that will sit over the more detailed policies, and will convey the Fund's overarching attitude to being a Responsible Investor.

Background

This revised Policy will support the Fund's specific RI aims with the funding and investments specific objectives:

Ensure that its future strategy, investment management actions, governance and reporting procedures take full account of longer-term risks and sustainability Ensure that the Fund's investments are aligned with the transition to a low carbon economy through a commitment to achieving a net zero carbon dioxide emission's target by 2045

Promote acceptance of sustainability principles and work together with others to enhance the Fund's effectiveness in implementing these.

Investment Pooling

As part of the Government's investment reform, the Fund has participated in the development of the WPP to pool the investments of the 8 Welsh LGPS funds. Whilst all strategic asset allocation and policy decisions remain with the Fund, implementation responsibilities in the future will be the responsibility of WPP.

The Fund is committed to pooling its investments with WPP, and acknowledge that this presents challenges, and also significant opportunities to enhance the Fund's approach to RI. The Fund has proactively engaged with WPP in setting WPP's RI policy and objectives, and is confident that they will enable it to implement its own policies.

The Fund will work with the WPP to develop their policies in the future to ensure they remain relevant and appropriate for the Clwyd Pension Fund.

Stewardship and Engagement

Stewardship is the responsible allocation, management and oversight of capital to create long-term value for clients and beneficiaries leading to sustainable benefits for the economy, the environment and society. The Financial Reporting Council (FRC) first published the UK Stewardship Code in 2010, and revised it in 2012. In October 2019 the FRC issued an updated and increasingly demanding version, the UK Stewardship Code 2020. The Code sets out a number of areas of good practice to which the FRC believes institutional investors should aspire.

ISS guidance given by the Secretary of State states that administering authorities should become signatories to the Code, and states how they implement the principles on a "comply or explain" basis. In practice the Fund continues to apply the requirements of the Code both through its arrangements with its asset managers and through membership of the Local Authority Pension Fund Forum (LAPFF).

The Fund is committed to reviewing its compliance against the latest code and has submitted its Stewardship report for the year ending 31 March 2022 in October 2022. At the time of writing officers are waiting on the outcome of the submission. As a member of the WPP, the Fund expects both WPP and the underlying fund managers to comply with the Stewardship Code. WPP has appointed Robeco as its Voting and Engagement provider and they are assisting in formulating and maintaining a voting policy and engagement principles that are in keeping with the LAPFF. In addition, Robeco are responsible for implementing the voting policy and reporting on it.

Reporting and Disclosure

The Fund is committed to transparency of its actions, in particular with respect to RI. The Annual Report contains copies of a number of documents including policy statements, and the ISS (in full). The annual report is circulated widely and is published on the Fund's website. It is accepted that approaches to RI and sustainability will evolve and develop over time, and it is therefore essential to keep policies and practices under regular review to ensure their effectiveness. In addition, the Fund recognises the importance of transparency and reporting in respect to RI and environmental, social and governance (ESG) issues, and therefore plans to enhance its analysis, disclosure and reporting. This will include manager ESG ratings, voting and engagement and carbon emissions analysis, and impact where relevant.

Responsible Investment Beliefs

The Fund recognises the importance of its role as stewards of capital and the need to ensure the highest standards of governance and promoting corporate responsibility in the underlying companies in which its investments reside. The Fund recognises that ultimately this protects the financial interests of the Fund and its beneficiaries. The Fund has a commitment to actively exercising the ownership rights attached to its investments, reflecting the Fund's conviction that responsible asset owners should maintain oversight of the companies in which it ultimately invests and recognising that the companies' activities impact upon not only their customers and clients, but more widely upon their employees, other stakeholders and also wider society.

The Fund defines a **Responsible Investment** (RI) as:

Incorporating sustainability considerations within the investment process, including environmental, social and governance (ESG) factors for a broader perspective on risk and return opportunities.

In developing its approach to RI, the Fund seeks to understand and manage the ESG and reputational risks to which it is exposed. This policy sets out the Fund's approach to this.

The foundations of the Fund's approach to RI are its Principles which are set out below:

Responsible Investment Principles

The Fund's fiduciary duty is to act in the best interests of its members and employers. The Fund recognises that ESG issues create risk and opportunity to its financial performance, and will contribute to the risk and return characteristics. The Fund believes, therefore, that these factors should be taken into account in its Funding and Investment Strategies and throughout the decision making process.

The Fund is a long-term investor, with pension promises for many years, and because of this, it seeks to deliver long-term sustainable returns.

The Fund integrates ESG issues at all stages of the Fund's investment decision making process.

The Fund seeks to apply an evidence based approach to the implementation of Responsible Investment.

The Fund recognises that transparency and accountability are important aspects of being a Responsible Investor and will demonstrate this by publishing its RI policy and activity for the Fund.

The Fund has a duty to exercise its stewardship responsibilities (voting and engagement) effectively by using its influence as a long-term investor to encourage corporate responsibility.

The Fund recognises the significant financial risk of **not** being a Responsible Investor and it seeks to ensure that this risk is mitigated through its Investment Policy and implementation.

The Fund recognises the importance of Social/Impact investments which can make a positive social and environmental impact whilst meeting its financial objectives, and it will make selective investments to support this aim.

Climate Change

The Fund recognises the importance in addressing the financial risks associated with climate change through its investment strategy, and believes that:

Climate change presents a systemic risk to the overall stability of every economy and country, with the potential to impact on the members, employers and all of the holdings in the Fund's investment portfolio.

Considering the impacts of climate change is not only the legal or fiduciary duty of the Fund, but is also consistent with the long term nature of the Fund. The Fund's investments need to be sustainable to be in the best interests of all key stakeholders.

Engagement is the best approach to enabling the change required to address the Climate Emergency, however selective risk-based disinvestment is appropriate to facilitate the move to a low carbon economy.

As well as creating risk, climate change also presents opportunities to make selective investments that achieve the required returns, whilst at the same time make a positive social and environmental impact, such as environmental infrastructure and clean energy.

Net-Zero commitment

As part of its commitment to RI the Fund has undertaken to evaluate and manage the carbon exposure of its investments to assist in ensuring an effective transition to a low-carbon economy. As part of this work, on 10 November 2021 the Clwyd Pension Fund Committee approved a strategy to achieve net-zero carbon emissions from its investment portfolio. This included carbon emissions analysis of the listed equity portfolio to provide a baseline for the Fund. Specifically, the Committee agreed a target for the investments in the Clwyd Pension Fund, as a whole, to have net zero carbon emissions by 2045, with an interim target of carbon reduction of 50% by 2030. Underlying this headline commitment, the plan also has a number of other key targets as outlined below:

a) for the Fund as a whole:

to have at least 30% of the Fund's assets allocated to sustainable investments by 2030

to expand the measurement of the carbon emissions of the Fund's investments to include all assets by the end of 2023.

b) within the Listed Equity portfolio:

to achieve a reduction in carbon emissions of 36% by 2025 and 68% by 2030 to target at least 30% of the Listed Equity portfolio to be invested in sustainable assets by 2030

to reduce fossil fuel exposure relating to oil and gas by 70% by 2025 and 90% by 2030

to reduce fossil fuel exposure relating to coal by 90% by 2025 and 95% by 2030 to engage with the biggest polluters within the Fund's Listed Equity portfolio as part of an overarching stewardship and engagement strategy, to achieve:

by 2025, at least 70% of organisations in carbon-intensive sectors have clearly articulated and credible strategies to attain net zero or are subject to engagement to achieve this objective.

by 2030, at least 90% of organisations in carbon-intensive sectors have clearly articulated and credible strategies to attain net zero or are subject to engagement to achieve this objective.

The Fund will monitor and report against these targets at least annually, and may review and revise them as appropriate, particularly to ensure that targets and ambitions are in line with national and international developments and initiatives.

Strategic RI Priorities

The Fund recognises that as a Responsible Investor there are a multitude of potential areas on which to focus, however it is not possible to concentrate on everything together. Therefore, to enable the approach to be focused, the Fund considered its strategic priorities for 2020 to 2023, which will support the overall aim of being a Responsible Investor.

These priorities were set in 2020 and work is ongoing to deliver against each of them, and the Clwyd Pension Fund Committee receives regular updates on progress.

These strategic priorities will be reviewed annually, and may be added to, but to maintain the desired focus the following have been identified from an RI perspective:

Evaluate and manage carbon exposure

The Fund has identified climate change as a financial risk, and intends to measure and understand its carbon exposure within its investment portfolio.

The Fund has agreed to use the carbon footprinting metric as the primary metric for monitoring carbonisation progress, whilst also monitoring progress against absolute emissions and weighted average carbon intensity (WACI).

Identify sustainable investments opportunities

The Fund has for a number of years looked to make Social/Impact investments; whereby in addition to making the requisite financial return the investment has a positive social or environmental impact. The 2022 Investment Strategy Review has further supported this with the asset allocation to the Local/Impact portfolio being increased.

This portfolio has a strategic target weight of 6% of the Fund's assets.

The Fund has increased its strategic allocation to sustainable equities to 15% following the latest strategy review, an increase of 10% from its previous allocation.

Improve public disclosure and reporting

The Fund recognises the importance of transparency and reporting with respect to ESG issues. The Fund continues to enhance its analysis, disclosure and reporting on its RI activities, including manager ESG ratings, voting and engagement and carbon emissions analysis.

The Fund has drafted its first Task Force on Climate-Related Financial Disclosures ("TCFD") report to the 31 March 2022. The report was drafted in line with the recommendations from the TCFD and the proposals for LGPS on governance and reporting of climate change risks available at the time.

The Fund carries out Analytics for Climate Transition ("ACT") analysis (a Mercer analytical tool), which provides the Fund with a bottom up analysis of the portfolio's transition capacity. Analysis is carried out every 12 months, with the latest analysis carried out as at 31 March 2022.

Active Engagement on ESG risks

As a member of the LAPFF, the Fund has active engagement with its underlying investments. In the future, due to the pooling of investments, this engagement will be supplemented by the work of the WPP. The Fund is committed to working proactively with WPP and its providers to improve the levels of engagement.

FRC Stewardship Code

The Fund was previously confirmed as a Tier One signatory to the 2012 Stewardship Code in March 2018. The new more demanding version of the code was launched in October 2019. The Fund is committed to reviewing its compliance against the latest code and has submitted its Stewardship report for the year ending 31 March 2022 in October 2022. At the time of writing officers are waiting on the outcome of the submission.

Actuarial Valuation and review of Investment Strategy

The assessment of the impact of climate change on the Fund's investment strategy will underpin the actuarial valuation and investment strategy review processes, both of which were carried out during 2022. Addressing climate change related risks was a key factor in each.

Commitment

The Fund has always sought to act with conscience when it comes to its investments and recognises that its approach to RI will need to evolve continually, given the speed of change with regard to the impact and understanding of ESG issues, and the ever changing world in which we live. Due to the increased focus on RI within the investment industry there is continuous development of thinking and best practice, and the Fund is committed to ensuring its approach remains relevant and appropriate. This RI Policy will be formally reviewed at least every three years as part of any strategic review of the Fund's asset allocation, or as required due to changing regulatory requirements or to address specific issues that may arise.



Approval, review and further information

Approval, Review and Consultation

This version of the Investment Strategy Statement was approved at the Clwyd Pension Fund Committee on 15 February 2023. It will be formally reviewed and updated at least every three years or sooner based on when it is considered appropriate to review the Fund's approach to investing the Fund's assets, including responsible investing.

Further Information

If you require further information about anything in or related to this Investment Strategy Statement, please contact:

Debbie Fielder, Deputy Head of Clwyd Pension Fund, Flintshire County Council E-mail – debbie.a.fielder@flintshire.gov.uk
Telephone - 01352 702259

Further information about the Fund can be found on its website - https://mss.clwydpensionfund.org.uk/.

Further information about the Wales Pension Partnership can be found on its website - https://www.walespensionpartnership.org/.



CLWYD PENSION FUND COMMITTEE

| Date of Meeting | Wednesday, 15 February 2023 |
|-----------------|-----------------------------|
| Report Subject | Funding Strategy Statement |
| Report Author | Head of Clwyd Pension Fund |

EXECUTIVE SUMMARY

The draft Funding Strategy Statement (FSS) was approved by the Committee in November 2022 and the consultation with employers commenced, which ended on 13 January 2023. The employers had the opportunity to feedback via:

- the Annual Joint Consultative Meeting (AJCM) on the 13 December 2022
- Optional 1-1 sessions with the Actuary to discuss their individual valuation results and the FSS. In total six employers took up this option and feedback was positive.
- Provide a written response to the FSS consultation. One response was received and this supported the principles, assumptions and flexibility provided.

Given this feedback no fundamental changes are proposed to the FSS as a result of the consultation but the document has been updated in the following key areas:

- The initial climate change scenario modelling has now taken place based on the proposed investment strategy and this section has now been updated.
- Other changes have been made to the FSS to finalise it, including activation
 of hyperlinks, finalisation of the missing information/assumptions and
 expanded wording included to enable the termination policy to be reviewed
 mid valuation where necessary and if market conditions permit.

The proposed FSS in relation to the 2022 valuation is attached as Appendix 1 and has been produced for approval by the Committee. The Actuary will then produce the final valuation report and implement the new contribution requirements from 1 April 2023. Some employers are intending to pay more than the minimum contributions required to support future sustainability of their contributions which is a positive outcome to the consultation.

| RECOMMENDATIONS | | |
|-----------------|---|--|
| 1 | The Committee notes the activity since the November 2022 meeting. | |
| 2 | The Committee approve the Funding Strategy Statement. | |

REPORT DETAILS

| 1.00 | Funding Strategy Statement |
|------|--|
| 1.01 | Draft Funding Strategy Statement |
| | The LGPS Regulations provide the statutory framework under which the Administering Authority is required to prepare and publish a Funding Strategy Statement (FSS) alongside each actuarial valuation. In doing this, they must have regard to FSS guidance issued by the Chartered Institute of Public Finance and Accountancy (CIPFA). The Fund Actuary must have regard to the FSS as part of the actuarial valuation process. |
| 1.02 | The FSS sets out all the key assumptions which the actuary has used in preparing the actuarial valuation at 31 March 2022, together with the Administering Authority's policies in the areas where the Administering Authority has discretion to manage the funding position of the Fund. The FSS must be revised and published whenever there is a material change in either the policy set out in the FSS or the Investment Strategy Statement and this will be monitored over the inter-valuation period. |
| 1.03 | The FSS includes reference to the updated investment strategy objectives from the investment strategy review and other updates to the Cash and Risk Management framework. The proposed strategy has little impact on the expected risk/return profile of Fund asset portfolio so no there is no impact on the proposed valuation assumptions. |
| 1.04 | The draft FSS that was approved by the Committee in November 2022 and the consultation with employers commenced, which ended on 13 January 2023. Employers were provided with their individual results schedules and the draft FSS during late November and feedback was requested. One formal written response was received but other feedback was provided as part of Steering Group meetings with the Councils and a meeting with the education sector employers. |
| 1.05 | As part of the consultation process, the Annual Joint Consultative Meeting (AJCM) took place on 13 December 2022 where the Actuary presented the whole Fund valuation results and explained the information set out in the employer results schedules and the factors that affected individual employer results. There was an opportunity to raise questions which a number of employers did. |
| 1.06 | In addition employers also had the option to book a 1-1 session with the Actuary to discuss their individual valuation results and feedback comments. In total six employers took up this option and feedback was positive. Results were explained on a 1-1 basis which helped to improve each employers understanding of the process. |
| 1.07 | As a consequence of the consultation feedback no fundamental changes are proposed to the assumptions and policies. Some employers are intending to pay more than the minimum contributions required to support future sustainability of their contributions which is a positive outcome to the consultation. Employers are being asked to confirm their final contributions for the 3 years from 1 April 2023 in early March 2023 to enable completion of the final Rates & Adjustments certificate for sign off by the Actuary. |

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However there have been a number of updates made versus the draft FSS for Committee approval as per paragraphs 1.08 and 1.09 of this report as well as some minor changes. These have been highlighted in the FSS for ease of reference.

1.08 | Climate Change Scenario Analysis

An important part of the risk analysis underpinning the funding strategy will be for the Actuary to identify the impact of climate change transition risk (shorter term) and physical risks (longer term) on the potential funding outcomes. The principles around the analysis of climate risks as part of the 2022 valuation has been agreed at a national level and the Actuary is required to consider this as part of his professional requirements when reporting on the valuation.

The projections are meant to illustrate the different elements of risk under three climate change scenarios based on the current strategic allocation. The scenarios are **not** meant to be predictors of what may happen and are only a small subset of a very wide range of scenarios that could arise depending on the global actions taken in relation to climate change. The actions taken (both historically and in future) by the Fund in relation to making its asset portfolio more sustainable is set out in the separate Taskforce for Climate Change (TCFD) reports and analysis of the asset portfolio adopting the same (or similar) scenarios although this can be over a different time period as is the case in the separate committee report. However the same principles apply in terms of scenarios considered.

The analysis considers a projection of the funding levels (assets divided by the Fund liabilities) under the scenarios considered which are designed to illustrate the transition and physical risks over different periods depending on what actions are taken globally on climate change.

The key metrics are the relative impact on the funding level over the different time periods as this illustrates the impact of climate related market shocks on the funding plan. Whilst these scenarios are only three out of a considerable range of potential outcomes it shows that climate change can have far reaching effects on the Fund.

The Actuary applies a nuanced approach to understand what is/is not priced into the markets in terms of transition and physical risks. They include assumptions about what is currently priced into markets, and later price in shocks when the markets account for future impacts (both physical and transition impacts).

The scenarios considered (Rapid, Orderly and Failed Transition on a global basis) and the relative impacts over 5, 20 and 40 years are shown in the section of the FSS on page 11. More detail will be included in the Actuary's final valuation report.

1.09 **Employer Termination policy**

Specific wording to enable the termination policy to be reviewed in between valuations or for specific cases where necessary given current

| | market volatility. Whilst this is unlikely to be a material risk to the Fund, given that there are typically no employer terminations due to the nature of the employer base, it is important that the review can take place if circumstances warrant it. |
|------|---|
| 1.10 | Other minor changes and additions have been made to the FSS to finalise it, including: • activation of hyperlinks • removal of square brackets where information has been finalised • small formatting changes |
| 1.11 | Once the final FSS has been approved by the Committee, the Fund Actuary will produce the final valuation report and contribution certificate no later than 31 March 2023 and the new contribution rates will be implemented from 1 April 2023 for the 3 years to 31 March 2026. The final FSS will then be published on the Fund website for employers. |

| 2.00 | RESOURCE IMPLICATIONS |
|------|---|
| 2.01 | The Actuary will collate the final contribution information and produce the valuation report which will be signed off by 31 March 2023. |

| 3.00 | CONSULTATIONS REQUIRED / CARRIED OUT |
|------|---|
| 3.01 | The Administering Authority consulted with employing bodies over the development of the Funding Strategy Statement during December 2022 and January 2023. |

| 4.00 | RISK MANAGEMENT |
|------|--|
| 4.01 | This report addresses some of the risks identified in the Fund's Risk Register. Specifically, this covers the following (either in whole or in part): • Governance risk: G2 • Funding and Investment risks: F1 - F6 |
| 4.02 | The actuarial valuation is a vital governance tool and is meant to control the risks relating to the CPF's funding position and employer contributions requirements which have a material impact on budgets and local services. The funding strategy (along with the investment strategy) which comes from the actuarial valuation is a key determinant of the overall financial risk levels in the CPF. The FSS is a crucial document setting out the overall governance and controls in place to manage these risks on a whole Fund and individual employer level. |

| 5.00 | APPENDICES |
|------|---|
| 5.01 | Appendix 1 – Draft Funding Strategy Statement |

| 6.00 | LIST OF ACCESS | IBLE BACKGROUND DOCUMENTS |
|------|---|--|
| 6.01 | Current FSS and 2019 Actuarial Valuation report. Committee reports on the actuarial valuation and funding strategy statements from June 2022 and November 2022. | |
| | Contact Officer: Telephone: E-mail: | Philip Latham, Head of Clwyd Pension Fund 01352 702264 philip.latham@flintshire.gov.uk |

| 7.00 | GLOSSARY OF TERMS |
|------|--|
| 7.01 | (a) CPF – Clwyd Pension Fund – The Pension Fund managed by Flintshire County Council for local authority employees in the region and employees of other employers with links to local government in the region |
| | (b) Administering authority or scheme manager – Flintshire County Council is the administering authority and scheme manager for the Clwyd Pension Fund, which means it is responsible for the management and stewardship of the Fund. |
| | (c) PFC – Clwyd Pension Fund Committee - the Flintshire County Council committee responsible for the majority of decisions relating to the management of the Clwyd Pension Fund |
| | (d) LPB or PB – Local Pension Board or Pension Board – each LGPS Fund has an LPB. Their purpose is to assist the administering authority in ensuring compliance with the scheme regulations, TPR requirements and efficient and effective governance and administration of the Fund. |
| | (e) LGPS – Local Government Pension Scheme – the national scheme, which Clwyd Pension Fund is part of |
| | (f) FSS – Funding Strategy Statement – the main document that outlines how we will manage employers contributions to the Fund |
| | (g) Actuarial Valuation - The formal valuation assessment of the Fund detailing the solvency position and determine the contribution rates payable by the employers to fund the cost of benefits and make good any existing shortfalls as set out in the separate Funding Strategy Statement. |
| | (h) Actuary - A professional advisor, specialising in financial risk, who is appointed by pension Funds to provide advice on financial related matters. In the LGPS, one of the Actuary's primary responsibilities is the setting of contribution rates payable by all participating employers as part of the actuarial valuation exercise. |
| | (i) GAD – Government Actuary's Department - The Government Actuary's Department is responsible for providing actuarial advice to |

public sector clients. GAD is a non-ministerial department of HM Treasury.



FUNDING STRATEGY STATEMENT CLWYD PENSION FUND

[DATEMARCH 2023]

FLINTSHIRE COUNTY COUNCIL

The information enclosed in this statement and the accompanying policies have a financial and operational impact on all participating employers in the Clwyd Pension Fund. It is imperative that all existing and potential employers are aware of the details set out herein.

A glossary of the key terms used throughout is available at the end of this document here

This Funding Strategy Statement has been prepared by Flintshire County Council (the Administering Authority) to set out the funding strategy for the Clwyd Pension Fund ("the Fund"), in accordance with Regulation 58 of the Local Government Pension Scheme Regulations 2013 (as amended) and guidance issued by the Chartered Institute of Public Finance and Accountancy (CIPFA).

1

GUIDE TO THE FSS AND POLICIES

The key objectives of the Clwyd Pension Fund ("the Fund") are set out in section 3. The information required by overarching guidance and Regulations is included in Sections 2 and 3 of the Funding Strategy Statement. This document also sets out the Fund's policies in the following key areas:

1. Actuarial Method and Assumptions (Appendix A)

The actuarial assumptions used for assessing the funding position of the Fund and the individual employers, known as the "Primary" contribution rate, and any contribution variations due to underlying surpluses or deficits, known as the "Secondary" rate, are set out here.

2. Deficit Recovery and Surplus Offset Plans (Appendix B)

The key principles when considering deficit recovery and surplus offset plans as part of the valuation are set out <u>here</u>.

3. Admission Policy (Appendix C)

Various types of employers are permitted to join the LGPS under certain circumstances. The conditions upon which their entry to the Fund is based and the approach taken is set out here.

4. Termination Policy, Flexibility for Exit Payments and Deferred Debt Agreements (Appendix D)

When an employer ceases to participate within the Fund, it becomes an exiting employer under the Regulations. The Fund is then required to obtain an actuarial valuation of that employer's liabilities in respect of the benefits of the exiting employer's former employees along with a termination contribution certificate showing any exit debt or exit credit, due from or to the exiting employer. In some circumstances an employer and the Fund can enter a Deferred Debt Agreement. The termination policy can be found here.

5. Review of Employer Contributions between Valuations (Appendix E)

In line with the Regulations, the Administering Authority has the discretion to review employer contributions between valuations in prescribed circumstances. The Fund's policy on how the Administering Authority will exercise its discretion is set out here.

6. Covenant Assessment and Monitoring Policy (Appendix F)

An employer's financial covenant is its legal obligation and crucially the ability to meet its financial responsibilities to the Fund now and in the future. This is a critical consideration in an employer's funding and investment strategy as it is the employers who underwrite the risks to which the Fund is exposed, including underfunding, longevity, investment and market forces. Further details on how employer covenant is assessed and monitored by the Fund is set out here.

7. Notifiable Events Framework (Appendix G)

Whilst in most cases regular covenant updates will identify some of the key employer changes, in some circumstances, employers are required to proactively notify the Administering Authority of any material changes. This policy sets out when this may happen and the notifiable events process. More details are set out https://example.com/here/.

8. III Health Insurance Arrangements (Appendix H)

The Fund has implemented a captive insurance arrangement which pools the risks associated with ill health retirement costs for employers whose financial position could be materially affected by ill health retirement of one of their members. The captive arrangement is reflected in the employer contribution rates (including on termination) for the eligible employers. More details are set out here.



2 BACKGROUND

The objectives of the Clwyd Pension Fund (the "Fund") is to ensure it has sufficient assets to meet its pension liabilities in the long-term in line with its fiduciary responsibility as the Administering Authority (Flintshire County Council). The Funding Strategy adopted by the Clwyd Pension Fund will therefore be critical in achieving this. The Administering Authority has taken advice from the Actuary in preparing this Statement.

The purpose of this Funding Strategy Statement ("FSS") is to set out a clear and transparent funding strategy that will identify how each Fund employer's pension liabilities are to be met going forward.

Given this, and in accordance with governing legislation, all interested parties connected with the Fund have been consulted and given the opportunity to comment prior to this FSS being finalised and adopted. This statement takes into consideration all comments and feedback received.

INTEGRATED RISK MANAGED STRATEGY

The funding strategy set out in this document has been developed alongside the Fund's investment strategy on an integrated basis taking into account the overall financial and demographic risks inherent in the Fund to meet the objective for all employers over different periods. The funding strategy includes appropriate margins to allow for the possibility of adverse events (e.g. material reduction in investment returns, economic downturn and higher inflation outlook) leading to a worsening of the funding position which would result in greater volatility of contribution rates at future valuations if these margins were not included. This prudence is required by the Regulations and guidance issued by professional bodies and Government agencies to assist the Fund in meeting its primary solvency and long term cost efficiency objectives. Individual employer results will also have regard to their covenant strength and the investment strategy applied to the asset shares of those employers.

THE REGULATIONS

The Local Government Pension Scheme Regulations 2013 ("the 2013 Regulations"), the Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014 ("the 2014 Transitional Regulations") and the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 (all as amended) (collectively: "the Regulations") provide the statutory framework from which the Administering Authority is required to prepare a Funding Strategy Statement (FSS).

THE SOLVENCY OBJECTIVE

The Administering Authority's long-term objective is for the Fund to achieve a 100% solvency level over a reasonable time period and then maintain sufficient assets in order for it to pay all benefits arising as they fall due. Solvency is defined as a level where the Fund's liabilities i.e. benefit payments can be reasonably met as they arise. Contributions are set in relation to this objective which means that once 100% solvency is achieved, if assumptions are borne out in practice, there would be sufficient assets to pay all benefits earned up to the valuation date as they fall due.

However, because financial and market conditions/outlook change between valuations, the assumptions used at one valuation may need to be amended at the next in order to meet the Fund's objective. This in turn means that contributions will be subject to change from one valuation to another. This objective translates to an employer specific level when setting individual contribution rates.

The general principle adopted by the Fund is that the assumptions used, taken as a whole, will be chosen with sufficient prudence for this objective to be reasonably achieved in the long term at each valuation.

LONG TERM COST EFFICIENCY

Employer contributions are also set in order to achieve long-term cost efficiency. Long-term cost efficiency requires that any funding plan must provide equity between different generations of taxpayers. This means that the contributions must not be set at a level that is likely to give rise to additional costs in the future which fall on later generations of taxpayers or put too high a burden on current taxpayers. The funding parameters and assumptions (e.g. deficit recovery period) must have regard to this requirement which will underpin the decision-making process. Furthermore, the FSS must have regard to the desirability of maintaining as nearly constant a primary rate of contribution as possible.

When formulating the funding strategy, the Administering Authority has taken into account these two key objectives and also considered the implications of the requirements under Section 13(4)(c) of the Public Service Pensions Act 2013. As part of these requirements the Government Actuary's Department (GAD) must, following an actuarial valuation, report on whether the rate of employer contributions to the Fund is set at an appropriate level to ensure the "solvency" of the pension fund and "long term cost efficiency" of the Scheme so far as it relates to the Fund.

EMPLOYER CONTRIBUTIONS

The required levels of employee contributions are specified in the Regulations. Employer contributions are determined in accordance with the Regulations which require that an actuarial valuation is completed every three years by the Actuary, including the provision of a rates and adjustments certificate specifying the "primary" and "secondary" rate of the employer's contribution.

3

KEY FUNDING PRINCIPLES

PURPOSE OF THE FSS

Funding is making advance provision to meet the cost of accruing benefit promises. Decisions taken on the funding approach therefore determine the rate or pace at which this advance provision is made. Although the Regulations specify the fundamental principles on which funding contributions should be assessed, implementation of the funding strategy is the responsibility of the Administering Authority, acting on the professional advice provided by the Actuary. The purpose of this FSS is therefore:

- to establish a clear and transparent fund-specific strategy which will identify how employers' pension liabilities are best met going forward by taking a prudent long-term view of funding those liabilities;
- to establish contributions at a level to "secure the solvency of the pension fund" and the "long term cost efficiency";
- to have regard to the <u>desirability</u> of maintaining as nearly constant a <u>primary rate</u> of contribution as possible.

The intention is for this strategy to be both cohesive and comprehensive for the Fund as a whole, recognising that there will be conflicting objectives which need to be balanced and reconciled.

KEY FUNDING AND INVESTMENT OBJECTIVES AND AIMS OF THE FUND:

- Achieve and maintain assets equal to 100% of liabilities within a [13]12 year average timeframe,
 whilst remaining within reasonable risk parameters.
- Determine employer contribution requirements, whilst recognising the constraints on affordability and strength of employer covenant, with the aim being to maintain as predictable an employer contribution requirement as possible.
- Recognising the constraints on affordability for employers, aim for sufficient excess investment returns relative to the growth of liabilities.
- Strike the appropriate balance between long-term consistent investment performance and the funding objectives.
- Manage employers' liabilities effectively through the adoption of employer specific funding objectives.
- Ensure net cash outgoings can be met as/when required.
- Minimise unrecoverable debt on employer termination.
- Ensure that the future strategy, investment management actions, governance and reporting procedures take full account of longer-term risks and sustainability.
- Ensure that the Fund's investments are aligned with the transition to a low carbon economy through a commitment to achieving a net zero carbon dioxide emission's target by 2045
- Promote acceptance of sustainability principles and work together with others to enhance the Fund's effectiveness in implementing these
- Aim to use the Wales Pensions Partnership as the first choice for investing the Fund's assets subject
 to it being able to meet the requirements of the Fund's investment strategy and objectives (including
 sustainability requirements), within acceptable long-term costs to deliver the expected benefits and
 subject to ongoing confidence in the governance of the Partnership.

THE AIMS OF THE FUND ARE TO:

- manage employers' liabilities effectively and ensure that sufficient resources are available to meet all liabilities as they fall due
- enable employer contribution rates to be kept at a reasonable and affordable cost to the taxpayers, scheduled, designated and admitted bodies, while achieving and maintaining fund solvency and long term cost efficiency, which should be assessed in light of the profile of the Fund now and in the future.
- maximise the returns from investments within reasonable risk parameters taking into account the above aims and the risk controls in place under the Flightpath Strategy.

THE PURPOSE OF THE FUND IS TO:

- receive monies in respect of contributions, transfer values and investment income, and
- pay out monies in respect of scheme benefits, transfer values, exit credits, costs, charges and expenses as defined in the Regulations.

RESPONSIBILITIES OF THE KEY PARTIES

The efficient and effective management of the pension fund can only be achieved if all parties (including pensions committee, investment managers, auditors and legal advisors, investment advisors, pension board etc) exercise their statutory duties and responsibilities conscientiously and diligently. The key parties and their roles for the purposes of the FSS are set out below.

KEY PARTIES TO THE FSS

The Administering Authority should:

- operate the pension fund
- collect employer and employee contributions, investment income and other amounts due to the pension fund as stipulated in the Regulations
- pay from the pension fund the relevant entitlements as stipulated in the Regulations
- invest surplus monies in accordance the Regulations
- ensure that cash is available to meet liabilities as and when they fall due
- take measures as set out in the Regulations to safeguard the fund against the consequences of employer default
- manage the valuation process in consultation with the Fund's Actuary
- prepare and maintain a FSS and an Investment Strategy Statement ("ISS), both after proper consultation with interested parties

The Individual Employer should:

- when determining the final level of contributions payable at each valuation within the FSS parameters employers should ensure they consider the appropriate balance between contribution affordability in the short term and the sustainability of contributions in the longer term. An employer should ensure they understand the potential risk that contributions may increase if experience turns out worse than the actuarial assumptions adopted. This may lead to employers choosing to pay higher contributions than the minimum requirement under the FSS.
- deduct contributions from employees' pay correctly after determining the appropriate employee contribution rate (in accordance with the Regulations), unless they are a Deferred Employer
- pay all contributions, including their own, as determined by the Actuary, promptly by the due date (including any exit payments upon ceasing participation where applicable)

- monitor all aspects of the Fund's performance and funding, amending the FSS/ISS as necessary
- effectively manage any potential conflicts of interest arising from its dual role as both fund administrator and a scheme employer, and
- support and monitor a Local Pension Board (LPB) as required by the Public Service Pensions Act 2013, the Regulations and the Pensions Regulator's relevant Code of Practice.
- develop a policy on certain discretions and exercise those discretions as permitted within the regulatory framework
- make additional contributions in accordance with agreed arrangements in respect of, for example, augmentation of scheme benefits and early retirement strain
- have regard to the Pensions Regulator's focus on data quality and comply with any requirement set by the Administering Authority in this context
- understand that the quality of the data provided to the Fund will directly impact on the assessment of the liabilities and contributions. In particular, any deficiencies in the data may result in the employer paying higher contributions than otherwise would be the case if the data was of high quality.
- notify the Administering Authority promptly of any changes to membership or their financial covenant to the Fund, which may affect future funding, and comply with any particular notifiable events specified by the Fund.
- understand the pensions impacts of any changes to their organisational structure and service delivery model.
- comply with Regulations in the case of a bulk transfer of staff



The Fund Actuary should:

- prepare valuations including the setting of employers' contribution rates at a level to ensure fund solvency after agreeing assumptions with the Administering Authority and having regard to its FSS and the Regulations
- prepare advice and calculations in connection with bulk transfers and individual benefitrelated matters such as early retirement strain costs, ill health retirement costs, etc.
- provide advice and valuations on the termination of admission agreements
- provide advice to the Administering Authority on the use of bonds and other forms of security against the financial effect on the Fund of employer default
- assist the Administering Authority in assessing whether employer contributions need to be revised between valuations as required by the Regulations
- advise on funding strategy, the preparation of the FSS and the inter-relationship between the FSS and the ISS, and
- ensure the Administering Authority is aware of any professional guidance or other professional requirements which may be of relevance to the Fund Actuary's role in advising the Fund.

A Guarantor should:

- notify the Administering Authority promptly of any changes to its guarantee status, as this may impact on the treatment of the employer in the valuation process or upon termination
- Where necessary, provide details of the agreement, and any changes to the agreement, between the employer and the guarantor to ensure appropriate treatment is applied to any calculations
- be aware of all guarantees that are currently in place
- work with the Fund and the employer in the context of the guarantee
- receive relevant information on the employer and their funding position in order to fulfil its obligations as a guarantor.

SOLVENCY FUNDING TARGET

Securing the "solvency" and "long term cost efficiency" is a regulatory requirement. To meet these requirements, the Administering Authority's long term funding objective is for the Fund to achieve and then maintain sufficient assets to cover 100% of projected accrued pension liabilities (the "funding target") assessed on an ongoing past service basis including allowance for projected final pay where appropriate.

Each employer's contributions are set at such a level to achieve long-term cost efficiency and full solvency in a reasonable timeframe.

LINK TO INVESTMENT POLICY AND THE INVESTMENT STRATEGY STATEMENT (ISS)

In assessing the value of the Fund's liabilities in the valuation, allowance has been made for growth asset out-performance taking into account the investment strategy adopted by the Fund, as set out in the ISS, which can be found on the Fund's website.

The overall strategic asset allocation is set out in the ISS. A summary of the strategy is included below:

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| Asset Class | Strategic Weight |
|------------------------------------|---------------------|
| Developed Global Equity* | <mark>15.0%</mark> |
| Emerging Market Equity | <mark>5.0%</mark> |
| Hedge Funds | <mark>5.0%</mark> |
| TAA/Best Ideas | <mark>11.0%</mark> |
| Multi-Asset Credit | <mark>12.0%</mark> |
| Cash and Risk Management Framework | <mark>23.0%</mark> |
| Private Markets | |
| Property | <mark>4.0%</mark> |
| Private Equity | <mark>8.0%</mark> |
| Local/Impact | <mark>6.0%</mark> |
| Infrastructure | <mark>8.0%</mark> |
| Private Credit | 3.0% |
| Total | <mark>100.0%</mark> |

*The Global Equity Portfolio is a 15% Strategic Weight to a the WPP Active Sustainable Global Equity Fund

CLIMATE CHANGE

An important part of the risk analysis underpinning the funding strategy will be for the Actuary to identify the impact of climate change transition risk (shorter term) and physical risks (longer term) on the potential funding outcomes. In terms of the current valuation, an analysis of different climate change scenarios at the Whole Fund level has been undertaken relative to the baseline position assuming that the funding assumptions are played out on a best estimate basis. The projections are meant to illustrate the different elements of risk under three climate change scenarios based on the current strategic allocation. The scenarios are **not** meant to be predictors of what may happen and are only a small subset of a very wide range of scenarios that could arise depending on the global actions taken in relation to climate change. The actions taken (both historically and in future) by the Fund in relation to making its asset portfolio more sustainable is set out in the separate Taskforce for Climate Change (TCFD) reports and analysis of the asset portfolio adopting the same (or similar) scenarios although this can be over a different time period.

The analysis considers a projection of the funding levels under the scenarios considered which are designed to illustrate the transition and physical risks over different periods depending on what actions are taken globally on climate change.

The key metrics are the relative impact on the funding level over the different time periods as this illustrates the impact of climate related market shocks on the funding plan. Whilst these scenarios are only three out of a considerable range of potential outcomes, it shows that climate change can have far reaching effects on the Fund.

The Actuary applies a nuanced approach to understand what is/is not priced into the markets in terms of transition and physical risks. They include assumptions about what is currently priced into markets, and later price in shocks when the markets account for future impacts (both physical and transition impacts). The three climate shock scenarios considered are:

- 1. Rapid Transition there is a sudden divestment across multiple securities in 2025 to align portfolios to the Paris Agreement goals, this will have disruptive effects on financial markets with sudden repricing followed by stranded assets and a sentiment shock. Average temperature increase stabilises at 1.5°C around 2050. In relative terms to the best estimate basis at the valuation date, this could have a detrimental impact on the funding level of 10% after 5 years as the larger transition risks manifest and then 9% after 20 years and 10% after 40 years where the physical risks become more dominant.
- 2. Orderly Transition political and social organisations act quickly and predictably to implement the recommendations of the Paris Agreement to limit global warming to below 2°C. This scenario includes additional economic damage consistent with 1.8°C of average temperature rise peaking in 2070. In relative terms this could have a detrimental impact on the funding level of 3% after 5 years as the transition risks are less impactful, and 3% after 20 years. The impact after 40 years is 16% which is higher than the Rapid Transition scenario as the higher temperature rises begin to have a greater impact.
- 3. Failed Transition The world fails to meet the Paris Agreement goals and global warming reaches 4.3°C above pre-industrial levels by 2100. Physical climate impacts cause large reductions in economic productivity and increasing impacts from extreme weather events. In relative terms this could have a positive impact on the funding level of 2% after 5 years which reflects the lower impact from transition risks (versus the market pricing) and a hugely detrimental impact of 30% after 20 years and 54% after 40 years which shows the material consequences of the physical risks from the significant temperature increases as time progresses.

The actuarial assumptions (versus the best estimate) include a level of prudence which implicitly allows for the climate risk and other risks to support future contribution stability and the Actuary has concluded that the level of prudence is currently sufficient. However, any climate related impacts will potentially put significant stress on the funding plan, especially when taken into account with other risk factors so needs to be monitored over time. Other risks e.g. longevity will also be considered in future analysis but are expected to have a much lower impact than the financial market impacts. The expected impact on asset returns under different scenarios and timeframes will be shown in more detail in the separate annual TCFD reports.

IDENTIFICATION OF RISKS AND COUNTER-MEASURES

The funding of defined benefits is by its nature uncertain. When actual experience is not in line with the assumptions adopted, a surplus or shortfall will emerge at the next actuarial assessment and will require a subsequent contribution adjustment to bring the funding back into line with the target.

The Administering Authority has been advised by the Actuary that the greatest risk to the funding level is the investment risk inherent in the predominantly growth based strategy, so that actual asset out-performance between successive valuations could diverge significantly from that assumed in the long term. The Actuary's formal valuation report includes a quantification of the key risks in terms of the effect on the funding position.

FINANCIAL

The financial risks are as follows:-

- Investment markets fail to perform in line with expectations
- Protection and risk management policies fail to perform in line with expectations
- Market outlook moves at variance with assumptions
- Investment Fund Managers fail to achieve performance targets over the longer term
- Asset re-allocations in volatile markets may lock in past losses
- Pay and price inflation significantly more or less than anticipated
- Future underperformance arising as a result of participating in the larger asset pooling vehicle therefore restricting investment decisions
- Employer contributions are unaffordable and/or unstable
- Investment and/or funding objectives and/or strategies are no longer fit for purpose
- Insufficient assets to pay benefits
- Loss of employer income and/or other employers become liable for their deficits
- An employer ceasing to exist without prior notification, resulting in a large exit credit requirement from the Fund impacting on cashflow requirements.

Any increase in employer contribution rates (as a result of these risks) may in turn impact on the service delivery of that employer and their financial position.

In practice the extent to which these risks can be reduced is limited. However, the Fund's asset allocation is kept under regular review and the performance of the investment managers is regularly monitored. In addition, the Flightpath risk management framework will help to reduce the key financial risks over time.

DEMOGRAPHIC

The demographic risks are as follows:-

- Future changes in life expectancy (longevity) that cannot be predicted with any certainty. Increasing longevity is something which government policies, both national and local, are designed to promote. It does, however, potentially result in a greater liability for pension funds.
- Potential strains from ill health retirements, over and above what is allowed for in the valuation assumptions for employers not in the captive arrangement
- Deteriorating pattern of early retirements (including those granted on the grounds of ill health)
- Unanticipated acceleration of the maturing of the Fund (e.g. due to further cuts in workforce and/or restrictions on new employees accessing the Fund) resulting in materially negative cashflows and shortening of liability durations.

Early retirements for reasons of redundancy and efficiency do not immediately affect the solvency of the Fund because they are the subject of a direct charge.

GOVERNANCE

Governance risks are as follows:-

- The quality of membership data deteriorates materially due to breakdown in processes for updating the information resulting in liabilities being under or overstated
- Administering Authority unaware of structural changes in employer's membership (e.g. large fall in employee numbers, large number of retirements) with the result that contribution rates are set at too low a level
- Administering Authority not advised of an employer closing to new entrants, something which would normally require an increase in contribution rates
- An employer ceasing to exist with insufficient funding or adequacy of a bond.
- An employer ceasing to exist without prior notification, resulting in a large exit credit requirement from the Fund impacting on cashflow requirements
- Changes to Committee membership

For these risks to be minimised much depends on information being supplied to the Administering Authority by the employing bodies. Arrangements are strictly controlled and monitored (e.g. the implementation of iConnect for transferring data from employers), but in most cases the employer, rather than the Fund as a whole, bears the risk.

Full details of the risks and the controls in place are set out in the Fund risk register.

REGULATORY

The key regulatory risks are as follows:-

- Changes to Regulations, e.g. changes to the benefits package, retirement age, potential new entrants to scheme,
- Changes to national pension requirements and/or HMRC Rules

Membership of the Local Government Pension Scheme is open to all local government staff and should be encouraged as a valuable part of the contract of employment. However, increasing membership does result in higher employer monetary costs.

MONITORING AND REVIEW

A full review of this Statement will occur every three years, to coincide with completion of a full statutory actuarial valuation and every review of employer rates or interim valuation. However, a review of part of or all of the Statement will take place annually to ensure all the relevant parameters remain fit for purpose and will take account of the current economic conditions, change in demographic trends and will also reflect any legislative changes.

FLIGHTPATH RISK MANAGEMENT FRAMEWORK - DE-RISKING STRATEGY

With effect from 1 April 2014 the Administering Authority to the Fund has implemented a Cash and Risk Management Framework ("CRMF") for the purpose of managing various aspects of the Fund's financial risks. The CRMF is made up of four key components: Liability Driven Investment ("LDI"), Synthetic Equity with Protection, Currency Hedging and Collateral Management. These components help the Fund to mitigate liability, equity and currency risk in a capital efficient manner.

The LDI component of the CRMF helps to effectively control and limit interest rate and inflation risks as these factors can lead to significant changes to liability values. At the valuation date, the level of hedging within the assets was approximately 26% in relation to interest rates and 42% in relation to inflation, meaning to the extent the liabilities vary due to these factors, the assets will offset that movements by this proportion. The level of interest rate hedging increased to c50% at 30th September 2022 and new triggers were implemented to reflect the higher interest rate and market yield environment.

The intention is for the Fund to increase exposure in the long term to achieve an 80% proportion to both interest rates and inflation as yields become more attractive through a market-aware yield trigger framework.

The overall funding flightpath strategy structure was reviewed as part of the annual review of the CRMF as well as the impact of the recent changes in interest rates and inflation outlook. A summary of the latest real yield triggers above CPI effective from [November_December_2022] is shown below (split by duration of liabilities). In practice the triggers are split into separate interest rate and inflation triggers.

[Table to be inserted once the latest agreed triggers have been implemented]

| Trigger | Target exposure (% of assets) | Real yield over CPI (p.a.) | | | |
|----------------|----------------------------------|----------------------------|--------------------|--------------------|--------------------|
| | | 15yr | 20yr | 30yr | 40yr |
| 1 | <mark>30%</mark> | 1.25% | <mark>1.25%</mark> | <mark>1.25%</mark> | 1.25% |
| <mark>2</mark> | <mark>40%</mark> | 1.60% | 1.60% | <mark>1.60%</mark> | <mark>1.60%</mark> |
| <mark>3</mark> | <mark>50%</mark> | 1.95% | 1.95% | 1.95% | 1.95% |
| <mark>4</mark> | <mark>60%</mark> | 2.30% | 2.30% | 2.30% | <mark>2.30%</mark> |
| <mark>5</mark> | <mark>70%</mark> | <mark>2.65%</mark> | <mark>2.65%</mark> | <mark>2.65%</mark> | <mark>2.65%</mark> |
| <mark>6</mark> | <mark>80%</mark> | 3.00% | 3.00% | 3.00% | <mark>3.00%</mark> |

Risk Management Framework - Monitoring/Trigger Review

A summary report is provided to the Fund (on a monthly and quarterly basis) that includes a "traffic light" analysis of the key components of the CRMF. The "traffic light" indicates whether the CRMF is operating in line with expectations or if any actions are required.

Furthermore, a separate fund-wide mechanism is in place such that if the funding level falls more than 5% below the "expected" funding level (based on valuation assumptions), then discussions will follow at the Advisory Panel level as to the continued appropriateness of the funding strategy. The Committee have agreed to also adopt a new funding level trigger of 110%, on a consistent approach to the valuation funding basis, to prompt further discussions regarding potential actions. This will be reviewed as part of the actuarial valuation process and investment strategy review.

A Dynamic Equity Protection strategy has been in place for the Fund since 2018. This was after rigorous analysis and value for money considerations by the Fund's Funding and Risk Management Group ("FRMG"). The strategy protects against falls of greater than 10% the average market position over rolling 12 month period on c. £400m of equity exposure within the CRMF. The cost of protection is offset by the Fund's participation in losses again beyond a fall of 30% from average market levels over the same 12 month period as well as by giving up some potential upside return on a 2-weekly basis. Whilst more complex to set up, the dynamic strategy provides advantages versus the previous static approach as follows:

- 1. Improved protection levels in upward trending markets;
- 2. Expectation of better long-term risk adjusted returns (after fees and transaction costs) except in some extreme scenarios; and
- 3. Improved flexibility and on-going governance as it allows the structure to easily adapt to changing requirements including switching the protection off.

Due to the requirements of implementing the strategy on a daily rolling basis, it was agreed that the strategy would be delivered using a counterparty bank rather than an investment manager. Mercer went through a process of determining the best counterparty bank and it was agreed that JP Morgan would deliver the strategy via the existing CRMF vehicle managed by Insight Investment management.

The Fund has implemented a currency hedging policy through the CRMF to lock-in gains from the depreciation in sterling and reduce the risk of a materially strengthening pound. The coverage of the currency hedge is 75% of the overall equity portfolio.

Further details of the updated funding level triggers, equity market protection and currency hedging are shown in the relevant Committee report.

The Administering Authority will monitor the progress of the funding strategy between full actuarial valuations as part of the CRMF monitoring detailed above and regular funding reviews. If considered appropriate, the funding and CRMF strategy will be reviewed (other than as part of the triennial valuation process), for example, if there:

- has been a significant change in market conditions, and/or deviation in the progress of the funding strategy
- have been significant changes to the CPF membership, or LGPS benefits
- have been changes to the circumstances of any of the employing authorities to such an extent that they impact on or warrant a change in the funding strategy e.g. closure to new entrants
- have been any significant special contributions paid into the CPF
- if there have been material changes in the ISS
- if there has been a change in Regulations or Guidance which materially impacts on the policies within the funding strategy

The principal aim of these risk management techniques is to provide more certainty of real investment returns versus CPI inflation and/or to protect against volatility in the termination position. In other words, they are designed to reduce risk and provide more stability/certainty of outcome for funding and ultimately employer contribution rates. The effect of these techniques has been allowed for in the actuarial valuation calculations and could have implications on future actuarial valuations and the assumptions adopted. Further details of the framework have been included in the ISS.

When monitoring the funding position, if the Administering Authority considers that any action is required, the employing authorities will be contacted to provide an update and details of any proposed remedial actions at the next valuation or earlier if appropriate.

Cash and Liquidity Management

The Administering Authority regularly monitors the position in terms of Fund cashflow requirements to ensure that benefits can be paid in an efficient manner and also to consider the impact on investment strategy e.g. in terms of collateral management. The monitoring approach and governance is set out in the separate cashflow and risk management policy.

APPENDIX A - ACTUARIAL METHOD AND ASSUMPTIONS

The key whole Fund assumptions used for calculating the funding target and the cost of future accrual for the 2022 actuarial valuation are set out below.

| FINANCIAL ASSUMPTIONS | | | | |
|--|--|---|--|--|
| | 2022 valuation assumption | Description | | |
| Investment return / discount rate | Ongoing funding basis: 4.60% p.a. (past service) and 5.10% p.a. (future service) | Derived from the expected return on the Fund assets based on the long term strategy set out in the ISS, including appropriate margins for prudence. For the 2022 valuation this is based on an assumed return of 1.5% p.a. above CPI inflation (past service) and 2.0% p.a. above CPI inflation (future service). This real return will be reviewed from time to time based on the investment strategy, market outlook and the Fund's overall risk metrics. | | |
| | Minimum risk termination basis: 1.7% p.a. | Derived from the yield on conventional UK Government gilts. This assumption will be reviewed on an ongoing basis to allow for changes in market conditions at the relevant employing body's cessation date, along with any other structural or legislative changes. | | |
| Inflation (Consumer Prices Index) | 3.10% p.a. | RPI inflation is reduced to reflect the expected long-term difference between RPI and CPI measures of inflation (reflecting the profile and duration of the whole Fund's accrued liabilities and 2030 RPI reform) and adjusted to remove any supply/demand distortions as well as Bank of England forecasts. The total adjustment was a deduction of 0.8% p.a. from the market implied RPI expectations at the valuation date. | | |
| Salary increases (long-term) | 4.35% p.a. | Pre 1 April 2014 benefits (and 2014 to 2022 McCloud underpin) - the assumption for real salary increases (salary increases in excess of price inflation) will be determined by an allowance of 1.25% p.a. over the inflation assumption as described above. This includes allowance for promotional increases. | | |
| Salary increases (short-term) | Where applicable this is 3% or 4% p.a. until 31 March 2026. As set out on individual employer results schedule. | Allowance has been made for expected short term pay restraint for some employers. To the extent that experience differs to the assumption adopted, the effects will emerge at the next actuarial valuation. | | |
| | . coano como dalo. | Page 186 | | |

| Pension Increases and Deferred Revaluation | Assumed to be in line with the CPI inflation assumption above (noting that pension increases cannot be negative as pensions cannot be reduced). At the 2022 valuation, an adjustment has been made to the liabilities to allow for the known inflation for the period 30 September 2021 to 31 March 2022, and where material, allowance will continue to be made for inflation as it emerges when assessing funding positions between valuations. |
|--|---|
| Indexation of CARE benefits | Assumed to be in line with the CPI inflation assumption above. For members in pensionable employment, indexation of CARE benefits can be less than zero (i.e. a reduction in benefits). |
| McCloud | A reasonable estimate for the potential cost of McCloud has been included within the 2022 valuation results for each employer. This has been calculated based on the data provided for the 2022 valuation. |

DEMOGRAPHIC ASSUMPTIONS

Mortality/Life Expectancy

The derivation of the mortality assumption is set out in separate advice as supplied by the Actuary. The mortality in retirement assumptions will be based on the most up-to-date information in relation to self-administered pension schemes published by the Continuous Mortality Investigation (CMI) including a loading reflecting Fund specific experience and will make allowance for future improvements in longevity and the experience of the scheme. A specific mortality assumption has also been adopted for current members who retire on the grounds of ill health.

For all members, it is assumed that the trend in longevity seen over recent time periods (as evidenced in the 2021 CMI analysis) will continue in the longer term and as such, the assumptions build in a level of longevity 'improvement' year on year in the future in line with the CMI 2021projections and a long term improvement trend of 1.75% per annum.

As an indication of impact, we have set out the life expectancies at age 65 based on the 2019 and 2022 assumptions:

| | Male Life Expectancy at 65 | | Female Life Expectancy at 65 | |
|-----------------------|----------------------------|------|------------------------------|------|
| | 2019 | 2022 | 2019 | 2022 |
| Pensioners | 22.4 | 21.5 | 24.8 | 23.9 |
| Actives aged 45 now | 24.0 | 23.3 | 26.8 | 26.0 |
| Deferreds aged 45 now | 22.6 | 22.8 | 25.6 | 25.6 |

For example, a male pensioner, currently aged 65, would be expected to live to age 86.5. Whereas a male active member aged 45 would be expected to live until age 88.3. The difference reflects the expected increase in life expectancy over the next 20 years in the assumptions above.

The mortality before retirement has also been reviewed and updated based on LGPS wide experience.

Life expectancy assumptions

The post retirement mortality tables adopted for this valuation are set out below:

| Current Status | Retirement Type | Mortality Table |
|------------------|-----------------|--|
| Annuitant | Normal Health | 114% S3PMA_CMI_2021 [1.75%] 105% S3PFA_M_CMI_2021 [1.75%] |
| | Dependant | 136% S3PMA_CMI_2021 [1.75%] 119% S3DFA_CMI_2021 [1.75%] |
| | III Health | 143% S3IMA_CMI_2021 [1.75%] 170% S3IFA_CMI_2021 [1.75%] |
| Active | Normal Health | 117% S3PMA_CMI_2021 [1.75%] 105% S3PFA_M_CMI_2021[1.75%] |
| | III Health | 256% S3IMA_CMI_2021 [1.75%] 342% S3IFA_CMI_2021 [1.75%] |
| Deferred | All | 125% S3PMA_CMI_2021 [1.75%] 111% S3PFA_M_CMI_2021 [1.75%] |
| Future Dependant | Dependant | 134% S3PMA_CMI_2021 [1.75%] 121% S3DFA_CMI_2021 [1.75%] |

^{*} The life expectancy assumptions use a smoothing parameter of 7.5 and no short term improvements are allowed for.

| OTHER DEMOGRAPHIC ASSUMPTIONS | | | | |
|---|---|--|--|--|
| Commutation | It has been assumed that all retiring members will take 75% of the maximum tax-free cash available at retirement. The option which members have to commute part of their pension at retirement in return for a lump sum is a rate of £12 cash for each £1 p.a. of pension given up. | | | |
| Proportions Married / Civil Partnerships assumption | This has been reviewed and updated based on LGPS wide experience. | | | |
| Other Demographics | Following an analysis of Fund experience carried out by the Actuary, the incidence of ill health retirements and withdrawal rates remain in line with the assumptions adopted for the last valuation. In addition, no allowance will be made for the future take-up of the 50:50 option. Where any member has actually opted for the 50:50 scheme, this will be allowed for in the assessment of the rate for the next 3 years. | | | |

Expenses are met out the Fund, in accordance with the Regulations. This is allowed for by adding 0.8% of pensionable pay to the contributions from participating employers. This is reassessed at each valuation and is calculated by estimating the level of expenses for the Fund over the period from 1 April 2023 to 31 March 2026. Investment expenses have been allowed for implicitly Expenses in determining the discount rates. In addition, any expenses that are directly attributable to specific employers via the Employer Liaison team, will be included in the assessment of that employer's expense allowance from the 2022 actuarial valuation. An allowance for reasonable expenses will also be included on the termination of an employer's participation in the Fund and will be taken into account as part of the termination valuation. The costs of any discretion exercised by an employer in order to enhance benefits for a member through the Fund will be subject to additional Discretionary contributions from the employer as required by the Regulations as and when **Benefits** the event occurs. As a result, no allowance for such discretionary benefits has been made in the valuation.

Further details on the demographic assumptions are set out in the Actuary's formal report.

METHOD

The actuarial method to be used in the calculation of the solvency funding target is the Projected Unit method, under which the salary increases assumed for each member are projected until that member is assumed to leave active service by death, retirement or withdrawal from service. This method implicitly allows for new entrants to the scheme on the basis that the overall age profile of the active membership will remain stable. As a result, for those employers which are closed to new entrants, an alternative method is adopted, which makes advance allowance for the anticipated future ageing and decline of the current closed membership group potentially over the period of the rates and adjustments certificate. Employers who move from open to closed may see an increase in contributions as a result of this change.

The assumptions to be used in the calculation of the funding target are set out above. Underlying these assumptions are the following two tenets:

- that the Fund is expected to continue for the foreseeable future; and
- favourable investment performance can play a valuable role in achieving adequate funding over the longer term.

This allows the Fund to take a longer term view when assessing the contribution requirements for certain employers.

There will be a funding plan for each employer. In determining contribution requirements the Administering Authority, based on the advice of the Actuary, will consider whether the funding plan adopted for an employer is reasonably likely to be successful having regard to the particular circumstances of that employer (potentially taking into account any material changes after the valuation date up to 31 March 2023).

As part of each valuation separate employer contribution rates are assessed by the Fund Actuary for each participating employer or group of employers. As indicated above, these rates are assessed taking into account the experience and circumstances of each employer, following a principle of no cross-subsidy between the distinct employers paths Funds

METHOD AND ASSUMPTIONS USED IN CALCULATING THE COST OF FUTURE ACCRUAL (OR PRIMARY RATE)

The future service liabilities are calculated using the same assumptions as the funding target except that a different financial assumption for the discount rate is used. A critical aspect here is that the Regulations state the desirability of keeping the "Primary Rate" (which is the future service rate) as stable as possible so this needs to be taken into account when setting the assumptions.

As future service contributions are paid in respect of benefits built up in the future, the Primary Rate should take account of the market conditions applying at future dates, not just the date of the valuation. In addition, the associated benefits being built up are paid out over a longer time horizon than benefits already accrued; thus it is justifiable to use a slightly higher expected return from the investment strategy.

EMPLOYER ASSET SHARES

The Fund is a multi-employer pension scheme that is not formally unitised and so individual employer asset shares are calculated at each actuarial valuation. This means it is necessary to make some approximations in the timing of cashflows and allocation of investment returns (in line with the appropriate investment strategy) as calculated by the Actuary based on relevant financial information, when deriving the employer asset share.

In attributing the overall investment performance obtained on the assets of the Fund to each employer a pro-rata principle is adopted. This involves applying a notional individual employer investment strategy identical to that adopted for the Scheme as a whole unless agreed otherwise between the employer and the Fund at the sole discretion of the Administering Authority.

At each review, cashflows into and out of the Fund relating to each employer, any movement of members between employers within the Fund, along with investment return earned on the asset share, are allowed for when calculating asset shares at each valuation. In addition, the asset shares maybe restated for changes in data or other policies.

Adjustments are also made on account of the funding positions of orphan bodies which fall to be met by all other active employers in the Fund.

More detail on the approach to assessing an employer's asset share is available on request.

APPENDIX B – DEFICIT RECOVERY AND SURPLUS OFFSET PLANS

If the funding level of an employer is above or below 100% at the valuation date (i.e. the assets of the employer are more or less than the liabilities), an adjustment plan needs to be implemented such that the secondary contributions for each employer can be calculated. This adjustment plan requires a period over which to recover the deficit or run off any surplus i.e. the recovery period.

It is one of the Fund's key objectives that an employer will target 100% funding (e.g. full solvency) over an agreed period to maintain sustainability of contributions in the longer term subject to the affordability of the participating employers given other competing cost pressures, dependent on the Administering Authority's view of the employer's covenant and risk to the Fund. Based on the advice of the Actuary the assumptions and parameters in the FSS have be determined to try to achieve this but there is no guarantee that contributions will remain sustainable at future valuations. Employers therefore need to consider the balance between affordability of contributions in the short term and sustainability of contributions in the longer term (at subsequent actuarial valuations) in the context of their budgets now and in the future when determining the level of contributions. This could lead to an employer deciding to pay more than the minimum contributions determined under the FSS which would support future sustainability/stability of contributions at future valuations.

EMPLOYER CONTRIBUTION ADJUSTMENT PLANS- KEY PRINCIPLES

The average recovery period for the Fund as a whole is [43]12 years at this valuation which is the same as] [x one years shorter than] the average recovery period from the previous valuation. Subject to affordability and other considerations individual employer recovery periods would also be expected to reduce at this valuation.

Recovery periods will be set by the Fund on a consistent basis across employer categories where possible. This will determine the minimum contribution requirement and employers will be free to select any shorter deficit recovery period and higher contributions if they wish.

Deficit or surplus offset contributions paid to the Fund by each employer will normally be expressed as £s amounts.

The Administering Authority retains ultimate discretion in applying these principles for individual employers on grounds of affordability and covenant strength and it may be deemed necessary to deviate under exceptional circumstances. Employers will be notified of their individual recovery period as part of the provision of their individual valuation results.

In determining the actual recovery period to apply for any particular employer or employer grouping, the Administering Authority may take into account; the size of the funding shortfall; or surplus the business plans of the employer; the assessment of the financial covenant of the Employer, changes in the funding position after the valuation date which is deemed reasonable and security of future income streams; and any contingent security available to the Fund or offered by the Employer such as guarantor or bond arrangements, charge over assets, etc.

The Administering Authority, following consultation with the participating employers, has adopted the following principles for setting the individual employer contribution rates arising from the 2022 actuarial valuation:

The employer contributions will be expressed and certified as two separate elements:

- the **Primary rate**: a percentage of pensionable payroll in respect of the cost of the future accrual of benefits and ancillary death in service and ill health benefits
- the Secondary rate: a schedule of lump sum monetary amounts and/or % of pay amendments over 2023/26 in respect of an employer's surplus or deficit (including phasing adjustments)

The contributions certified by the Actuary will be the minimum contributions payable by the employer. An employer can choose to pay additional contributions each year if they wish to do so.

General principles:

- a) Where increases (or decreases) in employer contributions are required from 1 April 2023, following completion of the 2022 actuarial valuation, the increase (or decrease) from the rates of contribution payable in the year 2023/24 may be implemented in steps, over a maximum period of 3 years. Any step up in future service contributions will be implemented in steps of at least 0.5% of pay per annum unless agreed otherwise based on the overall contributions paid over the certificate period. However, where a surplus exists or where there has been a reduction in contributions paid in respect of an employer's deficit at the valuation, the Fund will not consider it appropriate for any increase in contributions paid in respect of future accrual of benefits to be implemented in steps.
- b) Where a deficit exists the Fund does not believe it appropriate for contribution reductions to apply compared to the existing funding plan (allowing for indexation where applicable) where deficits remain, unless there is compelling reason to do so and any reduction will need clear justification on affordability grounds. Any employer whose covenant (as assessed by the Administering Authority) is not sufficiently strong in the long term will not normally be allowed to reduce contributions where the position has improved.
- c) The Fund's policy is <u>not</u> to allow the prepayment of employee or primary contributions and therefore only deficit contributions can be prepaid.
- d) Alternative patterns of contribution, on grounds of affordability, will be considered on an individual employer basis, subject to the total contribution requirement being met over the 2023/26 period covered by the contribution certificate. Employers should be aware that varying their contribution pattern could have an effect on the level of contributions required in the future.
- e) If the covenant is deemed to be materially weak, the secondary contributions may be set with reference to a higher funding target, subject to the discretion of the Fund.
- f) For those bodies identified as having a relatively weak covenant, the Administering Authority will need to balance the level of risk plus the solvency requirements of the Fund with the sustainability of the organisation when agreeing funding the plants of the product of the sustainability of the organisation when agreeing funding the sustainability of the sustainability of

- g) For employers that do not have a financial year end of 31 March 2023 (e.g. 31 July 2023), the Fund can allow the employer to continue to pay their current contribution plan until their financial year end date. The new contribution plan would then be implemented after this date (i.e. 1 August 2023 if the year-end is 31 July 2023).
- h) Employers must notify the Fund as soon as they become aware of their planned exit date. Where appropriate, or at the request of the Scheme Employer, the Fund will normally review their certified contribution in order to target a fully funded position at exit. Consideration will be given to any risk sharing arrangements when reviewing contribution rates.
- i) It is acknowledged by the Administering Authority that, whilst posing a relatively low risk to the Fund as a whole, an employers could be faced with contributions that could seriously affect their ability to function in the future. The Administering Authority therefore would be willing to use its discretion to accept an evidenced based affordable level of contributions for the organisation for the three years 2023/2026. Any application of this option is at the ultimate discretion of the Fund in order to effectively manage risk across the Fund. It will only be considered after the provision of the appropriate evidence as part of the covenant assessment and also the appropriate professional advice. Typically, this will be managed primarily through an adjustment to the recovery period and/or phasing/stepping of contributions.
- j) Notwithstanding the above principles, the Administering Authority, in consultation with the Actuary, has the discretion to consider whether any exceptional arrangements should apply in particular cases.

If an employer is in deficit:

- k) Subject to consideration of affordability, as a general rule the deficit recovery period will reduce by at least 3 years for employers at this valuation when compared to the preceding valuation. This is to target full solvency over a similar (or shorter) time horizon. Subject to affordability considerations and other factors a bespoke period may be applied in respect of particular employers where the Administering Authority considers this to be warranted.
- I) For closed employers, the deficit recovery period will be linked to the expected average future working lifetime of the active membership.
- m) The deficit recovery period will be set to at least cover the expected interest costs (actual interest costs will vary in line with investment performance) on the deficit.
- n) Employers may also elect to make lump sum prepayments of deficit contributions (either on an annual basis or a one-off payment) which could result in a cash saving over the valuation certificate period.

If an employer is in surplus:

For any employers assessed to be in surplus, their individual contribution requirements will be adjusted to such an extent that any surplus is used (i.e. run-off) over a the same period as that adopted for the last actuarial valuation, subject to a total employer contribution minimum of zero i.e. the secondary contribution offset cannot exceed the primary contributions payable in any year of the certificate. If an employer is expected to exit the Fund before this period, contribution requirements will be set to target no exit debt or exit credit being payable.



APPENDIX C – ADMISSION POLICY

INTRODUCTION

This appendix details the Fund's policy on admissions into the Fund and sets out the considerations for current and former admission bodies. It also sets out the methodology for assessment of ongoing contribution requirements.

- Admission bodies are required to have an "admission agreement" with the Fund. In conjunction with the Regulations, the admission agreement sets out the conditions of participation of the admission body including which employees (or categories of employees) are eligible to be members of the Fund.
- Scheme Employers have a statutory right to participate in the LGPS and their staff therefore
 can become members of the LGPS at any time, although some organisations (Part 2 Scheme
 Employers) do need to designate eligibility for its staff.

A list of all current employing bodies participating in the Fund is kept as a live document and will be updated by the Administering Authority as bodies are admitted to, or leave the Fund.

ENTRY TO THE FUND

Prior to admission to the Fund, an Admitted Body is required to carry out an assessment of the level of risk on premature termination of the contract to the satisfaction of the Administering Authority. If the risk assessment and/or bond amount is not to the satisfaction of the Administering Authority (as required under the LGPS Regulations) it will consider and determine whether the admission body must pre-fund for termination with contribution requirements assessed using the minimum risk methodology and assumptions.

Some aspects that the Administering Authority may consider when deciding whether to apply a minimum risk methodology are:

- Uncertainty over the security of the organisation's funding sources e.g. the body relies on voluntary or charitable sources of income or has no external funding guarantee/reserves;
- If the admitted body has an expected limited lifespan of participation in the Fund;
- The average age of employees to be admitted and whether the admission is closed to new joiners.

In order to protect other Fund employers, where it has been considered undesirable to provide a bond, a guarantee must be sought in line with the LGPS Regulations.

ADMITTED BODIES PROVIDING A SERVICE

Generally Admitted Bodies providing a service will have a guarantor within the Fund that will stand behind the liabilities. Accordingly, in general, the minimum risk approach to funding and termination will not apply for these bodies. As above, the Admitted Body is required to carry out an assessment of the level of risk on premature termination of the contract to the satisfaction of the Administering Authority. This assessment would normally be based on advice in the form of a "risk assessment report" provided by the Actuary to the Fund. As the Scheme Employer is effectively the ultimate guarantor for these admissions to the Fund it must also be satisfied (along with the Administering Authority) over the level (if any) of any bond requirement. Where bond agreements are to the satisfaction of the Administering Authority, the level of the bond amount will be subject to review on a regular basis.

In the absence of any other specific agreement between the parties, deficit recovery periods for Admitted Bodies will be set in line with the Fund's general policy as set out in Appendix B.

Any risk sharing arrangements agreed between the Scheme Employer and the Admitted Body will be documented in the commercial agreement between the two parties and not the admission agreement.

In the event of termination of the Admitted Body, any orphan liabilities in the Fund will be subsumed by the relevant Scheme Employer (further information is set out within Appendix D).

An exception to the above policy applies if the guarantor is not a participating employer within the Fund, including if the guarantor is a participating employer within another LGPS Fund. In order to protect other employers within the Fund the Administering Authority may in this case treat the admission body as pre-funding for termination, with contribution requirements assessed using the minimum risk methodology and assumptions

PRE-FUNDING FOR TERMINATION

An employing body may choose to pre-fund for termination i.e. to amend their funding approach to a minimum risk methodology and assumptions. This will substantially reduce the risk of an uncertain and potentially large debt being due to the Fund at termination. However, it is also likely to give rise to a substantial increase in contribution requirements, when assessed on the minimum risk basis.

For any employing bodies funding on such a minimum risk strategy a notional investment strategy can be assumed as a match to the liabilities if agreed by the Administering Authority based on the advice of the Actuary. In particular, the employing body's notional asset share of the Fund will be credited with an investment return in line with the minimum risk funding assumptions adopted rather than the actual investment return generated by the actual asset portfolio of the entire Fund. The Fund reserves the right to modify this approach in any case where it might materially affect the finances of the Scheme, or depending on any case specific circumstances.

APPENDIX D – TERMINATION POLICY, FLEXIBILITY FOR EXIT PAYMENTS AND DEFERRED DEBT AGREEMENTS

This appendix details the Fund's policy on the methodology for assessment of termination payments in the event of the cessation of an employer's participation in the Fund.

EXITING THE FUND

Unless entering a DDA, an employer ceases to participate in the Fund when the last active member leaves the Fund or when a suspension notice ends and the employer then becomes an "exiting employer" under the Regulations. In this situation the Fund is required to obtain an actuarial valuation of that employer's liabilities in respect of the benefits of the exiting employer's current and former employees, along with a termination contribution certificate setting out whether an exit payment is due to the Fund or a credit is payable to the employer.

When an employer terminates, employees may transfer to another employer, either within the Fund or elsewhere. If this is not the case the employees will retain pension rights within the Fund (i.e. either deferred benefits or immediate retirement benefits).

In addition to any liabilities for current employees, the Fund will also retain liability for payment of benefits to former employees (i.e. to existing deferred and pensioner members) except where there is a complete transfer of responsibility to another Fund with a different Administering Authority.

In the event that unfunded liabilities arise that cannot be recovered from the employing body, these will normally fall to be met by the Fund as a whole (i.e. all employers) unless there is a guarantor or successor body within the Fund.

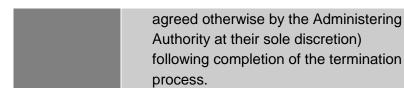
TERMINATION POLICY

The Fund's policy for settling termination payments/credits is as follows:

- 1. The default position is for exit payments and exit credits to be paid immediately in full once the cessation assessment has been completed by the Actuary (and any determination notice issued by the Fund where applicable). The treatment upon termination will depend on whether the employer has a guarantor within the Fund, or a successor body exists to take over the employing body's liabilities. Further detail is set out in the table below.
- At the discretion of the Administering Authority, instalment plans over a defined period may be agreed but only when there are clear issues of affordability that risk the financial viability of the organisation and the ability of the Fund to recover the debt.

The assumptions and approach used to assess the amount of a payment/credit payable upon termination will be consistent with the previous valuation assumptions, updated for market yields and inflation applying at the cessation date. With the following exceptions:

| | Employers with no guarantor in the Fund / only a guarantee of last resort | Employers with a guarantor | | |
|---|--|---|--|--|
| Financial assumptions | The minimum risk termination basis (unless the Administering Authority agrees otherwise, based on the advice of the Actuary). Adjustments may also be made to the inflation assumption to reflect the level of overall hedging in the Fund. This is to protect the other employers in the Fund as, at termination, the employing body's liabilities will become orphan liabilities within the Fund, and there will be no recourse to it if a shortfall emerges in the future (after participation has terminated). | If the employing body has a guarantor within the Fund or a successor body exists either of which would take over the employing body's liabilities, the Fund's policy is that the ongoing funding basis will be used for the termination assessment unless the guarantor informs the Fund otherwise. | | |
| Demographic Assumptions | In line with the assumptions adopted for the 2022 valuation with the exception of a higher level of prudence in the mortality assumptions to further protect the remaining employers. The rate of improvement in the mortality rates will therefore be increased to 2.25% p.a. This will be reviewed from time to time to allow for any material changes in life expectancy trends and will be formally reassessed at the next valuation. | In line with the assumptions adopted for the 2022 valuation for ongoing funding and contribution purposes. This will be reviewed from time to time to allow for any material changes in life expectancy trends and will be formally reassessed at the next valuation. | | |
| McCloud | A reasonable estimate for the potential cost of McCloud will be included. This will be calculated for all scheme members of the outgoing employer (reflecting the data made available). For the avoidance of doubt, there will be no recourse for an employer with regard to McCloud, once the final termination has been settled and payments have been made. | | | |
| Additional Costs | A reasonable allowance for expenses will also be made in relation administration and other expenses. This will be allowed for in the final termination assessment. | | | |
| Default policy once the termination certificate has been provided | In the case of a surplus - the Fund pays the exit credit to the exiting employer following completion of the termination process (within 6 months of the exit date, or within 6 months of the completion of the cessation assessment by the Actuary (if later), providing no appeals have been raised with the Fund during this time). In the case of a deficit -the Fund would require the exiting employer to pay the termination deficit to the Fund as a lump sum cash payment (unless Page 198 | The guarantor or successor body will then subsume the assets and liabilities (and any surplus or deficit) of the employing body within the Fund under the default policy. (For Admission Bodies, this process is sometimes known as the "novation" of the admission agreement.) In some instances an exit debt may be payable by an employer before the assets and liabilities are subsumed by the guarantor, this will be considered on a case-by-case basis. No payment of an | | |
| | - | 28 | | |



exit credit will be payable unless representation is made as set out below.

The Administering Authority can vary the treatment on a case-by-case basis at its sole discretion if circumstances warrant it based on the advice of the Actuary based on any representations from the interested parties (where applicable). For example, the Fund may adjust any exit payment or exit credit to take into account any risk sharing arrangements which exist between the exiting employer and other Fund employers

With regard to subsuming the residual assets and liabilities, this may, if agreed by the successor body, constitute a complete amalgamation of assets and liabilities to the successor body, including any funding deficit on closure. In these circumstances no termination payment will be required from the outgoing employing body itself, as the deficit would be recovered via the successor body's own deficit recovery plan.

REVIEW OF THE TERMINATION POLICY

As set out in the table above, for employers without a guarantor, the financial assumptions are currently related to the yields on Government debt (known as Gilts). The principle of the termination policy and the assumptions used is to ensure (as far as possible) there is sufficient monies to pay all the benefits due in relation to the "orphan" members of the outgoing employer as otherwise the remaining employers would potentially have to fund this via their contributions at subsequent valuations. This is why the Fund take a more cautious view as set out in this policy. For other employers, the policy is to use the appropriate ongoing funding assumptions if the orphaned liabilities are to be wholly subsumed by a guarantor in the Fund (once any exit payment is paid to/from the employer depending on the circumstances).

The policy will be reviewed as a matter of course at each actuarial valuation but will also be reviewed in times of extreme events, such as a material shift in market conditions or shift in economic/fiscal policy, which will affect the assets or liabilities of the exiting employer. This is to ensure that the approach remains appropriate, given the risk associated with funding the orphaned liabilities left behind by an exiting employer is being passed to other Fund employers, and ultimately the tax payer. This means that the assumptions (both financial and demographic) can be changed if circumstances warrant it. Employers would be notified of any change (and the rationale for the change) and the policy would be updated.

The Fund also has the discretion to apply a different approach on a case by case basis taking into account all factors (financial and non-financial) pertaining to the exiting employer.

FUTURE TERMINATIONS

In many cases, termination of an employer's participation is an event that can be foreseen, for example, because the organisation's operations may be planned to be discontinued and/or the admission agreement is due to cease. Under the Regulations, in the event of the Administering Authority becoming aware of such circumstances, it can amend an employer's minimum contributions such that the value of the assets of the employing body is neither materially more nor materially less than its anticipated liabilities at the date it appears to the Administering Authority that it will cease to be a participating employer. In this case, employing bodies are encouraged to open a dialogue with the Fund to commence plar page 1990 ermination as early as possible. Where

termination is disclosed in advance the Fund will operate procedures to reduce the sizeable volatility risks to the debt amount in the run up to actual termination of participation. The Fund will modify the employing body's approach in any case, where it might materially affect the finances of the Scheme, or depending on any case specific circumstances.

DETERMINATION NOTICES (EMPLOYERS WITH A GUARANTOR)

Where the outgoing employer is responsible for only part of the residual deficit or surplus as per a separate risk sharing agreement, the Fund's default will also be that any surplus would be retained by the Fund in favour of the outsourcing employer/guarantor.

For the avoidance of doubt, where the outgoing employer is not responsible for any costs under a risk sharing agreement then no exit credit will be paid as per the Regulations unless the Fund is aware of the provisions of the risk sharing agreement in any representation made and determines an exit credit should be paid.

If there is any dispute, then the following arrangements will apply:

- In the case of a surplus, in line with the amending Regulations (<u>The Local Government Pension Scheme (Amendment) Regulations 2020</u>) the parties will need to make representations to the Administering Authority if they believe an Exit Credit should be paid outside the policy set out above, or if they dispute the determination of the Administering Authority. The Fund will notify the parties of the information required to make the determination on request.
- If the Fund determines an Exit Credit is payable then they will pay this directly to the exiting employer within 6 months of the exit date, or within 6 months of the completion of the cessation assessment by the Actuary (if later)
- In the case of a deficit, in order to maintain a consistent approach, the Fund will seek to
 recover this from the exiting employer in the first instance although if this is not possible
 then the deficit will be recovered from the guarantor either as a further contribution
 collection or it will be taken into account at the next valuation depending on the
 circumstances.

If requested, the Administering Authority will provide details of the information considered as part of their determination. An exit credit determination notice will be provided alongside the termination assessment from the Actuary in cases where there is an exit credit. The notice will cover the following information and process steps:

- 1. Details of the employers involved in the process (e.g. the exiting employer and guarantor).
- 2. Details of the admission agreement, commercial contracts and any amendments to the terms that have been made available to the Administering Authority and considered as part of the decision making process. The underlying principle will be that if an employer is responsible for a deficit, they will be eligible for any surplus. This is subject to the information provided and any risk sharing arrangements in place.
- 3. The final termination certification of the exit credit by the Actuary.
- 4. The Administering Authority's determination based on the information provided.
- 5. Details of the appeals process in the event that a party disagrees with the determination and wishes to make representations to the Administering Authority.

POLICY IN RELATION TO THE FLEXIBILITY FOR DEBT SPREADING AGREEMENTS (DSA) AND DEFERRED DEBT AGREEMENTS (DDA)

The default position is for exit payments to be paid immediately in full (once the cessation assessment has been completed by the Actuary (adjusted for interest where appropriate) unless there is a risk sharing arrangement in place with a guaranteeing Scheme employer in the Fund whereby the exiting employer is not responsible for any exit payment (as detailed above). In the case of an exit credit the determination process set out above will be followed.

Under the Regulations the Fund has complete discretion as to whether it agrees to put a DDA in place provided that it follows the procedure set out in the Regulations.

If an employer requests that an exit debt payment is recovered over a fixed period of time (e.g. via a Debt Spreading Agreement ("DSA")) or that they wish to enter into a Deferred Debt Arrangement (DDA) with the Fund, they must make a request in writing covering the reasons for such a request.

Any deviation from the default position will be based on the Administering Authority's assessment of whether the full exit debt is affordable and whether it is in the interests of the Fund (and therefore ultimately taxpayers) to adopt either of the approaches. In making this assessment the Administering Authority will consider the covenant of the employer and also whether any security is required and available to back the arrangements.

Any costs (including necessary actuarial, legal and covenant advice) associated with assessing this will be borne by the employer and, depending on the employer's circumstances, will either be required as an upfront payment or included in the contribution plan or exit debt payment.

POLICY FOR SPREADING EXIT PAYMENTS

The following process will determine whether an employer is eligible to spread their exit payment over a defined period via a DSA.

- 1. The Administering Authority will request financial information from the employer including annual accounts, management accounts, budgets, cashflow forecasts and any other relevant information to use as part of their covenant review. As part of this, the Administering Authority will take advice from the Fund Actuary, covenant, legal and any other specialist adviser. If this information is not provided then the default policy of immediate payment will be adopted.
- 2. Once this information has been provided, the Administering Authority (in conjunction with the Fund Actuary, covenant and legal advisors where necessary) will review the covenant of the employer to determine whether it is in the interests of the Fund to allow them to spread the exit debt over a period of time. Depending on the length of the period and also the size of the outstanding debt, the Fund may request security to support the payment plan before entering into an agreement to spread the exit payments.
- 3. The payment plan could include non-uniform payments e.g. a lump sum up front followed by a series of payments over the agreed period. The payments required will include allowance for interest on late payment.
- 4. The initial process to determine whether an exit debt should be spread may take up to 3 months from receipt of data so it is important that employers who request to spread exit debt payments notify the Fund in good time Page 201

- 5. If it is agreed that the exit payments can be spread then the Administering Authority will engage with the employer regarding the following:
 - a. The spreading period that will be adopted (this will be subject to a maximum of 5 years except in exceptional circumstances).
 - b. The initial and annual payments due and how these will change over the period
 - c. The interest rates applicable and the costs associated with the payment plan devised
 - d. The level of security required to support the payment plan (if any) and the form of that security e.g. bond, escrow account etc.
 - e. The responsibilities of the employer during the exit spreading period including the supply of updated information and events which would trigger a review of the situation
 - f. The views of the Actuary, covenant, legal and any other specialists necessary
 - g. The covenant information that will be required on a regular basis to allow the payment plan to continue.
 - h. Under what circumstances the payment plan may be reviewed or immediate payment requested (e.g. where there has been a significant change in covenant or circumstances)
- 6. Once the Administering Authority has reached its decision, the arrangement will be documented and any supporting agreements will be included.
- 7. Subject to the employer's circumstances, any costs will either be required as an upfront payment or included in the contribution plan.

EMPLOYERS PARTICIPATING WITH NO CONTRIBUTING MEMBERS (DDA)

As opposed to paying the exit debt upfront or via a DSA, an employer may participate in the Fund with no contributing members and utilise the "Deferred Debt Agreements" (DDA) at the sole discretion of the Administering Authority. This would be at the request of the employer in writing to the Administering Authority.

The following process will determine whether the Fund will agree to allow the employer to enter into such an arrangement:

- The Administering Authority will request updated financial information from the employer including annual accounts, management accounts, budgets, cashflow forecasts and any other relevant information showing the expected financial progression of the organisation. If this information is not provided then a DDA will not be entered into by the Administering Authority.
- 2. Once this information has been provided, the Administering Authority will firstly consider whether it would be in the best interests of the Fund and employers to enter into such an arrangement with the employer. This decision will be based on a covenant review of the employer to determine whether the employer could afford the exit debt (either immediately or via a debt spreading agreement) at that time (based on advice from the Actuary, covenant and legal advisor where necessary). If the exit debt is deemed to be affordable then a Deferred Debt Agreement will not apply to the employer.
- 3. The initial process to determine whether a DDA should apply may take up to 3 months from receipt of the required information so an employer who wishes to request that the Page 202

Administering Authority enters into such an arrangement needs to make the request in advance of the potential exit date (for example when the Employer's active membership has reduced below 5 members and it appears likely that termination could be triggered within the next 6-9 months).

- 4. If the Administering Authority's assessment confirms that the potential exit debt is not affordable, the Administering Authority will engage in discussions with the employer about the potential format of a DDA using the template Fund agreement which will be based on the principles set out in the Scheme Advisory Board's separate guide. As part of this, the following will be considered and agreed:
 - a. What security the employer can offer whilst the employer remains in the Fund. In general the Administering Authority will not enter into such an arrangement unless they are confident that the employer can support the arrangement in future. Provision of security may also result in a review of the recovery period and other funding arrangements.
 - b. Whether an upfront cash payment should be made to the Fund initially to reduce the potential debt.
 - c. What the updated secondary rate of contributions would be required up to the next valuation.
 - d. The financial information that will be required on a regular basis to allow the employer to remain in the Fund and any other monitoring that will be required.
 - e. The advice of the Actuary, covenant, legal and any other specialists necessary.
 - f. The responsibilities that would apply to the employer while they remain in the Fund.
 - g. What conditions would trigger the implementation of a revised deficit recovery plan and subsequent revision to the secondary contributions (e.g. provision of security).
 - h. The circumstances that would trigger a variation in the length of the DDA (if appropriate), including a cessation of the arrangement (e.g. where the ability to pay contributions has weakened materially or is likely to weaken in the next 12 months). Where an agreement ceases an exit payment (or credit) could become payable. Potential triggers may be the removal of any security or a significant change in covenant assessed as part of the regular monitoring.
 - i. Under what circumstances the employer may be able to vary the arrangement e.g. a further cash payment.

The Administering Authority will then make a final decision on whether it is in the best interests of the Fund to enter into a DDA with the employer, and confirm the terms that are required.

- 5. For employers that are successful in entering into a DDA, contribution requirements will continue to be reviewed as part of each actuarial valuation or in line with the DDA in the interim if any of the triggers are met.
- 6. The costs associated with the advice sought and drafting of the DDA will be passed onto the employer as part of the arrangements and contribution requirements. Subject to the employer's circumstances, any costs will either be required as an upfront payment or included in the contribution plan.

APPENDIX E - REVIEW OF EMPLOYER CONTRIBUTIONS BETWEEN VALUATIONS

The Administering Authority has the ability to review employer contributions between valuations. The Administering Authority and employers have the following flexibilities:

- 1. The Administering Authority may review the contributions of an employer where there has been a significant change to the liabilities of an employer.
- 2. The Administering Authority may review the contributions of an employer where there has been a significant change in the employer's covenant.
- 3. An employer may request a review of contributions from the Administering Authority if they feel that either point 1 or point 2 applies to them. The employer would be required to pay the costs of any review following completion of the calculations and is only permitted to make a maximum of two requests between actuarial valuation dates (except in exceptional circumstances and at the sole discretion of the Administering Authority).

Where the funding position for an employer significantly changes solely due to a change in assets (and changes in actuarial assumptions), the overarching Government policy is that contribution reviews are not permitted outside of a full valuation cycle. However changes in assets would be taken into account when considering if an employer can support its obligations to the Fund after a significant covenant change (see 2. above).

The Administering Authority will consult with the employer prior to undertaking a review of their contributions including setting out the reason for triggering the review.

For the avoidance of doubt any review of contributions may result in no change and a continuation of contributions as per the latest actuarial valuation assessment. In the normal course of events, a rate review would not be undertaken close to the next actuarial valuation date, unless in exceptional circumstances. For example:

- A contribution review due to a change in membership profile would not be undertaken in the 6 months leading up to the valuation Rates and Adjustments Certificate.
- However, where there has been a material change in covenant, a review will be
 considered on a case by case basis which will determine if it should take place and
 when any contribution change would be implemented. This will take into account the
 proximity of the actuarial valuation and the implementation of the contributions from that
 valuation.

SITUATIONS WHERE CONTRIBUTIONS MAY BE REVIEWED

Contributions may be reviewed if the Administering Authority becomes aware of any of the following scenarios. Employers will be notified if this is the case.

Consideration will also be given to the impact that any employer changes may have on the other employers and on the Fund as a whole, when deciding whether to proceed with a contribution review.

• Significant changes in the employer's liabilities

This includes but is not limited to the following scenarios:

- 1. Significant changes to the employer's membership which will have a material impact on their liabilities, such as:
 - a. Restructuring of an employer
 - b. A significant outsourcing or transfer of staff to another employer (not necessarily within the Fund)
 - c. A bulk transfer into or out of the employer
 - d. Other significant changes to the membership for example due to redundancies, significant salary awards, ill health retirements (for employers not included in the captive arrangement) or large number of withdrawals
 - e. Where the aggregation of member movements materially shortens the expected time horizon for continued participation in the Fund
- 2. Two or more employers merging including insourcing and transferring of services
- 3. The separation of an employer into two or more individual employers

In terms of assessing the triggers under point a. above, the Administering Authority will only consider a review if the change in liabilities is expected to be more than 5% of the total liabilities. In some cases this may mean there is also a change in the covenant of the employer.

Any review of the rate will only take into account the impact of the change in liabilities (including, if relevant, any underfunding in relation to pension strain costs) both in terms of the Primary and Secondary rate of contributions.

Significant changes in the employer's covenant

This includes but is not limited to the following scenarios:

- Provision of, or removal of, or impairment of, security, bond, guarantee or some other form of indemnity by an employer against their obligations in the Fund. For the avoidance of doubt, this includes provision of security to any other pension arrangement or creditor (e.g. banks), which may impair the security provided to the Fund.
- Material change in an employer's immediate financial strength or longer-term financial outlook (evidence should be available to justify this) including where an employer ceases to operate or becomes insolvent.
- 3. Where an employer exhibits behaviour that suggests a change in their ability and/or willingness to pay contributions to the Fund.

In some instances, a change in the liabilities will also result in a change in an employer's ability to meet its obligations.

Whilst in most cases the regular covenant updates requested by the Administering Authority will identify some of these changes, in some circumstances, employers will be required to agree to notify the Administering Authority of any material changes. Where this applies, employers will be notified separately and the Administering Authority will set out the requirements (an example of the notifiable events framework is set out in Appendix G.

Additional information will be sought from the employer in order to determine whether a contribution review is necessary. This may include annual accounts, budgets, forecasts and any

specific details of restructure plans. As part of this, the Administering Authority will take advice from the Fund Actuary, covenant, legal and any other specialist adviser.

Where a contribution review is triggered by a significant change in employer covenant, any review of the contribution rate would include consideration of the updated funding position (both on an ongoing and termination basis) and would usually allow for changes in asset values when considering if the employer can meet its obligations on both an ongoing and termination basis (if applicable). This could then lead to the following actions:

- the contributions changing or staying the same depending on the conclusion, and/or;
- security to improve the covenant to the Fund, and/or;

In the case of an employer who may exit the Fund, there is statutory provision for rates to be amended between valuations but it is unlikely that this power will be invoked other than in exceptional circumstances.

PROCESS AND POTENTIAL OUTCOMES OF A CONTRIBUTION REVIEW

Where one of the listed events occurs, the Administering Authority will enter into discussion with the employer to clarify details of the event and any intent of the Administering Authority to review contributions. Ultimately, the decision to review contributions as a result of the above events rests with the Administering Authority after, if necessary, taking advice from their Actuary, legal or a covenant specialist advisor.

This also applies where an employer notifies the Administering Authority of the event and requests a review of the contributions. The employer will be required to agree to meet any professional and administration costs associated with the review. The employer will be required to outline the rationale and case for the review through a suitable exchange of information prior to consideration by the Administering Authority.

The Administering Authority will consider whether it is appropriate to use updated membership data within the review (e.g. where the change in data is expected to have a material effect on the outcome) and whether any supporting information is required from the employer.

As well as revisiting the employer's funding plan, as part of the review it is possible that other parts of the funding strategy will also be reviewed where the covenant of the employer has changed, for example the Fund will consider:

- Whether the Primary contribution rate should be adjusted to allow for any profile change
- Whether the Secondary contribution rate should be adjusted including whether the length of the recovery period adopted at the previous valuation remains appropriate. At the absolute discretion of the Administering Authority this may result in an increase to the recovery period where the evidence gathered demonstrates that the existing time horizon is no longer achievable and the extension is in the best interests of the tax payer, taking into account any security that may be available

The review of contributions may take up to 3 months from the date of confirmation to the employer that the review is taking place, in order to collate the necessary data.

Any change to an employer's contributions will be implemented at a date agreed between the employer and the Fund. The Schedule to the Rates and Adjustment Certificate at the last valuation will be updated for any contribution changes.

As part of the process the Administering Authority will consider whether it is appropriate to consult any other Fund employers prior to implementing the revised contributions. Page 206

Circumstances where the Administering Authority may consider it appropriate to do so include where there is another employer acting as guarantor in the Fund, then the guarantor would be consulted on as part of the contribution review process.

The Administering Authority will agree a proportionate process for periodical ongoing monitoring and review following the implementation of the revised contribution plan. The Employer will be required to provide information to the Fund to support this, which will depend in part of the reasons for triggering the contribution review.



APPENDIX F - COVENANT ASSESSMENT AND MONITORING POLICY

Covenant is the employer's legal obligation and financial ability to meet their defined benefit obligations in the Fund now and in the future. Regular assessment and monitoring of employer covenant is undertaken to understand the current strength of the employer's covenant and how they could change in the future. This is important to assist the Fund in deciding the appropriate level of risk when setting the investment strategy, employer funding targets and, where necessary, employer recovery plans. Therefore, a sound understanding of the covenant of employers is an essential part of the integrated approach to risk management of the Fund.

Employer's covenant can change quickly and therefore assessing the covenant of employers from a legal and financial perspective is an ongoing activity. The Fund has a well-developed and proportionate framework to monitor employer covenant and identify changes in covenant. The Fund can also draw on the expertise of external covenant advisers when necessary.

RISK CRITERIA

The assessment criteria upon which the affordability and recovery of employer contributions should be reviewed could include:

- Nature and prospects of the employer's industry
- Employer's competitive position and relative size
- Management ability and track record
- Financial policy of the employer
- Profitability, cashflow and financial ability to meet contributions (both ongoing and on exit)
- Employer's credit rating
- Position of the economy as a whole
- Legal aspects

Not all of the above would be applicable to assessing employer risk within the Fund; rather a proportionate approach to the consideration of the above criteria would be made, with further focus given to the following:

- The scale of obligations to the pension scheme relative to the size of the employer's operating cashflow
- The relative priority placed on the pension scheme compared to corporate finances
- An estimate of the amount which might be available to the scheme on insolvency of the employer as well as the likelihood of that eventuality.

ASSESSING EMPLOYER COVENANT

The strength of employer covenant can be subject to substantial variation over relatively short periods of time and, as such, regular monitoring and assessment is undertaken. The employers' covenants will be assessed and monitored objectively in a proportionate manner and their ability to meet their obligations in the short and long term will be considered when determining an individual employer's funding strategy.

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An assessment of employer covenant includes determining the following:

- Type of employer body and its origins
- Nature and enforceability of legal agreements
- Whether there is a bond in place and the level of the bond
- Whether a more accelerated recovery plan should be enforced
- Whether there is an option to call in contingent assets
 Is there a need for monitoring of ongoing and termination funding ahead of the next actuarial valuation?

The strength of employer covenant can be subject to substantial variation over relatively short periods of time and, as such, regular monitoring and assessment is vital.

The employer covenant will be assessed objectively and its ability to meet their obligations will be viewed in the context of the Fund's exposure to risk and volatility based on publically available information and/or information provided by the employer. The monitoring of covenant strength along with the funding position (including on the termination basis) enables the Fund to anticipate and pre-empt employer funding issues and thus adopt a proactive approach. In order to objectively monitor the strength of an employer's covenant, adjacent to the risk posed to the Fund, a number of fundamental financial metrics will be reviewed to develop an overview of the employer's stability and a rating score will be applied using a Red/Amber/Green (RAG) rating structure.

Research will be carried out into employers' backgrounds and, in addition, employers may be contacted to gather further information. Focus will be placed on the regular monitoring of employers with a proactive rather than reactive view to mitigating risk. The covenant assessment will be combined with the funding position to derive an overall risk score. Action will be taken if these metrics meet certain triggers based on funding level, covenant rating and the overall risk score.

FREQUENCY OF MONITORING

The funding position and contribution rate for each employer participating in the Fund will be reviewed in detail at each triennial actuarial valuation and will continue to be monitored between valuations (including on the termination basis) using an online system provided to officers by the Fund Actuary. However, it is important that the relative financial strength of employers is reviewed regularly to allow for a thorough assessment of the financial metrics. The funding position will be monitored (including on the termination basis) using an online system provided to officers by the Fund Actuary.

Employers subject to a more detailed review, where a risk criterion is triggered, will be reviewed at least every six months, but more realistically with a quarterly focus.

In some circumstances, employers will be required to agree to notify the Administering Authority of any material changes in covenant. Where this applies, employers will be notified separately. The notifiable event requirements are set out in Appendix G.

COVENANT RISK MANAGEMENT

The focus of the Fund's risk management is the identification and treatment of the risks and it will be a continuous and evolving process which runs throughout the Fund's strategy. Mechanisms that will be explored with certain employers, as necessary, will include but are not limited to the following:

- 1. Parental Guarantee and/or Indemnifying Bond
- 2. Transfer to a more prudent actuarial basis and investment strategy (e.g. the termination basis)
- 3. A higher funding target, shortened recovery periods and increased cash contributions
- 4. Managed exit strategies
- 5. Contingent assets and/or other security such as escrow accounts.



APPENDIX G - NOTIFIABLE EVENTS FRAMEWORK

The Fund regularly monitors the covenant of its employers. Whilst in most cases the regular covenant updates will identify some of the key employer changes, in some circumstances, employers are required to notify the Administering Authority of any material changes. This is in keeping with the guide that The Scheme Advisory Board recently published ('A Guide for Administering Authorities') in which is recommended that Administering Authorities should include a notifiable events process within its policies.

It is considered to be in the best interests of the employer to inform the Fund of any notifiable events that occur. This will enable the Fund to work with the employer to find an effective solution, particularly in times of change or financial distress and keep the interests of the employer, the Fund, the members and a guarantor (if one exists) in mind. Early engagement is always more effective and efficient for all parties than retrospective steps.

By not informing the Fund of a notifiable event, it may be seen as a deliberate act to hide the information or delay the Fund from taking action. If the Fund becomes aware of an event that has not been openly communicated as part of this policy, they reserve the right to implement one or more of the actions set out below without the consent of the employer.

In the case of guaranteed employers this policy applies to both the employer and the guarantor.

A notifiable event is any event or circumstance that, in the judgment of the Fund, could materially affect one or more of the following:

- the employer's basis for continued participation in the Fund
- the employer's ability to pay its ongoing contributions to the Fund*
- the employer's ability to pay its termination debt to the Fund in the event of ceasing to participate in the Fund*
- * These conditions would also apply where an employer and the Fund has entered into a Deferred Debt Agreement allowing continued participation as a Deferred Employer with no contributing members.

This policy sets out a list of typical events that, if they apply, must be notified to the Fund within a reasonable time period. The list is not exhaustive and may be modified from time to time. The Fund would deem 10 working days to be reasonable in the majority of cases. In some cases, notification prior to the event occurring may be required and this is detailed within the relevant sections below. The Fund will ensure that all information is treated as confidential.

EVENTS THAT MUST BE NOTIFIED TO THE FUND

The Fund considers any change that would be detrimental to either the employer's ability to finance their pension obligations or the ongoing viability of the employer to be 'material' and 'significant'.

Typical events that must be notified to the Fund include the following:

1) Significant changes in the employer's membership / liabilities

This includes but is not limited to the following scenarios, where applicable:

- i) Significant changes to the employer's membership which will have a material impact on their liabilities, such as:
 - a. Restructuring of the employer involving significant changes in staffing
 - b. A significant outsourcing or transfer of staff to another employer (not necessarily within the Fund)*
 - c. A bulk transfer of staff into the employer, or out of the employer to another pension scheme*
 - d. Other significant changes to the membership for example due to redundancies, significant salary awards, ill health retirements or large a number of member withdrawals*
 - e. A decision which will restrict the employer's active membership in the future*
- ii) Two or more employers merging including insourcing and transferring of services*
- iii) The separation of an employer into two or more individual employers*
- iv) Concerns of fraudulent activity that may include pensions aspects

*In these examples, the Fund requires prior notification of events at least 14 days before commencement of staff consultation regarding proposed changes to members' pensions. The Fund will ensure that all information is treated as confidential.

2) Significant changes to the employer covenant

i. Significant changes in the employer's financial strength / security

A material change in an employer's immediate financial strength or longer-term financial outlook. This includes but is not limited to the following scenarios (where applicable):

- a. An employer's forecasts indicate reduced affordability of contributions.
- b. A significant reduction in funding (e.g. reduction in grants, central government funding or other income stream)
- c. Provision of security to any other party including lenders and alternative pension arrangements
- d. Impairment of security, bond or guarantee provided by an employer to the Fund against their obligations
- e. The sale or transfer of significant assets, where the net book value or sale value exceeds 10% of the employer's net assets
- f. A material increase in gearing (i.e. taking on additional debt in order to finance its operations)
- g. The employer has defaulted on payments
- h. There has been a breach of banking (or other) covenant or the employer has agreed a waiver with the lender
- i. The employer's officers are seeking legal advice in the context of continuing to trade and/or potential wrongful trading
- An employer becomes insolvent

ii. A change in the employer's circumstances

This includes but is not limited to the following scenarios, where applicable:

- a. A merger of the employer with another organisation
- b. An acquisition by the employer of another organisation or relinquishing control
- c. An employer commences the wind down of its operations or ceases to trade
- d. A material change in the employer's business model
- e. A change in the employer's legal status (to include matters which might change qualification as a scheme employer under the LGPS Regulations)
- f. The employer becoming aware of material suspected / actual fraud or financial irregularity
- g. The employer becoming aware of material legal or court action against them
- h. There has been suspension or conviction of senior personnel
- i. Regulatory investigation and/or sanction by other regulators
- j. Loss of accreditation by a professional, statutory or regulatory body

In the examples set out above, the Fund requires prior notification of these events (e.g. at the time that there has been a decision in principle rather than once the event has happened). The Fund will ensure that all information is treated as confidential.

WHAT INFORMATION SHOULD BE PROVIDED TO THE FUND?

The information required will vary depending on the situation that has arisen. The first step will be to email or call the Fund to notify them of the event that has occurred.

WHAT ACTION WILL THE FUND TAKE ONCE NOTIFIED?

Where one of the listed events occurs, the Fund will enter into discussion with the employer to clarify details of the event. If necessary, advice will be taken from the Fund Actuary, legal or a covenant specialist advisors. Depending on the outcome of the Fund's review of the situation, potential actions that may be taken as a result are as follows:

- a. No further action required
- b. More detailed request for further information and ongoing monitoring
- c. The Fund will review the documentation provided and respond on next steps
- d. A review of employer contributions
- e. A review of the recovery period used to calculate secondary contributions
- f. A review of the termination position and discussions with the employer as to how this may be addressed
- g. A review of any deferred debt agreements if applicable

Employers will kept informed of all steps throughout the process.

APPENDIX H – INSURANCE ARRANGEMENTS

OVERVIEW OF ARRANGEMENTS

Ill health retirements can be expensive for employers, particularly small employers where one or two costly ill health retirements can take them well above the "average" implied by the valuation assumptions.

For certain employers in the Fund (following discussions with the Fund Actuary) a captive ill health insurance arrangement was established by the Administering Authority to cover ill health retirement costs by pooling these risks for eligible employers. The aim of the arrangement is that smaller employers, whose funding position could be significantly affected by the retirement of one or more of their members on the grounds of ill health, pay a premium to the Fund within their future service contribution rate. This has applied to all ill-health retirements since 1 April 2017.

The internal captive arrangement operates as follows:

- "Premiums" are paid by the eligible employers into the captive arrangement which is tracked separately by the Fund Actuary in the valuation calculations. The premiums are included in the employer's primary rate. The premium for 2023/26 is 0.6% of pensionable pay per annum.
- The captive arrangement is then used to meet strain costs (over and above the premium paid) emerging from ill-health retirements in respect of both active and deferred members i.e.so there is no initial impact on the deficit position for employers within the captive.
- The premiums are set with the expectation that they will be sufficient to cover the costs in the 3 years following the valuation date. If any excess premiums over costs are built up in the Captive, these will be used to offset future adverse experience and/or result in lower premiums at the discretion of the Administering Authority based on the advice of the Actuary.
- In the event of poor experience over a valuation period any shortfall in the captive fund is effectively underwritten by the other employers within the Fund. However, the future premiums will be adjusted to recover any shortfall over a reasonable period with a view to keeping premiums as stable as possible for employers. Over time the captive arrangement should therefore be self-funding and smooth out fluctuations in the contribution requirements for those employers in the captive arrangement.
- Premiums payable are subject to review from valuation to valuation depending on experience and the expected ill health trends. They will also be adjusted for any changes in the LGPS benefits. They will be included in employer rates at each valuation or on commencement of participation for new employers.

EMPLOYERS COVERED BY THE ARRANGEMENT

Those employers (both existing and new) that will generally be included in the captive are:

- Community related Admitted Bodies
- Town and Community Councils

These employers have been notified of their participation. New employers entering the Fund who fall into the categories above will also be included. At the discretion of the Administering Authority and where is it felt to be beneficial to the long term covenant and financial health of an employer, specific employers (outside of the categories listed above) may be included within the captive arrangement. In addition, the Administering Authority has the ability to exclude any employer in order to manage employer risk within the Fund.

For all other employers who do not form part of the captive arrangement, the current treatment of ill-health retirements will still apply. The Fund therefore continues to monitor ill-health retirement strain costs incurred in line with the allowance made in the actuarial assumptions. Once the allowance is exceeded, any excess costs would be recovered from the employer. This would normally be at the next valuation but could be at an earlier review of the contributions due, including on termination of participation.

EMPLOYER RESPONSIBILITIES

Apart from the regulatory procedures in place to ensure that ill health retirements are properly controlled, employing bodies should be doing everything in their power to ensure robust processes are in place to determine eligibility for ill health retirements.

The Fund and the Actuary will monitor the number of retirements that each captive employer is granting over time. If any employer has an unusually high incidence of ill health retirements, consideration will be given to the governance around the eligibility criteria applied by the employer and it is possible that some or all of the costs would fall on that employer if the governance was not deemed strong enough.

APPENDIX I - GLOSSARY OF TERMS

ACTUARIAL VALUATION: an investigation by an Actuary into the ability of the Fund to meet its liabilities. For the LGPS the Fund Actuary will assess the funding level of each participating employer and agree contribution rates with the Administering Authority to fund the cost of new benefits and make good any existing deficits as set out in the separate Funding Strategy Statement. The asset value is based on market values at the valuation date.

ADMINISTERING AUTHORITY: the council with a statutory responsibility for running the Fund and that is responsible for all aspects of its management and operation.

ADMISSION BODIES: A specific type of employer under the Local Government Pension Scheme (LGPS) who do not automatically qualify for participation in the Fund but are allowed to join if they satisfy the relevant criteria set out in the Regulations.

BENCHMARK: a measure against which fund performance is to be judged.

BENEFITS: The benefits provided by the Fund are specified in the governing legislation contained in the Regulations referred to within the FSS. Benefits payable under the Fund are guaranteed by statute and thereby the pensions promise is secure for members.

The Fund is a defined benefit arrangement with principally final salary related benefits from contributing members up to 1 April 2014 and Career Averaged Revalued Earnings ("CARE") benefits earned thereafter. There is also a "50:50 Scheme Option", where members can elect to accrue 50% of the full scheme benefits in relation to the member only and pay 50% of the normal member contribution.

BEST ESTIMATE ASSUMPTION: an assumption where the outcome has a 50/50 chance of being achieved.

BONDS: loans made to an issuer (often a government or a company) which undertakes to repay the loan at an agreed later date. The term refers generically to corporate bonds or government bonds (gilts).

CAREER AVERAGE REVALUED EARNINGS SCHEME (CARE): with effect from 1 April 2014, benefits accrued by members in the LGPS take the form of CARE benefits. Every year members will accrue a pension benefit equivalent to 1/49th of their pensionable pay in that year. Each annual pension accrued receives inflationary increases (in line with the annual change in the Consumer Prices Index) over the period to retirement.

CPI: acronym standing for "Consumer Prices Index". CPI is a measure of inflation with a basket of goods that is assessed on an annual basis. The reference goods and services differ from those of RPI. These goods are expected to provide lower, less volatile inflation increases. Pension increases in the LGPS are linked to the annual change in CPI.

CPIH: An alternative measure of CPI which includes owner occupiers' housing costs and Council Tax (which are excluded from CPI). Page 216

CONTINGENT ASSETS: assets held by employers in the Fund that can be called upon by the Fund in the event of the employer not being able to cover the debt due upon termination. The terms will be set out in a separate agreement between the Fund and employer.

COVENANT: the assessed financial strength of the employer. A strong covenant indicates a greater ability (and willingness) to pay for pension obligations in the long run. A weaker covenant means that it appears that the employer may have difficulties meeting its pension obligations in full over the longer term or affordability constraints in the short term.

DEFERRED DEBT AGREEMENT (DDA): A written agreement between the Administering Authority and an exiting Fund employer for that employer to defer their obligation to make an exit payment and continue to make contributions at the assessed Secondary rate until the termination of the DDA.

DEFERRED EMPLOYER: An employer that has entered into a DDA with the Fund.

DEFICIT: the extent to which the value of the Fund's past service liabilities exceeds the value of the Fund's assets. This relates to assets and liabilities built up to date and ignores the future build-up of pension (which in effect is assumed to be met by future contributions).

DEFICIT RECOVERY PERIOD: the target length of time over which the current deficit is intended to be paid off. A shorter period will give rise to a higher annual contribution, and vice versa.

DERIVATIVES: Financial instruments linked to the performance of specific assets which can be used to magnify or reduce exposure to those assets

DISCOUNT RATE: the rate of interest used to convert a cash amount e.g. future benefit payments occurring in the future to a present value i.e. the liabilities. A higher discount means lower liabilities and vice versa.

EARLY RETIREMENT STRAIN: the additional cost incurred by a scheme employer as a result of allowing a Scheme Member aged 55 or over to retire before Normal Retirement Age and to receive a full pension based on accrued service at the date of retirement without full actuarial reduction.

EMPLOYER'S FUTURE SERVICE CONTRIBUTION RATE ("PRIMARY RATE"): the contribution rate payable by an employer (expressed as a % of pensionable pay) which is set at a level which should be sufficient to meet the cost of new benefits being accrued by active members in the future. The cost will be net of employee contributions and will include an allowance for the expected level of administrative expenses. See also "Primary Rate" below.

EMPLOYER'S SECONDARY CONTRIBUTION RATE: an adjustment to the Primary Rate to reflect any past service deficit or surplus, to arrive at the rate each employer is required to pay. The Secondary Rate may be expressed as a percentage adjustment to the Primary Rate, and/or a cash adjustment in each of the three years beginning 1 April in the year following that in which the valuation date falls. The Secondary Rate is specified in the Rates and Adjustments Certificate. For any employer, the rate they are actually required to pay is the sum of the Primary and Secondary Rates. Secondary Rates for the whole fund in each of the three years shall also be disclosed. These will be calculated as the weighted average based on the whole fund payroll in respect of percentage rates and as a total amount in respect of cash adjustments.

EMPLOYING BODIES: any organisation that participates in the LGPS, including admission bodies and scheme employers.

EQUITIES: shares in a company which are bought and sold on a stock exchange.

EQUITY PROTECTION: an insurance contract which provides protection against falls in equity markets. Depending on the pricing structure, this may be financed by giving up some of the upside potential in equity market gains.

EXIT CREDIT: the amount payable from the Fund to an exiting employer in the case where the exiting employer is determined to be in surplus at the point of cessation based on a termination assessment by the Fund Actuary.

FLIGHTPATH: a framework that defines a de-risking process whereby exposure to growth assets is reduced as and when it is affordable to do so i.e. when "triggers" are hit, whilst still expecting to achieve the overall funding target.

FUNDING OR SOLVENCY LEVEL: the ratio of the value of the Fund's assets and the value of the Fund's liabilities expressed as a percentage.

FUNDING STRATEGY STATEMENT: This is a key governance document that outlines how the Administering Authority will manage employer's contributions and risks to the Fund.

GOVERNMENT ACTUARY'S DEPARTMENT (GAD): the GAD is responsible for providing actuarial advice to public sector clients. GAD is a non-ministerial department of HM Treasury.

GUARANTEE / GUARANTOR: a formal promise by a third party (the guarantor) that it will meet any pension obligations not met by a specified employer. The presence of a guarantor will mean, for instance, that the Fund can consider the employer's covenant to be as strong as its guarantor's.

HEDGING: a strategy that aims to reduce funding volatility. This is achieved by investing in assets that capture levels of yields based on agreed trigger levels so the assets mimic the change in liabilities.

HEDGE RATIO The level of hedging in place as a percentage of the liabilities. This can be in relation to interest rates, inflation rates or real rates of return.

ILL HEALTH CAPTIVE: this is a notional fund designed to protect certain employers against excessive ill health costs in return for an agreed insurance premium.

INVESTMENT STRATEGY: the long-term distribution of assets among various asset classes that takes into account the Funds objectives and attitude to risk.

LETTING EMPLOYER: an employer that outsources part of its services/workforce to another employer, usually a contractor. The contractor will pay towards the LGPS benefits accrued by the transferring members, but ultimately the obligation to pay for these benefits will revert to the letting employer.

LGPS: the Local Government Pension Scheme, a public sector pension arrangement put in place via Government Regulations, for workers in local government. These Regulations also dictate

those employing bodies which are eligible to participate, members' contribution rates, benefit calculations and certain governance requirements.

LIABILITIES: the actuarially calculated present value of all benefit entitlements i.e. scheme cashflows of all members of the Fund, built up to date or in the future. The liabilities in relation to the benefit entitlements earned up to the valuation date are compared with the present market value of Fund assets to derive the deficit and funding/solvency level. Liabilities can be assessed on different set of actuarial assumptions depending on the purpose of the valuation.

LONG TERM COST EFFICIENCY: this is a measure of the extent to which the Fund's policies properly address the need to balance immediate budgetary pressures with the undesirability of imposing an excessive debt burden on future generations.

MATURITY: a general term to describe a Fund (or an employer's position within a Fund) where the members are closer to retirement (or more of them already retired) and the investment time horizon is shorter. This has implications for investment strategy and, consequently, funding strategy.

MCCLOUD JUDGMENT: This refers to the linked legal cases of Sargeant and McCloud, and which found that the transitional protections (which were afforded to older members when the public service pension schemes were reformed in 2014/15) constituted unlawful age discrimination.

MEMBERS: The individuals who have built up (and may still be building up) entitlement in the Fund. They are divided into actives (current employee members), deferreds (ex-employees who have not yet retired) and pensioners (ex-employees who have now retired and dependants of deceased ex-employees).

MINIMUM RISK FUNDING BASIS: an approach where the discount rate used to assess the liabilities is determined based on the market yields of Government bond investments based on the appropriate duration of the liabilities being assessed. This can be used as a benchmark to assess the level of reliance on future investment returns in the funding strategy and therefore the level of risk appetite in a Funds choice of investment strategy. This is usually adopted when an employer is exiting the Fund.

ORPHAN LIABILITIES: liabilities in the Fund for which there is no sponsoring employer within the Fund. Ultimately orphan liabilities must be underwritten by all other employers in the Fund.

PAST SERVICE LIABILITIES: this is the present value of all the benefits accrued by members up to the valuation date. It is assessed based on a set of assumptions agreed between the Administering Authority and the Actuary.

PERCENTILES: relative ranking (in hundredths) of a particular range. For example, in terms of expected returns a percentile ranking of 75 indicates that in 25% of cases, the return achieved would be greater than the figure, and in 75% cases the return would be lower.

PHASING/STEPPING OF CONTRIBUTIONS: when there is an increase/decrease in an employer's long term contribution requirements, the increase in contributions can be gradually "stepped" or phased in over an agreed period. The phasing/stepping can be in equal steps or on a bespoke basis for each employer.

POOLING: employers may be grouped together for the purpose of calculating contribution rates, (i.e. a single contribution rate applicable to all employers in the pool). A pool may still require each individual employer to ultimately pay for its own share of deficit, or (if formally agreed) it may allow deficits to be passed from one employer to another.

PREPAYMENT: the payment by employers of contributions to the Fund earlier than that certified by the Actuary. The amount paid will be reduced in monetary terms compared to the certified amount to reflect the early payment.

PRESENT VALUE: the value of projected benefit payments, discounted back to the valuation date.

PRIMARY RATE OF THE EMPLOYERS' CONTRIBUTION: the contribution rate required to meet the cost of the future accrual of benefits including ancillary, death in service and ill health benefits together with administration costs. It is expressed as a percentage of pensionable pay, ignoring any past service surplus or deficit, but allowing for any employer-specific circumstances, such as its membership profile, the funding strategy adopted for that employer, the actuarial method used and/or the employer's covenant. The Primary rate for the whole fund is the weighted average (by payroll) of the individual employers' Primary rates. For any employer, the rate they are actually required to pay is the sum of the Primary and Secondary rates. See also "Employer's future service contribution rate" above.

PROFILE: the profile of an employer's membership or liability reflects various measurements of that employer's members, i.e. current and former employees. This includes: the proportions which are active, deferred or pensioner; the average ages of each category; the varying salary or pension levels; the lengths of service of active members vs their salary levels, etc.

PRUDENT ASSUMPTION: an assumption where the outcome has a greater than 50/50 chance of being achieved i.e. the outcome is more likely to be overstated than understated. Legislation and Guidance requires the assumptions adopted for an actuarial valuation to be prudent.

RATES AND ADJUSTMENTS CERTIFICATE: a formal document required by the LGPS Regulations, which must be updated at least every three years at the conclusion of the formal valuation. This is completed by the Actuary and confirms the contributions to be paid by each employer (or pool of employers) in the Fund for the three-year period until the next valuation is completed.

REAL RETURN OR REAL DISCOUNT RATE: a rate of return or discount rate net of (CPI) inflation.

RECOVERY PLAN: a strategy by which an employer will make up a funding deficit over a specified period of time ("the recovery period"), as set out in the Funding Strategy Statement.

SAB FUNDING BASIS OR SAB BASIS: a set of actuarial assumptions determined by the LGPS Scheme Advisory Board (SAB). Its purposes are to set out the funding position on a standardised approach so that comparisons can be made with other LGPS Funds, and to assist with the "Section 13 review" as carried out by the Government Actuary's Department. As an example, the real discount rate over and above CPI used in the SAB Basis as at 31 March 2022 was 2.4% p.a., so it can be substantially different from the actuarial assumptions used to calculated the Fund's solvency funding position and contribution outcomes for employers.

SCHEDULED BODIES: types of employer explicitly defined in the LGPS Regulations, whose employers must be offered membership of their local LGPS Fund. These include Councils, colleges, universities, police and fire authorities etc, other than employees who have entitlement to a different public sector pension scheme (e.g. teachers, police and fire officers, university lecturers).

SCHEME EMPLOYERS: employers that have the statutory right to participate in the LGPS. These organisations (set out in Part 1 of Schedule 2 of the 2013 Regulations) would not need to designate eligibility, unlike the Part 2 Scheme Employers.

SECTION 13 VALUATION: in accordance with Section 13 of the Public Service Pensions Act 2014, the Government Actuary's Department (GAD) have been commissioned to advise the Department for Levelling Up, Housing and Communities (DLUHC) in connection with reviewing the 2022 LGPS actuarial valuations. All LGPS Funds therefore will be assessed on a standardised set of assumptions as part of this process.

SECONDARY RATE OF THE EMPLOYERS' CONTRIBUTION: an adjustment to the Primary rate to reflect any past service deficit or surplus, to arrive at the rate each employer is required to pay. The Secondary rate may be expressed as a percentage adjustment to the Primary rate, and/or a cash adjustment in each of the three years beginning 1 April in the year following that in which the valuation date falls. The Secondary rate is specified in the rates and adjustments certificate. For any employer, the rate they are actually required to pay is the sum of the Primary and Secondary rates.

SOLVENCY/FUNDING LEVEL: the ratio of the value of the Fund's assets and the value of the Fund's liabilities expressed as a percentage.

SOLVENCY FUNDING TARGET: an assessment of the present value of benefits to be paid in the future. The desired funding target is to achieve a solvency level of a 100% i.e. assets equal to the accrued liabilities at the valuation date assessed on the ongoing concern basis.

STRAIN COSTS: the costs arising when a members retire before their normal retirement date and receive their pensions immediately without actuarial reduction. So far as the Fund is concerned, where the retirements are not caused by ill-health, these costs are invoiced directly to the retiring member's employer at the retirement date and treated by the Fund as additional contributions. The costs are calculated by the Actuary.

VALUATION FUNDING BASIS: the financial and demographic assumptions used to determine the employer's contribution requirements. The relevant discount rate used for valuing the present value of liabilities is consistent with an expected rate of return of the Fund's investments. This includes an expected out-performance over gilts in the long-term from other asset classes, held by the Fund.

50/50 SCHEME: in the LGPS, active members are given the option of accruing a lower personal benefit in the 50/50 Scheme, in return for paying a lower level of contribution.

Return to Section 1





CLWYD PENSION FUND COMMITTEE

| Date of Meeting | Wednesday, 15 February 2023 |
|-----------------|-------------------------------------|
| Report Subject | Investment and Funding Update |
| Report Gabjeet | investment and randing opacie |
| Report Author | Graduate Investment Officer Trainee |
| | |

EXECUTIVE SUMMARY

An investment and funding update is on each quarterly Committee agenda.

There are separate agenda items on asset pooling in Wales, investment performance and the funding and flight path risk management framework.

This update includes matters that are for noting which include.

- LGPS: Changes to the Scheme Advisory Board (SAB) cost management process (1.02-1.03)
- Progress with the items on the Business Plan 2022/23
- Wales Pensions Partnership (WPP) voting and engagement
- Risk register there have been no changes to the risk register this quarter.
- Delegated responsibilities this details the delegated responsibilities which have been completed by officers since the last Committee meeting.

| RECOMMENDATIONS | | |
|-----------------|--|--|
| 1 | That the Committee consider and note the update, and provide any | |
| | comments. | |

REPORT DETAILS

| 1.00 | INVESTMENT AND FUNDING RELATED MATTERS | | |
|------|--|--|--|
| 1.01 | Business Plan Update | | |
| 1.01 | Appendix 1 provides a summary of progress against the Investment and Funding section of the Business Plans for 2022/23. Key tasks are currently on target and key points to note are as follows: | | |
| | F1 (Funding Strategy Statement Review and Triennial Actuarial Valuation) – the Actuarial Valuation process for 31 March 2022 is now complete. See agenda item 6. F2 (Review of Investment Strategy) – This is now complete. See agenda item 5. F3 (Climate Change and TCFD) – This is now complete. See agenda item 4. Members attended a training session on 1 February 2023. F5 (LGPS Investment Related Developments) – This continues to be delayed in some areas as the consultation(s) that were due prior to the summer have not as yet been issued. This will now be included in the Business Plan for 2023/24. | | |
| 1.02 | Current Development and News | | |
| | LGPS: Changes to the Scheme Advisory Board (SAB) cost management process | | |
| | On 30 January 2023 the Department for Levelling Up, Housing and Communities (DLUHC) published a consultation setting out proposed updates to the SAB cost management process for the LGPS. This consultation will last for 8 weeks from 30 January 2023 to 24 March 2023. | | |
| | Background | | |
| | Valuations of the public service schemes (e.g. LGPS, Civil Service, Teachers, NHS) are undertaken by the Government Actuary's Department on a 4 yearly cycle and these inform the separate HM Treasury cost management process. These valuations are used to consider whether the cost of the pensions have fallen outside of a target level, in which case changes are to be made to bring costs back to target (as well as to set contribution rates for the unfunded schemes). This cost control mechanism is undertaken by HMT and a consultation regarding a change in how it operates took place in 2021 following which changes to this process were confirmed. This included the introduction of an "economic check", whereby if the schemes' costs fall outside a target level, an "economic check" will be undertaken before it is determined whether any changes to the schemes are needed to bring costs back into line with the target. | | |
| | For the LGPS there is also a parallel SAB 'cost management process'. The SAB process uses a different target cost and the underlying assumptions used to measure LGPS costs can be different from the HMT process. Recommendations for changes which are made as a result of the SAB process (where these are accepted by Government) are considered when calculating the LGPS costs for the purpose of the cost control mechanism. | | |
| | Following confirmation of the changes to be made to the HMT cost control | | |

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mechanism in 2021, the SAB also proposed changes to its LGPS process, to ensure the two processes remain aligned, which were approved by the Board in 2022. As part of this, the SAB also considered whether to align to the new "economic check" that will be applied in the HMT process. Instead, the SAB decided it would be preferable to consider changes in the LGPS discount rate, as determined following advice by its actuary. The Government has confirmed that it is content with this approach.

1.03 What are the proposed changes?

The consultation is technical in nature and outlines changes to the regulations governing cost control in the LGPS which the Government considers are desirable or necessary following the SAB review. The Government has confirmed that it remains of the view that there should be flexibility in how the HM Treasury cost control mechanism and the SAB cost management process interact.

The proposed changes in the SAB cost management process are as follows:

- A requirement to undertake the whole LGPS Scheme valuation on a 4 yearly cycle rather than a 3 yearly cycle, which brings it into line with the process for the other public service schemes.
- This does not change the requirement to undertake individual LGPS Fund valuations on a 3 yearly cycle although whether this changes in the future remains to be seen.
- Incorporating more flexibility if the SAB decide to make recommendations on costs.
- SAB will be consulted on the technical accuracy of any changes in regulations that may be needed to incorporate the new "economic check" mechanism into the updated HMT process, prior to implementation*

There is no direct impact to the Clwyd Pension Fund in relation to these proposals. Changes to the HMT and SAB cost management processes will take effect for the next valuation of the public service schemes, effective 31 March 2020.

As the consultation has no direct impact on the Fund, it is proposed that the Fund will not be responding, although Mercer as our Fund Actuary will be responding in due course. Mercer can take into account any client views in their response.

1.04 Environmental Finance: Impact Pension Fund of the Year Award

The Fund is delighted to have been awarded 'Pension fund of the year' at the *Environmental Finance's Impact Awards 2022* for its 'place-based' investing approach and 4% asset allocation to impact.

The Fund was identified as a "trailblazer" by the impact organisations The Good Economy and Pensions for Purpose, for its commitment to providing private capital to local and regional opportunities, highlighting the Fund's commitment to responsible investing.

The full article can be found here.

1.05 Wales Pension Partnership (WPP) Responsible Investing Update

The Fund's key priorities within its Responsible Investment (RI) policy included enhanced reporting on RI matters. Work is ongoing with WPP to produce a template for each of the Welsh Pension Fund Committees to receive information on voting, engagement and stock lending. Until the template is finalised, the Fund will provide publically available documentation.

1.06 Roles and responsibilities

The role of monitoring the engagement, voting and stock lending carried out by Robeco and Northern Trust on behalf of WPP lies with the WPP Joint Governance Committee (JGC), rather than the Clwyd Pension Fund Committee. However WPP's role is to deliver the RI policies of all the Constituent Authorities.

1.07 <u>Voting and Engagement</u>

As an asset owner, there are opportunities to engage with companies, and also vote at Annual General Meetings, with a view to helping improve company policies in relation to environmental, social and governance matters. As WPP own stocks on behalf of the Constituent Authorities (including Clwyd Pension Fund), they carry out voting and engagement on their behalf.

WPP have appointed Robeco as the Voting and Engagement provider. The Deputy Head of the Clwyd Pension Fund, as part of the WPP RI Sub Group, has been working with Robeco to create suitable reports for Constituent Authorities showing the voting and engagement that has taken place.

- 1.08 Appendix 2 highlights the engagement work that has been carried out on behalf of WPP from September to December 2022. This quarter provides information and case studies on the following areas of engagement:
 - Social Impact of Artificial Intelligence
 - Social Impact of Gaming
 - Biodiversity
 - Corporate Governance Standards in Asia
 - Proxy Voting

It is important to note that the lists of stocks in the engagement report are for the WPP as a whole and may or may not be in sub funds the Clwyd Pension Fund is invested in. This is one of the areas of enhancement that is ongoing.

Appendices 3 and 4 provide summary details for the proxy voting reports for the Global Opportunities and Emerging Market Equity Funds in which the Fund is invested. The reports cover the number of meetings and votes cast for the period to December 2022 and some of the voting highlights.

1.09 | Securities Lending

Securities lending involves the owner of shares or bonds transferring them temporarily to a borrower. In return, the borrower transfers other shares, bonds or cash to the lender as collateral and pays a borrowing fee. Stock lending can, therefore, be used to incrementally increase fund returns for investors.

WPP have appointed Northern Trust to lend securities, which are held within the WPP sub-funds, on their behalf.

Quarterly Securities Lending reports are presented at each WPP Joint Governance Committee (JGC). The results below were presented to the JGC on 5 December 2022.

The total amount of WPP net revenue received for securities lending in the quarter to September 2022 was £259,092. The Clwyd Pension Fund is only invested in 3 funds which generated the revenue as shown in the following table.

| Sub Fund | WPP Net Revenue £ | CPF Net Revenue £ |
|--------------------------|-------------------|-------------------|
| Global Opportunities | 108,644 | 4,346 |
| Equity (4%) | | |
| Emerging Markets | 4,374 | 2,056 |
| Equity (47%) | | |
| Multi Asset Credit (34%) | 21,879 | 7,439 |
| | | |
| Total | 134,897 | 13,841 |

1.10 Policy and Strategy Implementation and Monitoring

The Advisory Panel receive a detailed investment report from the Fund's Investment Consultants, Mercer, which shows compliance with the existing approved Investment Strategy, as well as reports on fund manager performance. A summary of this performance is shown in the Mercer report included in agenda item 9.

The Advisory Panel also receive verbal updates from key matters considered at the following Clwyd Pension Fund officer/adviser working groups:

- Tactical Asset Allocation Group (TAAG)
- Cash and Risk Management Group (CRMG)
- Private Equity and Real Assets Group (PERAG)

Any decisions arising from these meetings which have been agreed using delegated responsibilities are detailed in Appendix 5.

1.11 Delegated Responsibilities

The Pension Fund Committee has delegated a number of responsibilities to officers or individuals. Appendix 5 updates the Committee on the areas of delegation used since the last meeting. To summarise:

- Cash-flow forecasting continues to be monitored through the Cash and Risk Management Strategy.
- Shorter term tactical decisions continue to be made by the Tactical Asset Allocation Group (TAAG).

| • | The following commitments to private market investments have |
|---|--|
| | been made in line with the Fund's Investment Strategy and |
| | recommendations from Mercer, the Fund Consultant; more details |
| | are provided in 1.13. |

| Asset Class | Fund | Commitment |
|----------------|-------------|--------------|
| Property | Newcore V | £15m |
| Infrastructure | Sandbrook I | \$20m (£17m) |

1.12 Private Market Allocations

As reported to previous Committees, due to the WPP currently appointing Allocators to implement private markets, Mercer as the Fund's investment consultant have been working with officers to determine the Fund's requirements for infrastructure and private debt in addition to private equity and impact opportunities until they are transitioned to WPP. This work includes identifying potential managers on a sustainable basis.

1.13 As part of this process, Mercer share relevant reports on their research views and full due diligence on any recommended managers for the Fund officers to consider and discuss. From there, meetings are conducted with the recommended managers and Fund officers to discuss the mandates in more detail and facilitate any further information the Fund may require. The Fund and Mercer continue to be busy considering new allocations for 2022/23.

The Fund has committed to two new investments during the quarter – Newcore is an existing Property manager that the Fund has been invested with since 2019, whilst Sandbrook is a new Infrastructure manager.

Newcore V

Newcore is raising £200m for its fifth fund. The UK-based real estate manager specialises in social infrastructure and offers a compelling opportunity for investing in value-add real estate with inflation-linked income and strong ESG credentials.

Sandbrook I

Sandbrook is raising \$1bn for its first Climate Infrastructure Fund. The strategy focuses on both greenfield and brownfield opportunities and seeks to invest in energy transition infrastructure across North America, Europe and other Organisation for Economic Co-operation and Development (OECD) countries.

| 2.00 | RESOURCE IMPLICATIONS |
|------|---|
| 2.01 | The Governance Administration Assistance vacancy has been filled since the last committee. Due to two post vacancies in the Fund's Finance Team (out of a total team of seven), a proportion of the work of the team has been outsourced to the Fund's consultants. This is a temporary measure until the posts are filled. The recruitment for the Principal Accountant is underway. It is critical these posts are filled in the near future due to the number of vacancies in this team. |

| 3.00 | CONSULTATIONS REQUIRED / CARRIED OUT |
|------|---|
| 3.01 | None directly as a result of this report. |

| 4.00 | RISK MANAGEMENT |
|------|--|
| 4.01 | Appendix 6 provides the dashboard and risk register highlighting the |
| | current risks relating to investments and funding matters. |
| 4.02 | No additional risks or changes have been made to the risk register since |
| | the last Committee. All risks are either on or close to target. |

| 5.00 | APPENDICES |
|------|--|
| 5.01 | Appendix 1 – 2022/23 Business plan Appendix 2 – WPP Engagement Report Q3 2022 Appendix 3 – WPP Global Opportunities Summary Voting Q3 2022 Appendix 4 – WPP Emerging Market Equity Summary Voting Q3 2022 Appendix 5 – Delegated Responsibilities Appendix 6 – Risk dashboard and register – Investments and Funding |

| 6.00 | LIST OF ACCESSIBLE BACKGROUND DOCUMENTS | |
|------|---|--|
| 6.01 | None. | |
| | Contact Officer: | leuan Hughes, Graduate Investment Officer Trainee, Clwyd Pension Fund |
| | E-mail: | leuan.Hughes@flintshire.gov.uk |

| 7.00 | GLOSSARY OF TERMS |
|------|---|
| 7.00 | GLOSSART OF TERINIS |
| 7.01 | (a) The Fund - Clwyd Pension Fund – The Pension Fund managed by Flintshire County Council for local authority employees in the region and employees of other employers with links to local government in the region |
| | (b) Administering authority or scheme manager – Flintshire County Council is the administering authority and scheme manager for the Clwyd Pension Fund, which means it is responsible for the management and stewardship of the Fund. |
| | (c) The Committee - Clwyd Pension Fund Committee – the Flintshire County Council committee responsible for the majority of decisions relating to the management of the Clwyd Pension Fund |
| | (d) TAAG – Tactical Asset Allocation Group – a group consisting of The Clwyd Pension Fund Manager, Pensions Finance Manager and consultants from Mercer, the Fund Consultant. |
| | (e) AP – Advisory Panel – a group consisting of Flintshire County Council Chief Executive and Corporate Finance Manager, the Clwyd Pension Fund Manager, Fund Consultant, Fund Actuary and Fund Independent Advisor. |

- (f) **PERAG Private Equity and Real Asset Group** a group chaired by the Clwyd Pension Fund Manager with members being the Pensions Finance Managers, who take specialist advice when required. Recommendations are agreed with the Fund's Investment Consultant and monitored by AP.
- (g) In House Investments Commitments to Private Equity / Debt, Property, Infrastructure, Timber, Agriculture and other Opportunistic Investments. The due diligence, selection and monitoring of these investments is undertaken by the PERAG.
- (h) WPP Wales Pensions Partnership The WPP is a collaboration of the eight LGPS funds (Constituent Authorities) covering the whole of Wales and is one of eight national Local Government Pension pools. WPP has appointed an Operator to manage assets collectively for the eight Wales LGPS funds. A proportion of the Clwyd Pension Fund assets are invested via WPP.
- (i) **LGPS Local Government Pension Scheme** the national scheme, which Clwyd Pension Fund is part of
- (j) ISS Investment Strategy Statement the main document that outlines our strategy in relation to the investment of assets in the Clwyd Pension Fund.
- (k) **FSS Funding Strategy Statement** the main document that outlines how we will manage employers' contributions to the Fund
- (I) Funding & Risk Management Group (FRMG) A subgroup of Pension Fund officers and advisers set up to discuss and implement any changes to the Risk Management framework as delegated by the Committee. It is made up of the Clwyd Pension Fund Manager, Pension Finance Manager, Fund Actuary, Strategic Risk Adviser and Investment Advisor.
- (m)Actuarial Valuation The formal valuation assessment of the Fund detailing the solvency position and determine the contribution rates payable by the employers to fund the cost of benefits and make good any existing shortfalls as set out in the separate Funding Strategy Statement.
- (n) Actuary A professional advisor, specialising in financial risk, who is appointed by pension Funds to provide advice on financial related matters. In the LGPS, one of the Actuary's primary responsibilities is the setting of contribution rates payable by all participating employers as part of the actuarial valuation exercise.
- (o) **Department for Levelling Up, Housing & Communities (DLUHC)** supports communities across the UK to thrive, making them great places to live and work.
- (p) **Financial Reporting Council (FRC)** an independent regulator in the UK and Ireland, responsible for regulating auditors, accountants and actuaries, and setting the UK's Corporate Governance and Steward.
- (q) **OECD Countries** Organisation for Economic Co-operation and Development; 38 Member countries from North and South America to

Europe and Asia-Pacific.

A full glossary of Investments terms can be accessed via the following link. https://www.schroders.com/en/uk/adviser/tools/glossary/



Business Plan 2022/23 to 2024/25 – Q4 Update Funding and Investments

Key Tasks

Key:



Funding and Investments (including accounting and audit) Tasks

| Ref | Key Action –Task | 2022/23 Period | | | | Later Years | |
|-----|---|----------------|----|----|----|-------------|-------------|
| | | Q1 | Q2 | Q3 | Q4 | 2023/ 24 | 2024/ 25 |
| F1 | Funding Strategy Statement Review and Triennial Actuarial Valuation | х | х | x | x | | |
| F2 | Review of Investment Strategy | | х | х | х | х | |
| F3 | Climate Change and TCFD | | х | х | | х | |
| F4 | UK Stewardship Code | х | х | х | | | |
| F5 | LGPS Investment Related Developments (later timescales unknown) | | × | х | хМ | xM | |

Funding and Investments (including accounting and audit) Task Descriptions

F1 – Funding Strategy Statement Review and Triennial Actuarial Valuation

What is it?

The formal triennial actuarial valuation of the Fund is due to be undertaken as at 31 March 2022. This considers the solvency position and other financial metrics and is a legal requirement of the LGPS Regulations. It determines the contribution rates payable by the employers to fund the cost of benefits including the impact of any shortfall or surplus. These aspects are driven by the contents of the separate Funding Strategy Statement, which is reviewed and consulted on as part of the process.

This is considered in conjunction with the employer risk management framework implemented by the Fund. Employers will be required to provide financial statements and evidence of affordability and security before contributions can be agreed. Consideration will also be given as to the sustainability of any contribution reductions. The exercise will include cash flow projections to input into the Cash and Risk Management policy framework.

Timescales and Stages

| Effective date | 31 March 2022 |
|---|-----------------|
| Demographic Analysis including covid-19 impact | 2022/23 Q1 |
| Update risk management and monitoring framework | 2022/23 Q1 & Q2 |
| Initial whole Fund results (expected) | 2022/23 Q2 |
| Integration with climate change considerations | 2022/23 Q2 |
| Individual Employer results including review of McCloud allowances (expected) | 2022/23 Q2 & Q3 |
| Funding Strategy Statement review and consultation with employers | 2022/23 Q2 & Q3 |
| Funding Strategy Statement approval | 2022/23 Q4 |
| Deadline for agreement of all contributions and sign-off valuation report | 31 March 2023 |

Resource and Budget Implications

The exercise is led by the Deputy Head of Clwyd Pension Fund and will be performed by the Fund Actuary. It will involve considerable resource from the Administration and Finance teams over 2022/23. The Fund Actuary's costs in relation to this exercise are included in the 2022/23 budget.

F2 - Review of Investment Strategy

What is it?

This relates to the triennial review of the Investment Strategy having regard to the findings of the actuarial valuation and the review of the Funding Strategy.

The review will also have regard to DLUHC's recently published Levelling Up agenda and the requirement for LGPS Funds to draft a mandatory plan setting out an ambition as to how they will allocate at least 5% to "new" local investments (with local being defined as the UK). Note however that this is not a mandatory requirement in scale nor does it represent a ceiling. In addition, the review of investment strategy will incorporate strategic climate change scenario analysis modelling.

This is expected to take place concurrently with the review of the Funding Strategy Statement in 2022/23.

Timescales and Stages

| Review of Investment Strategy | 2022/23 Q2 & Q3 |
|---|-----------------|
| Approve Investment Strategy (with consultation if required) | 2022/23 Q4 |
| Implementation of any changes | 2023/24 |

Resource and Budget Implications

The work will be led by Deputy Head of Clwyd Pension Fund, working with the Fund's Investment Consultant. The Investment Consultant's estimated costs in relation to this exercise are included in the 2022/23 budget.

F3 - Climate Change and TCFD

What is it?

The Task Force on Climate-Related Financial Disclosures (TCFD) have released climate-related financial disclosure recommendations to help organisations provide better information to support informed capital allocation. The Fund will look to report on a TCFD basis to ensure transparency of the work the Fund is undertaking with respect to climate change. This will include reporting on the various commitments the Fund has made relating to meeting its net zero target.

As noted in F5, DLUHC will be launching a wide-ranging consultation in the summer of 2022, and this will include how TCFD should be adopted within the LGPS. The Fund will have regard to this whilst carrying out the development of their reporting.

Timescales and Stages

| Design TCFD compliant reporting template | 2022/23 Q2 to Q3 |
|--|------------------|
| Review TCFD reporting template (if required) in line with LGPS | 2023/24 |
| requirement | |

Resource and Budget Implications

This work will be led by the Deputy Head of Clwyd Pension Fund, supported by the Investment Consultant. Estimated costs for the development of the reporting are contained within the 2022/23 budget.

F4 - UK Stewardship Code

What is it?

Stewardship is the responsible allocation, management and oversight of capital to create long-term value for clients and beneficiaries leading to sustainable benefits for the economy, the environment and society.

The UK Stewardship Code 2020 comprises a set of 12 'apply and explain' Principles for asset owners. As part of the Fund's desire to demonstrate its good governance and stewardship of its assets, the Fund will look to become a signatory to the Code by submitting its report by October 2022. The WPP have already submitted its application to become a signatory of the Stewardship Code, and the Fund will need to use this submission to inform their application.

Timescales and Stages

| Develop Stewardship Code template | 2022/23 Q1 to Q2 |
|---|------------------|
| Stewardship Code submission (pre October 2022 deadline) | 2022/23 Q3 |

Resource and Budget Implications

This work will be led by the Deputy Head of Clwyd Pension Fund, supported by the Investment Consultant. Estimated costs for the development of the submission are contained within the 2022/23 budget.

F5 - LGPS Investment Related Developments

What is it?

The Government (DLUHC) will continue to produce guidance for the LGPS community. It is expected that, in summer 2022, the Fund will be asked to consider a significant single consultation exercise. The Fund intends to respond to the consultation in respect of all areas covered.

Further detail will be provided in due course but it is anticipated that it will encompass the following areas:

- Levelling up as described in section F2 (will eventually result in the publication of a mandatory plan by the Fund)
- TCFD as described in section F3
- Asset Pooling Guidance DLUHC undertook an informal consultation on new asset pooling guidance during early 2019. DLUHC has since confirmed its intention to carry out a formal consultation in due course (and it will now be contained within this wider consultation)
- Competition and Markets Authority Order 2019 covering the requirement to set strategic objectives for investment consultants.

Timescales and Stages

| Respond to consultation (in full) | 2022/23 Q2 to Q3 |
|------------------------------------|------------------|
| Respond to changes in requirements | Unclear |

Resource and Budget Implications

This work will be led by the Deputy Head of Clwyd Pension Fund, supported by the Investment Consultant. Estimated costs for the development of the reporting are contained within the 2022/23 budget albeit this may need revisited when the requirements are better understood.





ACTIVE OWNERSHIP REPORT

ROBECO | 01.10.2022 - 31.12.2022

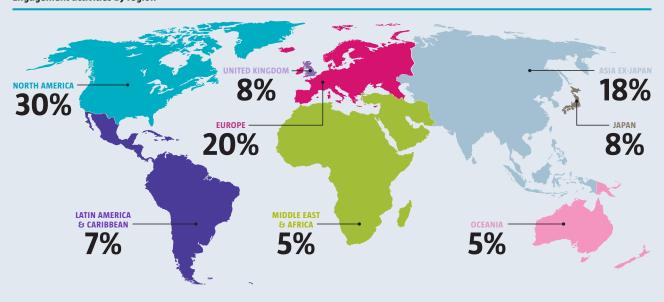






Q4 22 FIGURES ENGAGEMENT

Engagement activities by region



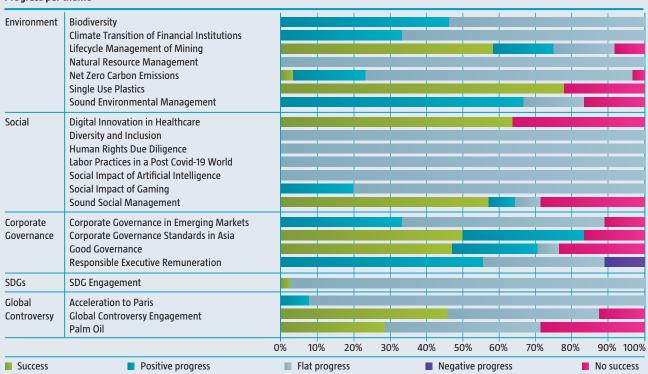
Number of engagement cases by topic*

| | Q1 | Q2 | Q3 | Q4 |
|----------------------|-----|-----|-----|-----|
| Environment | 47 | 55 | 36 | 60 |
| Social | 20 | 26 | 21 | 21 |
| Corporate Governance | 19 | 20 | 12 | 21 |
| SDGs | 15 | 30 | 18 | 29 |
| Global Controversy | 25 | 19 | 13 | 20 |
| Total | 126 | 150 | 100 | 151 |
| | | | | |

Number of engagement activities per contact type

| | Q1 | Q2 | Q3 | Q4 | YTD |
|------------------------|-----|-----|-----|-----|-----|
| Meeting | 1 | 1 | 4 | 16 | 22 |
| Conference call | 78 | 90 | 56 | 90 | 314 |
| Written correspondence | 88 | 125 | 76 | 114 | 403 |
| Shareholder resolution | 0 | 1 | 0 | 3 | 4 |
| Analysis | 16 | 27 | 19 | 46 | 108 |
| Other | 1 | 9 | 1 | 2 | 13 |
| Total | 184 | 253 | 156 | 271 | 864 |

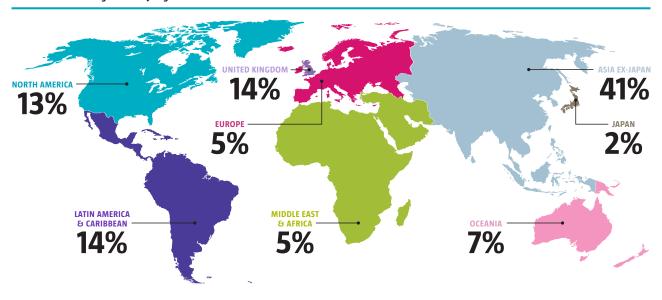
Progress per theme



^{*} Due to a change in Robeco's methodology to account for engagement cases, numbers are expected to differ from previous quarters.

Q4 22 FIGURES VOTING

Shareholder meetings voted by region



Voting overview

| | Q1 | Q2 | Q3 | Q4 | YTD |
|--|-------|--------|-------|-------|--------|
| Total number of meetings voted | 101 | 725 | 160 | 162 | 1,148 |
| Total number of agenda items voted | 1,187 | 10,531 | 1,688 | 1,436 | 14,842 |
| % Meetings with at least one vote against management | 62% | 76% | 49% | 38% | 66% |

Votes cast per proposal category



CONTENTS



Social Impact of Artificial Intelligence

Artificial Intelligence is increasingly shaping our lives, from science-fiction applications such as self-driving cars to mere operational efficiency, yet potential adverse impacts of such technologies are often overlooked. Engagement specialist Daniëlle Essink reflects on ICT companies' responsible AI use, as she is closing the theme Social Impact of Artificial Intelligence, sharing regulatory trends, best practices of AI testing and engagement outcomes.





Social Impact of Gaming

Looking both on and behind the screen, engagement specialist Alexandra Mortimer is giving an update on our Social Impact of Gaming engagements, taking a critical look at the gaming industry. The engagement has already provided interesting results, from growing transparency on labor practices, active encouragements of responsible gaming behavior and stringent complaints mechanisms.





Biodiversity

As decision makers from across the world discussed how to end biodiversity loss during the UN Convention on Biological Diversity Conference, engagement specialist Claire Ahlborn reflects on Robeco's multi-layered approach to use shareholder rights to protect biodiversity, from collaborative corporate and sovereign engagements to collaboration with data providers to improve biodiversity data.



Corporate Governance Standards in Asia

In the Asian market, engagement specialist Ronnie Lim shares key updates on his engagement with Japanese policy makers and companies to reduce capital inefficiencies, increase board diversity and improve corporate disclosures.



Proxy Voting

Engagement specialist Diana Trif and Active Ownership Analyst Manuel Sobral reflect on some of 2022's key trends, from the growing shareholder activism in Australia to the critical topic of Anti-ESG shareholder proposals, the actors behind them and how to spot these misleading agenda items.

INTRODUCTION



Although there were turbulent times, we look back on 2022 as being another successful year for Robeco's Active Ownership activities. We have continued to grow the team and we launched several new engagements, next to this we enhanced the transparency and collaboration with our clients.

With the year having come to an end, so did our engagement on the Social Impact of Artificial Intelligence (AI), launched in 2019. The opportunities present in AI are often described as 'endless', though technology's growing and often unregulated presence in our lives brings along numerous social risks, ranging from systematic discrimination to surveillance and privacy concerns.

For three years, we have supported technology companies in creating holistically responsible AI frameworks to govern their technological development, deployment and end use. We successfully closed 40% of the engagements, with many of the companies having formalized responsible AI principles. They have shared how the principles of inclusiveness, fairness and transparency are being integrated into their developer trainings, enterprise risk management systems and board responsibilities. However, companies remain resistant to publicly disclosing their systematic responsible Al practices, a critical challenge as Al is starting to be regulated.

Staying on the topic of technology, looking both on and behind the screen, we reflect on the progress observed so far in our Social Impact of Gaming engagement. Over the last two years, gaming companies have taken significant

steps to address in-game harassment of players, ranging from Al-driven text filtering to extensive feedback loops. At the same time, game providers are seeking ways to improve their disclosures on social and environmental performance, with three out of the five companies under engagement having launched their first sustainability reports since we started our dialogues with them.

Meanwhile, stakeholders from across the world came together at the UN Convention on Biological Diversity Conference in Montreal in December to find ways to halt biodiversity loss and to address the associated environmental, social and economic harms. Eliminating biodiversity loss requires urgent multilateral action, from governments, companies and investors. In our update, we share the various ways in which Robeco addresses biodiversity loss and deforestation, through our engagement with the Brazilian and Indonesian governments that aim to strengthen no-deforestation laws, to our newly launched proxy voting policy targeting agricultural companies that are not living up to their environmental responsibilities. Finally, we report on the soft launch of the Nature Action 100 engagement collaboration, in which we take an active role. The collaboration focuses on the 100 companies deemed to be the biggest culprits in causing biodiversity loss.

Finally, we shift our focus to Asia, where we continue to engage policy makers and companies on key gaps in their corporate governance, including the low rate of female board representation and the systematic challenges around companies' annual disclosures. These corporate governance issues alongside other market and capital inefficiencies are believed to have significant impacts on companies' market valuations, highlighting the importance of investor engagement.

As we move into a new year, we reflect on the promises made by companies and governments towards safeguarding our planet, and are ready to play our part in moving towards a more sustainable future.

Carola van Lamoen

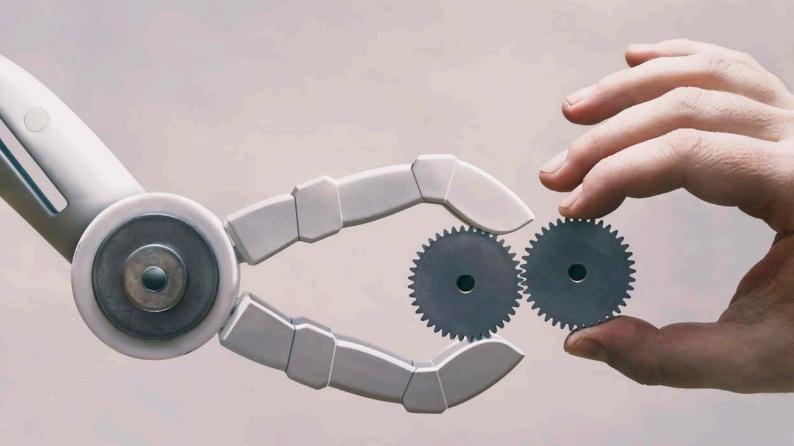
Head of Sustainable Investing

AI, will you judge me?

SOCIAL IMPACT OF ARTIFICIAL INTELLIGENCE

DANIËLLE ESSINK – Engagement specialist

(AI) come with risks that are not yet fully explored, let alone understood. As Al close our Social Impact of AI engagement



Al represents new opportunities for companies to grow and transform their businesses. According to the 2022 McKinsey Technology Trends Outlook, AI adoption across different industries continues to grow, and benefits such as cost reduction and improved efficiency remain significant. However, to achieve the full potential of AI, companies need to manage the associated risks that come with the development and use of the technology, including human rights-related risks. From 2019 to 2022, Robeco engaged with 10 companies from across the Information and Communication Technology (ICT) sector with the aim of promoting best practices in the development and responsible use of AI.

Opportunities and challenges

Given the speed at which AI is being developed, there is no doubt that in the next few decades, this technology will transform our economy and society in ways we cannot imagine. According to the 2022 Worldwide Artificial Intelligence Software Forecast by the International Data Corporation (IDC), the worldwide AI market is estimated to show compound annual growth of 18.6% from 2022 to 2026 alone.

This type of growth represents massive opportunities for AI to contribute to positive changes, such as detecting patterns in environmental data, or improving the analysis of health information. Using AI to overcome some of the most difficult challenges that humans face, including climate change, is an exciting prospect. At the same time, AI could cause new problems or aggravate existing ones if companies do not have enough understanding of the risks associated with these technologies. For example, using AI algorithms for profiling can have discriminatory effects, such as credit rating algorithms disfavoring people from certain ethnic backgrounds, or those living in certain areas.

Similarly, AI can be used for surveillance – in public spaces but also in the workplace – putting the right to privacy at risk. This shows a growing need for the responsible governance of AI systems to ensure that such systems conform to ethical values, norms, and the growing number of AI regulations.

Upcoming regulation

In response to the ethical and societal challenges raised by AI, an increasing number of regulatory initiatives and policy proposals have been launched by various players, including governments and governmental bodies such as national ethics committees, inter-governmental organizations such as the EU, non-profit organizations and academics.

On April 2021, the European Commission issued the AI Act as

'ETHICAL PRINCIPLES ON THEIR OWN DO NOT ENSURE THE RESPONSIBLE DEVELOPMENT AND DEPLOYMENT OF AI.

DANIËLLE ESSINK

a means of regulating the technology. This is a crucial step as it represents a sign of norm diffusion. In the proposal, clear requirements and obligations regarding the specific uses of AI are laid out for developers, deployers and users. The proposal takes a risk-based regulatory approach by distinguishing four categories based on the level of risk. For example, AI systems that have been identified as high-risk, such as CV-scanning tools that rank job applicants, will be subject to strict obligations including enhanced risk management processes and human oversight. Al systems with limited risks will remain largely unregulated.

Following the proposal in April 2021, the regulation was expected to come into effect in late 2022 or early 2023, using a transitional period. This growing legislative pressure around AI could pose serious regulatory risks for companies that are not well prepared to conform with the rising obligations.

The results of our engagement

In September 2022, we concluded our Social Impact of AI engagement program and successfully closed 40% of the engagement cases. Through our engagement, we learned that companies are gradually aligning internal practices to principles of responsible AI. Many companies formalized AI principles that address topics like inclusiveness, fairness and transparency. Additionally, companies are increasingly pursuing a collaborative approach by actively participating and contributing to crossindustry multi-stakeholder initiatives that aim to advance responsible governance and best practices in Al. These types of initiatives play a decisive role in guaranteeing trustworthy AI across the industry.

However, ethical principles on their own do not ensure the responsible development and deployment of AI. Businesses require robust governance mechanisms to effectively implement their principles. In our engagement, we observed that transparency

around AI governance and implementation remained low, as most companies' public disclosures lacked clarity about how such principles translate into practice, and which checks and balances are in place. After talking to the companies, we learned about the specifics of the implementation, which then gave us the confidence to close some of the objectives successfully. The engagement results of this theme are, therefore, highly correlated with the company's willingness to set up constructive dialogues.

Next steps

The alignment of AI technologies with ethical values and principles will be critical to promote and protect human rights in society. Even though much work has been done in this area, the implementation of AI principles and management of AI risks remains a critical area for improvement. As a result, we will continue our engagement work with a selection of companies in the ICT sector under our 'Sustainable Development Goals (SDG) engagement' theme. These dialogues have a strong focus on human rights and societal impact, and highlight topics like misinformation, content moderation and stakeholder collaboration. We will focus on how companies can contribute to SDG 10 (Reduced inequalities) and SDG 16 (Peace, justice and strong institutions) by safeguarding human rights in the development and use of AI and promoting social, economic and political inclusion.

CASE STUDY

MICROSOFT

Microsoft is an American multinational technology company, showing strong performance in developing and implementing AI policies and guidelines. For example, the company has published six ethical principles to drive responsible Al as well as user tools, guidelines, and resources to help implement it throughout the lifecycle of technologies, from concept to deployment. One specific example is a checklist which helps prioritize fairness when developing AI. Additionally, Microsoft has added requirements on responsible use by clients in the terms of service and marketing materials of its AI products and services.

PLAYING FOR IMPACT

SOCIAL IMPACT OF GAMING

ALEXANDRA MORTIMER – Engagement specialist

In response to mounting concerns around the effects of ever-more popular games on the well-being of adults and children, in Q1 2021 we started engaging the global video gaming industry on their social impact. We selected six of the largest listed gaming companies located in the US, South Korea and China, with objectives that address the social impacts felt both behind and in front of the screen. Two years into the engagement, the industry has made significant steps, though not all at once.



In front of the screen

For the consumers playing video games, companies are expected to develop strategies that prevent harassment occurring between players, especially within Massively Multiplayer Online Role-Playing Games (MMORPGs), where large numbers of players interact at once. Automatic chat text filtering has emerged as a standard technology deployed by most companies under engagement. More sophisticated tiered responses have emerged among a subset of the companies, which feature artificial intelligence, feedback loops to the affected players, and appeals processes.

Overall, the application of such tools is decided by studios on a game-by-game basis, though we have encouraged companies to look for opportunities for studios to learn from each other, and create a more general application of harassment-prevention tools. Another interesting response by the industry has been to conduct research on the factors behind disruptive player behavior, though we have yet to see how this research is being leveraged in game design, which we will encourage in the coming months.

Other elements of player behavior that warrant attention are the money and time spent within games. Much of companies' focus has been on children's spending in recognition of their limited ability to regulate their behavior. A straightforward measure implemented by at least half of the companies has been to ban spending abilities for accounts below an early-teen age group, though age restrictions and time restraints are largely implemented through the consoles on which the games are played, and must be actively set by parents.

In September 2021, the Chinese government introduced limits on children's gaming time for which functions such as account verification had to be integrated. This had a significant effect on the

'CREATING RECOGNITION OF UMBRELLA COMPANIES' **RESPONSIBILITIES TOWARDS** SUBSIDIARIES' RISKS REQUIRES A SHIFT IN MINDSET AT THE **MANAGEMENT LEVEL.'**

ALEXANDRA MORTIMER

total time and money spent by young players, as already evidenced by one company. This area of impact has the potential to generate some creative design solutions, and we remain keen to see how the breadth of tools develops over the next year.

Two other player-end impacts have seen less traction in the intervening time. Depictions of violence within games are acknowledged as material by the companies most exposed to this content. However, we have yet to see examples of clear policies that guide what imagery is appropriate outside of regulation, and it is widely seen to be a creative rather than a risk-aligned decision. Similarly, in-game diversity has begun to garner attention in US-based studios, but lacks traction in other markets. Companies have highlighted extended character appearance options that allow for diverse avatars, and characters in storylines that reflect one or more dimensions of diversity such as race, gender expression or physical ability levels. This, too, is considered a creative decision that is determined by project teams, for which the diversity levels of the teams themselves is considered a large factor. In some instances, feedback structures have been put in place for employees to flag inappropriate or concerning content, though it doesn't appear that this is a formal process that is taken advantage of across all projects.

Behind the screen

Since the launch of the engagement, the issue of diversity and inclusion on the work floor has only continued to rise in prominence within the gaming sector. Allegations of toxic workplace cultures, enabling sexual harassment and discrimination, continued into 2021, triggering legal and employee action. The response by the industry has been twofold. Western companies have appointed leads for diversity, installing training and development programs, while remaining defensive of the view that allegations are the result of systemic issues. Companies in other regions however approach diversity primarily from the gender perspective, and are less responsive to the issue overall. Wider workplace conditions have attracted more uniform attention, with companies reporting initiatives to improve work-life balance.

Where companies have developed across the board is in their reporting. All companies under engagement now publish annual ESG reports, when at the beginning of the engagement, three had yet to do so. The reports highlight initiatives that relate to many of our objectives, and largely conform to frameworks that include metrics that we deem important for transparency, in particular those that are related to the workforce. We've provided input to companies on topics we deem material to receive more transparency about, and the metrics we'd like to see in future, acknowledging that many are still exploring this new form of communication.

Focus areas for the last year of engagement: responsibility and regulation

Decisions around in-game elements such as character diversity are largely seen to be within the remit of the creative and project teams, as they're highly relevant to the user experience. Umbrella companies are nonetheless still responsible for managing subsidiaries' risks, including those faced by consumers when using their product. Creating recognition of this dynamic is at the center of this engagement, and requires a shift in mindset at the management level.

China's restrictions around minors' gaming time is but one example of how regulations are influencing the way that users interact with games. Markets are separately mandating how monetization and violence should be included in games, creating a fragmented landscape of acceptable game features. Prominently, 'loot boxes', which have been likened to gambling products, have come under scrutiny by regulators in the UK and US, in addition to four countries where the products are already actively regulated or banned. How companies are navigating this landscape, especially within international expansion plans, is an element we will look to explore further as we approach the end of the engagement theme.

CASE STUDY

ACTIVISION BLIZZARD

Activision Blizzard, an American video game holding company, faced prominent allegations of employee misconduct towards the end of 2021, generating wide media coverage and employee outrage. Since then, the company has settled an investigation with a state regulator and implemented a multi-pronged initiative of diversity personnel, targets, and strengthened employee protection policies. We have discussed this at length with the company as part of our engagement, and provided detailed feedback on how Activision can improve its reporting to progress the resolution of the issue by increasing confidence in the efficacy of its new measures. If the efforts are proven to have worked, the company's response to its scandal may serve as a positive example to peers in a sector that has faced many similar allegations in past years.

NC SOFT

South Korean video game developer and publisher NC Soft has made significant steps in improving its sustainability disclosures since the beginning of our engagement in 2020, moving from elementary ESG disclosure to publishing an inaugural ESG report in 2021. The company's new ESG reports have particularly highlighted NC Soft's approach to diversity, both within the company and in-game. Though not regarded as highly material in its domestic base compared to Western markets, NC Soft has shared how its employee code of ethics accounts for diversity and inclusion. It has also published human capital metrics describing how gender is represented across different levels of the company. NC Soft has also outlined the process in place to intercept content that may be inappropriate in different markets, both in imagery and in text.

A MULTI-FACETED APPROACH

BIODIVERSITY

CLAIRE AHLBORN – Engagement specialist

Nature is critical to meeting the UN Sustainable
Development Goals (SDGs) and limiting global warming
to 1.5 degrees. Countries, companies and civil society
organizations must work together to eliminate and reverse
biodiversity loss and secure our and our planet's health
and well-being. In an active effort to live up to our and our
clients' environmental and social responsibilities, Robeco
has set up an integrated and multi-layered engagement
approach to address biodiversity loss.



In prioritizing economic development, humanity has caused considerable damage to the natural world and its ecosystems. Yet, a degraded biosphere will have a direct impact on growth and human welfare over the next several decades. From 1970 to 2018 there has been a reported 69% average decline in global wildlife species. In Latin America, this number rises to a staggering 94%.

Moreover, studies conducted in the Netherlands, Brazil and France found financial institutions to have hundreds of billions of assets highly dependent on the services provided by healthy ecosystems, from pollination to clean water provision. Such estimates help frame the gravity of biodiversity loss trends and underline the collective urgency to halt and reverse them.

A multi-layered engagement strategy

Addressing biodiversity loss requires urgent action from both governments and companies. With their wide coverage, investors are often in a unique position to push for change. Yet, investor action on biodiversity has been limited, with data barriers and capacity limitations keeping them from integrating biodiversity into their investments, engagement and voting decisions at scale.

As the financial materiality of biodiversity and the impact that companies and financial institutions have on nature is becoming clearer, Robeco has set out to create a holistic, multi-layered and scalable engagement approach towards biodiversity. As such, we are not only engaging the various relevant stakeholders, from

'ADDRESSING BIODIVERSITY LOSS REQUIRES URGENT ACTION FROM BOTH GOVERNMENTS AND COMPANIES. WITH THEIR WIDE COVERAGE, INVESTORS ARE OFTEN IN A UNIQUE POSITION TO **PUSH FOR CHANGE'**

CLAIRE AHLBORN

governments and companies to data providers, but also exploring how stewardship efforts can be scaled through proxy voting and collaborative engagements.

Engagement: From impact assessments to incentive structures

Biodiversity loss is one of the defining challenges of the 21st century. Robeco's engagement initially started off with a focus on addressing biodiversity loss linked to deforestation among companies exposed to high-risk commodities. We have since extended the engagement program in both time and scope to accommodate engagements on other drivers of biodiversity loss, from pollution to overfishing.

Through the engagements, we expect companies to assess their biodiversity impacts and dependencies and set a biodiversity strategy that includes, for instance, no-deforestation targets. We also expect them to report key impact indicators following recognized reporting frameworks such as the Taskforce for Nature-Related Financial Disclosures.

To achieve environmental goals, biodiversity must be embedded within companies' governance and incentive structures. Companies must actively engage their stakeholders, assuring adequate efforts are made to not exclude smallholder farmers and local communities from their supply chains.

The theme will among others cover companies engaged as part of our new RobecoSAM Biodiversity Equities Fund, which directs financial flows towards biodiversity solutions providers. We aim to engage with those companies where we see opportunities to enhance their contributions to biodiversity, including wider asks such as the systematic integration of biodiversity into companies' strategies and risk management processes, or topicspecific discussions on, for instance, sustainable livestock manure management.

Voting for nature

To scale up our efforts, Robeco has introduced a new voting approach around deforestation, targeting companies that have high exposure to deforestation risk, but do not have adequate policies and processes in place to reduce their impact, or are involved in severe and repeated deforestation-linked controversies. Drawing on the insights from benchmarks such as Global Canopy's Forest500 ranking, we start by focusing on companies involved in the key forest risk sectors: palm oil, soy, beef and leather, timber, pulp and paper.

Speaking up together

Seeking a wider reach, we are increasingly looking for collaborative engagement opportunities. We recently signed the Business for Nature statement calling for mandatory corporate reporting for nature by 2030. We also joined the letter campaign and ESG data provider engagement by the Finance Sector Deforestation Action, a group of over 30 investors calling for increased action and transparency on protecting our forests.

Furthermore, Robeco was honored to be part of the core investor group that launched the Nature Action 100 initiative during the UN Biodiversity Conference in Montreal in December. This aims to harness the power of collaborative engagement to address nature loss and biodiversity decline, focusing on the 100 companies with the largest impacts and dependencies on nature.

The initiative will be co-led by the sustainability advocacy group Ceres, the Institutional Investors Group on Climate Change (IIGCC), the Finance for Biodiversity Foundation and the financial think tank Planet Tracker. There will be three main work streams:

- the Secretariat, responsible for setting up the initiative's Steering Group and supporting administrative, communications and fundraising activities;
- the Technical Advisory Group, tasked with identifying priority engagements and developing science-based investor guidance and tools; and
- the Corporate Engagement group, focusing on developing a multi-year plan to engage companies deemed most important to stemming nature and biodiversity loss.

Global investors are invited to sign up to the program and lead on individual dialogues on behalf of the global investor community.

Public policy dialogue

Shifting to the sovereign level, Robeco continues to be actively involved in the Investor Policy Dialogue on Deforestation (IPDD) initiative since it was formally set up in July 2020, co-chairing the work streams responsible for engaging with the governments of Brazil and Indonesia. Currently, the coalition is comprised by 65 institutional investors from 19 countries, with USD 10 trillion in assets under management. As a long-term investor in these countries' bonds and equities, Robeco considers sovereign engagement as a necessary and powerful step to encourage governments that are significantly exposed to deforestation risk to implement relevant policies and contribute to a positive change.

CASE STUDY

The Finance Sector Deforestation Action We are actively partaking in the Finance Sector Deforestation Action (FSDA) initiative, a collaborative investor group constituting of over 30 investors that have signed the COP26 Financial Sector Commitment on Eliminating Agricultural **Commodity-Driven Deforestation throughout** investment and financing activities by 2025.

As part of the investor group, we have joined a letter and engagement campaign launched at the end of 2022, jointly aiming to engage more than 50 companies. These include, among others, meat producer Marfrig and forestry company Suzano, on creating clear no-deforestation and traceability targets, due diligence processes and disclosures.

In October 2022, Robeco took part in the IPDD's group trip to Jakarta and met with representatives from national government agencies to discuss various ESG topics. In particular, the IPDD group met with the Indonesia Stock Exchange (IDX) and with the Chamber of Commerce (KADIN), signing two Memorandums of Understanding to promote country sustainability disclosures for listed companies, and to support the Regenerative Forest Business Sub Hub, respectively.



CORPORATE GOVERNANCE STANDARDS IN ASIA

RONNIE LIM – Engagement specialist

Our engagement to improve corporate governance standards began in 2017 with Japan and was widened in 2020 to include Asia. In addition to engaging with companies, we also work with other investors and stakeholders to create a positive environment for change. We focus on the most material governance issues to be addressed, with target companies selected in close collaboration with our fundamental equity teams.



Opportunities and challenges

We have two broad streams of engagement in Asia. Firstly, we work with regulators and policy stakeholders such as financial regulators and local stock exchanges in Japan, South Korea, and to a lesser extent in China, to ensure an improved and level playing field for ESG issues. Secondly, we work constructively with companies in Japan and South Korea to improve their disclosure, communication and financial performance. We have also worked in collaboration with other asset managers to improve the Asian corporate governance 'ecosystem', with active participation in the two working groups (Japan and South Korea) within the Asian Corporate Governance Association (ACGA) and the International Corporate Governance Association (ICGN).

Our policy engagement included a virtual delegation meeting with Japan's Ministry of Economy, Trade and Industry. One of the issues we raised was the disclosure timing of annual reports, and we noted that it is of utmost importance to investors that these be released prior to the annual general meetings. In addition, we were co-signatories of a letter to Japan's Financial Services Agency and the Tokyo Stock Exchange on two pathways to address the low rate of female participation: changes to the listing rules and via Japan's Corporate Governance Code.

We engage with domestic investors in Japan who are increasingly motivated to understand how economic value is created by efficient balance sheet management. Over the past year, we delivered a series of ICGN webinars on the topic of capital efficiency and long-term value creation which saw active participation by listed

'WE ATTRIBUTE THE PREDILECTION FOR MANAGEMENT TO PERSIST WITH EXCESS CASH OR INEFFICIENT BALANCE SHEETS TO EITHER EXCESSIVE RISK **AVERSION OR THE PRESERVATION** OF 'OPTION VALUE'.'

RONNIE LIM

companies. The content of the webinars was how cashflow and return on capital create long-term shareholder value, and the impact of valuation by efficient management of balance sheet items, such as by lowering inventory and increasing dividend payouts.

The markets of Japan and South Korea, where the engagement is focused, have large valuation discounts compared to other developed markets in Europe and the US. These discounts have widened in the year to date with the strong relative appreciation of the US dollar. The main valuation metrics we use include priceearnings ratios (PEs), price-to-book value and EV/EBITA.

The companies under engagement were also trading at valuation discounts compared to their global industry peers, which we attribute partly to broad governance issues in Japan and South Korea, but also to the lack of robust financial strategies and inefficient balance sheets. Our dialogue was consistently explaining the importance of both effective investor communication, together with the setting of appropriate capital management targets.

Company engagements

We have written in previous reports that the essentials of good corporate governance go beyond using 'check-list' assessments of governance codes and are closely related to the two principles of transparency and accountability. Therefore, we ask companies to improve transparency by publishing narrative reporting on their corporate strategy and having a distinct financial strategy. KPMG's last survey in 2020 showed that Japan leads the world, with 579 companies issuing integrated reports. There is much to celebrate given the increased emphasis on reporting on material environmental and social (E&S) issues, including setting targets on greenhouse gas emissions reductions. We have commended companies when they have not only reported on material E&S issues, but have also set credible near-and long-term targets. However, there are still significant opportunities for companies to improve reporting of their financial strategy and to give robust explanations on specific targets that would support their business strategy.

We consider a robust financial strategy to have several components, including disclosing the thresholds for planned capital expenditure, investment and acquisitions. We constantly remind executives of the basics of corporate finance, including having positive returns on capital, and we push for increased accountability by providing practical recommendations such as publishing dividend policies and setting appropriate incentives. We also challenge companies to dispose of any crossholdings and low-return business assets, and to return excess capital in the way of dividends, share buybacks and the cancellation of any treasury shares.

The engagements usually begin with a dialogue questioning some aspects of how the board is structured, and how compensation and incentives are structured. Typically, a company will be trading at a low valuation because of investor skepticism about the sustainability of key operating metrics such as an unusually high profit margin, or a persistently low dividend pay-out ratio. Most companies defend these practices by steering the dialogue to their need to create earnings growth, or through specious arguments for the need to retain legacy business divisions which are no longer profitable.

We attribute the predilection for management to persist with excess cash or inefficient balance sheets to either excessive risk aversion or the preservation of 'option value' – for example to make a large acquisition without shareholder scrutiny or approval. These are behavioral and cultural issues that we believe are some of the main contributors to the 'Asia discount' and can be very challenging for a minority investor to address. We do not believe that there is a single, magic bullet to fix this problem, but we have found some success in making the business and investment case for our proposals and demonstrating sincerity by being constructive and patient.

CASE STUDY

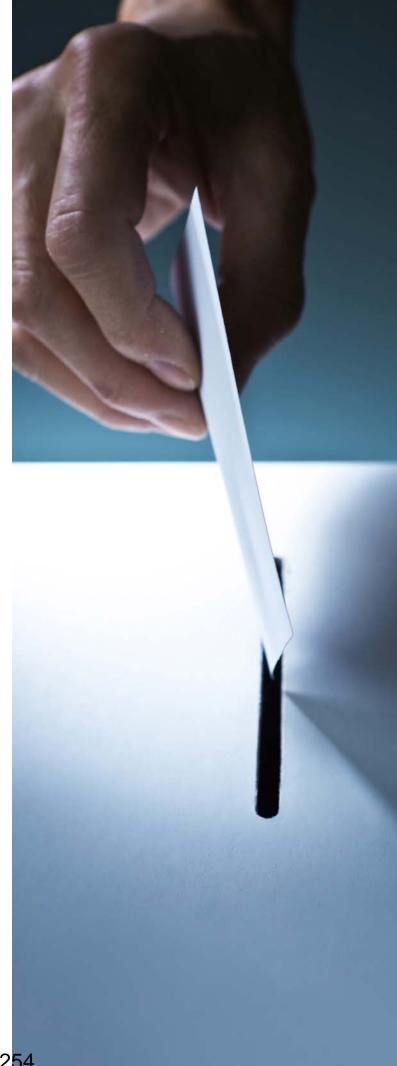
Omron Corporation

We began engagement in 2016 with Japanese electronics maker Omron, which now trades at a significant premium relative to industry peers. The company's integrated reporting steadily improved and its communication with investors now includes published interviews with its CEO and CFO. In addition, Omron's revised remuneration incentives for corporate value enhancement include a 60% weighting for financial metrics. We had regular meetings with the company to discuss capital management performance on both an absolute and relative basis and we worked with Omron to improve its return on equity for each business unit. We closed our engagement as having been successful.



DIANA TRIF – Engagement specialist **MANUEL SOBRAL** – Active ownership analyst

Engagement specialist Diana Trif and Active Ownership Analyst Manuel Sobral reflect on some of 2022's key trends, from the growing shareholder activism in Australia to the critical topic of Anti-ESG shareholder proposals, the actors behind them and how to spot these misleading agenda items.



Anti-ESG shareholder proposals

Investors and issuers were faced with a transformed US AGM landscape in 2022. The growing national debate around sustainable investing prompted a dramatic increase in the number of shareholder proposals filed by conservative activists seeking to halt companies' ESG efforts and to combat "woke capitalism". These proposals, now widely referred to as "anti-ESG", entail new challenges for investors seeking to push US companies to step up their ESG efforts.

On the one hand, there are concerns that anti-ESG proponents may seek to take advantage of certain features of the US proxy machinery to block pro-ESG shareholder proposals from reaching ballots. The tactics that may be employed to achieve this are diverse, yet have a common denominator – they concern shareholder proposal excludability under US rules. A shareholder proposal becomes eligible for a vote if it reaches a company's proxy statement, but companies can exclude the proposal if it fails to meet certain procedural and substantive requirements.

Particularly relevant in this sense is that the US Securities and Exchange Commission (SEC) allows companies to leave out substantially duplicative shareholder proposals from its proxy statement, as well as to exclude a shareholder proposal which addresses the same subject matter as a proposal that received low levels of support in any previous meeting. The 2022 proxy season has shown that anti-ESG shareholder proposals often take advantage of these provisions by duplicating the wording of pro-ESG shareholder proposals, which can lead to a number of consequences. First, if the anti-ESG shareholder proposal is submitted first, it will be the one that makes it to the ballot. Second, if an anti-ESG shareholder proposal receives less than 5% support at a meeting, as often is the case, pro-ESG proposals covering the same topic can be excluded from the proxy materials for the next three years.

In addition, anti-ESG shareholder proposals are often verbatim copies of pro-ESG shareholder proposals; they tackle the same topics ranging from lobbying to racial equity, and often appear to be fueled by a desire to advance rather than hinder a company's ESG goals. Discerning the true objective of the proposal in many cases requires an in-depth analysis that spans well beyond the proxy materials made available by companies. This analysis covers aspects such as the proponent, the views expressed by the proponent, and any public statements made by the proponent regarding the shareholder proposal in question, thereby placing a burden on proxy analyses. Robeco assesses each shareholder proposal on a case-by-case basis and supports resolutions which aim to increase transparency on material ESG issues, enhance long-term shareholder value creation, address material ESG risks and enforce appropriate conduct.

Corporate Governance in Australia

In recent years, climate activism has become increasingly prominent in Australia, with shareholder associations such as the Australasian Centre for Corporate Responsibility (ACCR) and Market Forces strongly advocating for sustainability goals through engagement and the submission of shareholder proposals. This is in line with the wider global trend of growing scrutiny of companies over sustainability concerns by investors and regulators alike. For the Australian market however, Rio Tinto's detonation of the Juukan Gorge cave in 2020 pushed sustainability concerns further into the forefront of the corporate agenda, and throughout the 2022 proxy season we continued to observe its effects on shareholder activism.

ACCR is a shareholder advocacy organization which focuses on the management of ESG-related issues. Throughout 2022, the organization filed a total of 13 shareholder proposals, of which eight were related to climate concerns. Climate proposals included requests for a climate sensitivity analysis at BHP Billiton's and Origin Energy's annual general meetings, and requests to stop advocating for the development of new and expanded coal mines at Rio Tinto, Woodside Energy and Santos.

In addition, Market Forces has actively targeted Australian banks connected with fossil fuel financing. The shareholder activist group submitted proposals to the upcoming AGMs of National Australia Bank, ANZ Bank and Westpac, requesting that the banks report on how they plan to stop financing fossil fuel projects. Earlier in Q4, Market Forces also submitted a similar proposal at Commonwealth Bank's October AGM, which received less than 10% support.

Despite their continued efforts in pushing for corporate climate action, shareholder activists such as ACCR and Market Forces have struggled to gather significant support and pass climate proposals at AGMs. The Australian regulatory environment presents a significant obstacle for passing shareholder resolutions related to climate, as shareholders are not allowed to propose an advisory resolution unless it is permitted under the company's constitution. Consequently, it is often the case that ACCR's and Market Force's climate proposals are not put up for vote at AGMs.

This issue gained significant attention in the past, as part of the 2015 court case of Australasian Centre for Corporate Responsibility versus Commonwealth Bank of Australia. The case came to light due to the omission by the Commonwealth Bank of two ordinary proposals filed by ACCR. In the end, Commonwealth Bank won the case, which harmed the prospect of activism through advisory shareholder resolutions. However, shareholders will often submit a resolution to amend the constitution along with the advisory resolution they would like to pass. Robeco is supportive of proposals that facilitate the submission of shareholder resolutions, as we deem these to be an important means of engagement between companies and



COMPANIES UNDER ENGAGEMENT IN 2022



Environment

Biodiversity

Barry Callebaut AG

Compagnie Generale des Etablissements

Michelin SCA

JBS SA

Marfrig Foods SA

Mondelez International

Ryohin Keikaku Co Ltd

Sappi Ltd.

Suzano Papel e Celulose SA

The Hershey Corporation

Top Glove Corp. Bhd.

Unilever

Climate Transition of Financial Institutions

Bank of America Corp.

Barclays Plc

BNP Paribas SA

Citigroup, Inc.

DBS Group Holdings

HSBC

ING Groep NV

JPMorgan Chase & Co., Inc.

Sumitomo Mitsui Financial Group, Inc.

Lifecycle Management of Mining

Anglo American

AngloGold Ashanti Ltd.

Barrick Gold Corp.

BHP Billiton

First Quantum Minerals Ltd.

Fortescue Metals Group Ltd.

Gerdau SA

Polymetal International Plc

Polyus Gold OAO

Sibanye Stillwater Ltd.

Natural Resource Management

Ambev SA

Callon Petroleum Co.

CF Industries Holdings, Inc.

Continental Resources, Inc.

Diageo

OCI NV

PepsiCo, Inc.

Sappi Ltd.

Severn Trent PLC

Tronox Holdings Plc

Net Zero Carbon Emissions

Anglo American

ArcelorMittal

Berkshire Hathaway

BHP Billiton

BlueScope Steel Ltd.

ВP

CEZ as

Chevron

China National Building Material Co. Ltd.

CRH Plc

Ecopetrol SA

Enel

ExxonMobil

Gazprom OAO

HeidelbergCement AG

Hyundai Motor

JFE Holdings, Inc.

LyondellBasell Industries NV

Marathon Petroleum Corp.

Petroleo Brasileiro

Phillips 66

PTT Exploration & Production

Rio Tinto

Royal Dutch Shell

Saudi Arabian Oil Co.

Valero Energy Corp.

Vistra Energy Corp.

WEC Energy Group Inc

Single Use Plastics

LyondellBasell Industries NV

PepsiCo, Inc.

Procter & Gamble Co.

Sealed Air Corp.

Sound Environmental Management

Guangdong Investment Ltd.

Origin Energy Ltd.

Saudi Arabian Oil Co.

Social

Digital Innovation in Healthcare

Abbott Laboratories

AbbVie. Inc.

CVS Caremark Corp.

Elevance Health Inc

Eli Lilly & Co.

Fresenius SE

HCA Holdings, Inc.

Philips Roche

Sinopharm Group Co., Ltd. UnitedHealth Group

Diversity and Inclusion

Eli Lilly & Co. Netflix Inc Oracle Corp

Taiwan Semiconductor Manufacturing Co.

Thermo Fisher Scientific, Inc.

Human Rights Due Diligence for Conflict-Affected and High-Risk **Areas**

Bharat Electronics Ltd. Booking Holdings, Inc. Cemex SAB de CV Fast Retailing

HeidelbergCement AG

Inditex

PTT Exploration & Production Sinotruk Hong Kong Ltd. SolarEdge Technologies, Inc.

Wacker Chemie AG

Labor Practices in a Post Covid-19 World

Accor SA Amazon.com, Inc. Delivery Hero AG

InterContinental Hotels Group Plc Marriott International, Inc.

Meituan Dianping Uber Technologies, Inc. Wal-Mart Stores

Social Impact of Artificial Intelligence

Booking Holdings, Inc.

Microsoft Visa, Inc.

Social Impact of Gaming

Activision Blizzard, Inc.

NCsoft Corp. NetEase.com, Inc. Take-Two Interactive Software, Inc.

Tencent Holdings Ltd.

Sound Social Management

Aon Plc

Bayerische Motoren Werke

Glencore Plc MTN Group Post Holdings Inc Procter & Gamble Co.

Tesco Plc

Thermo Fisher Scientific, Inc.

Governance

Corporate Governance in Emerging Markets

Companhia de Concessoes Rodoviarias SA

CPFL Energia SA

Haier Smart Home Co., Ltd.

Hyundai Motor Midea Group Co. Ltd. Samsung Electronics Woongjin Coway Co. Ltd. XinAo Gas Holdings Ltd.

Corporate Governance Standards in Asia

Hynix Semiconductor, Inc.

Mando Corp. Mitsubishi Motors OMRON Corp. ROHM Co. Ltd.

Shin-Etsu Chemical Co. Ltd.

Good Governance

Arcadis NV DSM

Heineken Holding Nissan Motor Royal Dutch Shell Samsung Electronics

Signify NV

Sumitomo Mitsui Financial Group, Inc.

Unilever

Responsible Executive Remuneration

Booking Holdings, Inc.

Deutsche Boerse

Henkel AG & Co. KGaA

Linde Plc

NIKE

Schneider Electric SA

Tesco Plc Walt Disney Wolters Kluwer

SDGs

SDG Engagement

Adobe Systems, Inc. Alphabet, Inc. Amazon.com, Inc.

Amgen Apple Aptiv PLC

Banco BTG Pactual S.A. Boston Scientific Corp. Capital One Financial Corp. CB Richard Ellis Group, Inc. Charter Communications, Inc.

Companhia de Concessoes Rodoviarias SA

Deutsche Boerse

eBay

Elanco Animal Health, Inc. Electronic Arts, Inc. Elevance Health Inc F5 Networks, Inc. Jeronimo Martins

JPMorgan Chase & Co., Inc.

L Oréal

Meta Platforms Inc Mr. Price Group Ltd. NASDAQ OMX Group, Inc.

Neste Oil Oyj **Novartis OTP Bank Nyrt** Rio Tinto

Salesforce.com, Inc.

SalMar ASA

Samsung Electronics

Sandvik AB Sony

STMicroelectronics NV

Total Union Pacific

United Parcel Service, Inc.

Volvo Group Zoetis, Inc.

Global Controversy Engagement

Acceleration to Paris

Anhui Conch Cement Co. Ltd. Caterpillar, Inc. China Petroleum & Chemical Formosa Plastics Corp. ITOCHU Corp. Lukoil Holdings OAO Marubeni Corp. Mitsubishi Nippon Steel & Sumitomo Metal Corp.

PetroChina

POSCO

Rosneft NK OAO

Sumitomo Corp.

Palm Oil

MP Evans Group PLC **REA Holdings PLC** Wilmar International

Global Controversy Engagement

Currently, 10 companies are under engagement based on potential breaches of the UN Global Compact and/or the OECD Guidelines for Multinational Enterprises.

CODES OF CONDUCTS



Robeco's Engagement Policy

Robeco actively uses its ownership rights to engage with companies on behalf of our clients in a constructive manner. We believe improvements in sustainable corporate behavior can result in an improved risk return profile of our investments. Robeco engages with companies worldwide, in both our equity and credit portfolios. Robeco carries out three different types of corporate engagement with the companies in which we invest; value engagement, Sustainable Development Engagement and enhanced engagement. In all three types of engagement, Robeco aims to improve a company's behavior on environmental, social and/or corporate governance (ESG) related issues with the aim of improving the long-term performance of the company and ultimately the quality of investments for our clients.

Robeco adopts a holistic approach to integrating sustainability. We view sustainability as a long-term driver of change in markets, countries and companies which impacts future performance. Based on this belief, sustainability is considered as one of the value drivers in our investment process, like the way we look at other drivers such as company financials or market momentum.

More information is available at: https://www.robeco.com/en-int/ sustainable-investing/influence.

The UN Global Compact

One of the principal codes of conduct in Robeco's engagement process is the United Nations Global Compact. The UN Global Compact supports companies and other social players worldwide in stimulating corporate social responsibility. The Global Compact became effective in 2000 and is the most endorsed code of conduct in this field. The Global Compact requires companies to embrace, support and adopt several core values within their own sphere of influence in the field of human rights, labor standards, the environment and anti-corruption measures. Ten universal principles have been identified to deal with the challenges of globalization.

Human rights

- 1. Companies should support and respect the protection of human rights as established at an international level
- 2. They should ensure that they are not

complicit in human-rights abuses.

Labor standards

- 3. Companies should uphold the freedom of association and recognize the right to collective bargaining
- 4. Companies should abolish all forms of compulsory labor
- 5. Companies should abolish child labor
- 6. Companies should eliminate discrimination in employment.

Environment

- 7. Companies should adopt a prudent approach to environmental challenges
- 8. Companies should undertake initiatives to promote greater environmental responsibility
- 9. Companies should encourage the development and diffusion of environmentally friendly technologies.

Anti-corruption

10. Companies should work against all forms of corruption, including extortion and bribery.

More information can be found at: https://www.unglobalcompact.org/

CODES OF CONDUCTS

OECD Guidelines for Multinational Enterprises

The OECD Guidelines for Multinational Enterprises are recommendations addressed by governments to multinational enterprises operating in or from adhering countries, and are another important framework used in Robeco's engagement process. They provide non-binding principles and standards for responsible business conduct in a global context consistent with applicable laws and internationally recognized standards.

The Guidelines' recommendations express the shared values of the governments of countries from which a large share of international direct investment originates and which are home to many of the largest multinational enterprises. The Guidelines aim to promote positive contributions by enterprises to economic, environmental and social progress worldwide.

More information can be found at: http:// mneguidelines.oecd.org/

International codes of conduct

Robeco has chosen to use broadly accepted external codes of conduct in order to assess the ESG responsibilities of the entities in which we invest. Robeco adheres to several independent and broadly accepted codes of conduct, statements and best practices and is a signatory to several of these codes. Next to the UN Global Compact, the most important codes, principles, and best practices for engagement followed by Robeco are:

- International Corporate Governance Network (ICGN) statement on
- Global Governance Principles
- United Nations Global Compact
- United Nations Sustainable **Development Goals**
- United Nations Guiding Principles on **Business and Human Rights**

- OECD Guidelines for Multinational Enterprises
- Responsible Business Conduct for Institutional Investors (OECD)

In addition to our own adherence to these codes, we also expect companies to follow these codes, principles, and best practices. In addition to our own adherence to these codes, we also expect companies to follow these codes, principles, and best practices.

Robeco's Voting Policy

Robeco encourages good governance and sustainable corporate practices, which contribute to long-term shareholder value creation. Proxy voting is part of Robeco's Active Ownership approach. Robeco has adopted written procedures reasonably designed to ensure that we vote proxies in the best interest of our clients. The Robeco policy on corporate governance relies on the internationally accepted set of principles of the International Corporate Governance Network (ICGN). By making active use of our voting rights, Robeco can, on behalf of our clients, encourage the companies concerned to increase the quality of the management of these companies and to improve their sustainability profile. We expect this to be beneficial in the long term for the development of shareholder value.

Collaboration

Where necessary, Robeco coordinates its engagement activities with other investors. Examples of this includes Eumedion; a platform for institutional investors in the field of corporate governance and the Carbon Disclosure Project, a partnership in the field of transparency on CO₂ emissions from companies, and the ICCR. Another important initiative to which Robeco is a signatory is the United Nations Principles for Responsible Investment. Within this context, institutional investors commit themselves to promoting responsible investment, both internally and externally.

Robeco's Active Ownership Team

Robeco's voting and engagement activities are carried out by a dedicated Active Ownership Team. This team was established as a centralized competence center in 2005. The team is based in Rotterdam, the Netherlands, and Hong Kong. As Robeco operates across markets on a global basis, the team is multi-national and multi-lingual. This diversity provides an understanding of the financial, legal and cultural environment in which the companies we engage with operate. The Active Ownership team is part of Robeco's Sustainable Investing Center of Expertise headed by Carola van Lamoen. The SI Center of Expertise combines our knowledge and experience on sustainability within the investment domain and drives SI leadership by delivering SI expertise and insights to our clients, our investment teams, the company and the broader market. Furthermore, the Active Ownership team gains input from investment professionals based in local offices of the Robeco around the world. Together with our global client base we are able leverage this network to achieve the maximum possible impact from our Active Ownership activities.

ROBECO

Robeco Institutional Asset Management B.V. (Robeco) is a pure play international asset manager founded in 1929. It currently has offices in 15 countries worldwide and is headquartered in Rotterdam, the Netherlands. Through its integration of fundamental, sustainability and quantitative research, Robeco is able to offer institutional and private investors a selection of active investment strategies, covering a range of asset classes.

Sustainability investing is integral to Robeco's overall strategy. We are convinced that integrating environmental, social and governance (ESG) factors results in better-informed investment decisions. Further we believe that our engagement with investee companies on financially material sustainability issues will have a positive impact on our investment results and on society.

More information can be found at: https://www.robeco.com

IMPORTANT INFORMATION

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Contact

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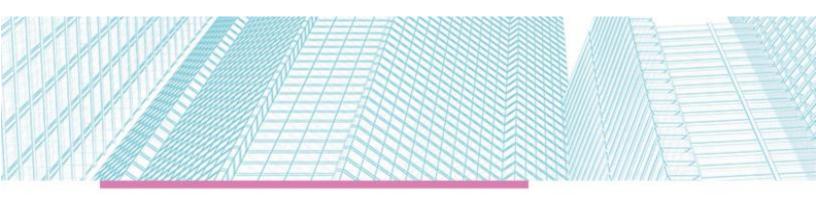
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Wales Pension Partnership GLOBAL OPPS EQUITY FUND





Proxy Voting Report Period: October 01, 2022 - December 31, 2022

| Votes Cast | 580 | Number of meetings | 64 |
|------------|-----|--------------------|-----|
| For | 499 | With management | 495 |
| FUI | 499 | With management | 495 |
| Withhold | 6 | Against management | 85 |
| Abstain | 0 | | |
| Against | 74 | | |
| Other | 1 | | |
| | | | |
| Total | 580 | Total | 580 |

In 29 (45%) out of 64 meetings we have cast one or more votes against management recommendation.

General Highlights

Anti-ESG shareholder proposals

Investors and issuers were faced with a transformed US AGM landscape in 2022. The growing national debate around sustainable investing prompted a dramatic increase in the number of shareholder proposals filed by conservative activists seeking to halt companies' ESG efforts and to combat "woke capitalism". These proposals, now widely referred to as "anti-ESG", entail new challenges for investors seeking to push US companies to step up their ESG efforts.

On the one hand, there are concerns that anti-ESG proponents may seek to take advantage of certain features of the US proxy machinery to block pro-ESG shareholder proposals from reaching ballots. The tactics that may be employed to achieve this are diverse, yet have a common denominator — they concern shareholder proposal excludability under US rules. A shareholder proposal becomes eligible for a vote if it reaches a company's proxy statement, but companies can exclude the proposal if it fails to meet certain procedural and substantive requirements.

Particularly relevant in this sense is that the US Securities and Exchange Commission (SEC) allows companies to leave out substantially duplicative shareholder proposals from its proxy statement, as well as to exclude a shareholder proposal which addresses the same subject matter as a proposal that received low levels of support in any previous meeting. The 2022 proxy season has shown that anti-ESG shareholder proposals often take advantage of these provisions by duplicating the wording of pro-ESG shareholder proposals, which can lead to a number of consequences. First, if the anti-ESG shareholder proposal is submitted first, it will be the one that makes it to the ballot. Second, if an anti-ESG shareholder proposal receives less than 5% support at a meeting, as often is the case, pro-ESG proposals covering the same topic can be excluded from the proxy materials for the next three years.

In addition, anti-ESG shareholder proposals are often verbatim copies of pro-ESG shareholder proposals; they tackle the same topics ranging from lobbying to racial equity, and often appear to be fueled by a desire to advance rather than hinder a company's ESG goals. Discerning the true objective of the proposal in many cases requires an in-depth analysis that spans well beyond the proxy materials made available by companies. This analysis covers aspects such as the proponent, the views expressed by the proponent, and any public statements made by the proponent regarding the shareholder proposal in question, thereby placing a burden on proxy analyses. Robeco assesses each shareholder proposal on a case-by-case basis and supports resolutions which aim to increase transparency on material ESG issues, enhance long-term shareholder value creation, address material ESG risks and enforce appropriate conduct.

Market Highlights

Corporate Governance in Australia

In recent years, climate activism has become increasingly prominent in Australia, with shareholder associations such as the Australasian Centre for Corporate Responsibility (ACCR) and Market Forces strongly advocating for sustainability goals through engagement and the submission of shareholder proposals. This is in line with the wider global trend of growing scrutiny of companies over sustainability concerns by investors and regulators alike. For the Australian market however, Rio Tinto's detonation of the Juukan Gorge cave in 2020 pushed sustainability concerns further into the forefront of the corporate agenda, and throughout the 2022 proxy season we continued to observe its effects on shareholder activism.

ACCR is a shareholder advocacy organization which focuses on the management of ESG-related issues. Throughout 2022, the organization filed a total of 13 shareholder proposals, of which eight were related to climate concerns. Climate proposals included requests for a climate sensitivity analysis at BHP Billiton's and Origin Energy's annual general meetings, and requests to stop advocating for the development of new and expanded coal mines at Rio Tinto, Woodside Energy and Santos.

In addition, Market Forces has actively targeted Australian banks connected with fossil fuel financing. The shareholder activist group submitted proposals to the upcoming AGMs of National Australia Bank, ANZ Bank and Westpac, requesting that the banks report on how they plan to stop financing fossil fuel projects. Earlier in Q4, Market Forces also submitted a similar proposal at Commonwealth Bank's October AGM, which received less than 10% support.

Despite their continued efforts in pushing for corporate climate action, shareholder activists such as ACCR and Market Forces have struggled to gather significant support and pass climate proposals at AGMs. The Australian regulatory environment presents a significant obstacle for passing shareholder resolutions related to climate, as shareholders are not allowed to propose an advisory resolution unless it is permitted under the company's constitution. Consequently, it is often the case that ACCR's and Market Force's climate proposals are not put up for vote at AGMs.

This issue gained significant attention in the past, as part of the 2015 court case of Australasian Centre for Corporate Responsibility versus Commonwealth Bank of Australia. The case came to light due to the omission by the Commonwealth Bank of two ordinary proposals filed by ACCR. In the end, Commonwealth Bank won the case, which harmed the prospect of activism through advisory shareholder resolutions. However, shareholders will often submit a resolution to amend the constitution along with the advisory resolution they would like to pass. Robeco is supportive of proposals that facilitate the submission of shareholder resolutions, as we deem these to be an important means of engagement between companies and shareholders.

Voting Highlights

BHP Group Limited - 11/10/2022 - Australia

Proposal: Shareholder Proposal regarding Lobbying Activity Alignment with the Paris Agreement and Shareholder Proposal regarding Audited Climate Sensitivity Analysis

BHP Group Limited operates as a resources company in Australia, Europe, China, Japan, India, South Korea, the rest of Asia, North America, South America, and internationally. It operates through Petroleum, Copper, Iron Ore, and Coal segments.

Besides the routine agenda items, the 2022 Annual General Meeting (AGM) of BHP Group included two noteworthy environmental shareholder proposals filed by the Australian Centre for Corporate Responsibility (ACCR). The proponent of both proposals clearly intended for BHP Group to become a climate leader in terms of climate policy advocacy and climate accounting. However, both proposals triggered quite a debate about the level of commitment, and responsibility companies have toward society and investors when it comes to enabling an environmentally sustainable future.

With the shareholder proposal regarding lobbying activity alignment with the Paris Agreement, the ACCR requested the company and its shareholders to proactively advocate for Australian policy settings that are consistent with the Paris Agreement's objective of limiting global warming to 1.5 degrees. After careful consideration, Robeco decided not to support this proposal. While it sounded supportable in spirit, we ultimately believed the resolution to be too broad and ambiguous. Although we believe companies should provide shareholders with adequate disclosure to allow them to understand the nature of their advocacy and lobbying activities, the Supervisory Board and Management should retain the flexibility to assess each policy idea of the Australian government on its merits.

The other resolution filed by the ACCR requested the company and shareholders to include a climate sensitivity analysis in the company's audited financial statements starting from the 2023 financial year. After analyzing BHP Group's efforts and those of other major resource companies, we decided to support this shareholder proposal. Firstly, while BHP's disclosures are generally good, we believe the quantitative substantiation of scenario analysis can be further improved by third-party verification. Moreover, while we acknowledge auditors have limited ability in auditing the materiality of future-oriented sensitivity analysis, some companies already go beyond the disclosures in financial statements as BHP has them. We, therefore, believe BHP could further improve by reporting the assumed commodity prices and assessing the impact of assets under different climate scenarios. Finally, several accounting bodies like the IASB, FASB, and IAASB have stated that material climate change issues should be considered in the preparation and audit of financial statements.

In the end, neither of the proposals were adopted, where the shareholder resolutions on positive advocacy and climate accounting received 12.73% and 18.67% support respectively.

Oracle Corp. - 11/16/2022 - United States

Proposals: Advisory Vote on Executive Compensation and Director Elections.

Oracle offers products and services that address enterprise information technology environments worldwide.

Oracle's 2022 AGM occurred amidst continued scrutiny over the company's compensation practices. The company's Say on Pay proposal was voted down for several years in a row prior to 2017 and subsequently faced dissent levels of around 40%.

This year, we once again voted Against the Say on Pay proposal after concluding that there are significant concerns regarding the company's compensation program based on three main factors: the modification of the 2018 performance-based stock options (PSOs), pay and performance misalignment and the lack of a meaningful response to shareholder dissent.

In fiscal 2018, Oracle granted Chairman, CTO, founder, and near-controlling shareholder Lawrence Ellison as well as the CEO performance-based stock options (PSOs) to be earned upon the attainment of stock price, market capitalization, and operational performance goals. As none of the goals were achieved in fiscal 2020, 2019 or 2018, the company disclosed in its 2021 Proxy Statement that it had decided to extend the PSO performance period by three years after "taking into consideration stockholders' feedback." The modified fair value of the awards was disclosed in the 2022 Proxy Statement and stood at over USD 138 million for both executives. We consider that the company failed to provide a compelling rationale for modifying the PSO performance period, thereby casting a shadow on the predictability of the remuneration committee's decisions. In addition, we view the modified fair value of the awards as being excessive. We have significant concerns regarding the lack of a clawback policy for LTI awards and the absence of performance-based LTI awards for certain executives. Finally, we believe Oracle failed to respond adequately to the sustained high levels of shareholder dissent against the Say on Pay proposal.

In light of the above, we escalated our concerns by voting Against the re-election of all remuneration committee members at the 2022 AGM. The meeting saw between 27% and 30% of the votes cast Against their re-election, with the Say-on-Pay proposal again facing high dissent (ca. 33%).

Campbell Soup Co. - 11/30/2022 - United States

Proposal: Shareholder Proposals Regarding Supply Chain Analysis and Managing Climate Risk in Employee Retirement Options

Campbell Soup Company, together with its subsidiaries, manufactures and markets food and beverage products in the United States and internationally. The company operates through Meals & Beverages and Snacks segments.

In the company's 2022 Annual General Meeting (AGM), among the usual agenda items focusing on executive remuneration and board elections, there were two shareholder resolutions aiming at supply chain violations and managing climate risk in employee retirement options.

The company uses a risk-based approach to monitor compliance with its Responsible Sourcing Supplier Code, requiring third-party audits of high-risk suppliers and a corrective action plan for those suppliers who violate the code. The first-mentioned shareholder resolution requested the company to analyze the practices in its supply chain for any potential violations of its Responsible Sourcing Supplier Code, and disclose them within six months. Also, the shareholders requested the company to explain how each practice violates its requirements and how prevalent each practice is in its supply chain. We decided to support the proposal since additional disclosure would allow shareholders to understand better how the company brings alignment among its commitments/policies and practices and addresses material ESG risks.

The second shareholder resolution up for vote requested the company to report on how its 401(k) retirement funds manage systemic risks created by investing in

companies contributing to climate change. Though we agree with the spirit of the proposal, the company's retirement plan options fall outside the shareholders' remit; thus, we decided not to support this proposal. We believe that it should be up to employees' discretion regarding where their investments are directed, and shareholders of the company should not try to influence how these employees invest their retirement savings.

Cisco Systems, Inc. - 12/08/2022 - United States

Proposal: Shareholder Proposals Regarding Report on Tax Transparency and feedback on Executive Compensation

Cisco Systems, Inc. designs, manufactures and sells Internet Protocol-based networking and other products related to the communications and information technology industry in the Americas, Europe, the Middle East, Africa, the Asia Pacific, Japan, and China.

Prior to this year's Annual General Meeting (AGM), we had the opportunity to have a conference call with the company's representatives and members of the Investor Relations (IR) team. During the call, we discussed the company's latest proxy statement and the tax transparency shareholder resolution. Additionally, we provided feedback on structural improvements for the executive compensation scheme, like extending the performance period under the Long-term Incentive plan and disclosing more granularly how the ESG KPIs are linked to the overall strategy.

Cisco was among the three big US tech companies (Amazon and Microsoft) where we saw a tax transparency resolution being up to vote. The shareholder proposal requested the company to publish a tax transparency report in line with the Global Reporting Initiative's (GRI) Tax Standard. The tax transparency resolution fillings were coordinated by Pirc, Europe's largest independent corporate governance and shareholder advisory consultancy, and have been part of a larger campaign targeting 30 companies in sectors with a reputation for tax avoidance or with governments as customers.

On our call, the company's representatives recommended voting against the resolution because it would potentially harm their business regarding specific manufacturing plants in parts of the world where they want to keep details private on a country-by-country basis. Although the company provides some level of disclosure, we decided to support the proposal since regulatory trends and controversies regarding the company's taxes justify additional disclosure. The company still needs to disclose the voting outcome of the AGM.

Microsoft Corporation - 12/13/2022 - United States

Proposals: Shareholder Proposal Regarding Managing Climate Risk in Employee Retirement Options, Shareholder Proposal Regarding Report on Government Use of Technology, Shareholder Proposal Regarding Risks of Developing Military Weapons, and Shareholder Proposal Regarding Report on Tax Transparency.

Microsoft Corporation develops, licenses, and supports software, services, devices, and solutions worldwide. The company operates in three segments: Productivity and Business Processes, Intelligent Cloud, and More Personal Computing.

The company's 2022 AGM agenda included several proposals routinely encountered on US firm ballots and six management-opposed shareholder proposals. Below, we highlight four resolutions deemed to be of particular importance.

One of the shareholder proposals up for a vote requested that the board provide a report on how its 401(k) retirement funds manage the growing systemic risk to the economy created by investing retirement plan funds in companies contributing

significantly to climate change. While we deem the spirit of the proposal supportive, we consider that the company's retirement plan options fall outside the shareholders' remit. The resolution garnered low support (ca. 11%).

Two shareholder proposals on the meeting agenda addressed the same topic: the risks associated with certain Microsoft products and technologies. One proposal requested a report assessing "whether governmental customer use of Microsoft's technology, including defense contract use, does or can contribute to violations of privacy, civil and human rights, and conflicts with the policies and principles set forth in Microsoft's CSR Report and other public disclosures." The other resolution requested a report assessing "the reputational and financial risks to the company for being identified as a company involved in the development of weapons used by the military for training and/or combat purposes." We supported both resolutions as we consider that additional disclosure on this material topic would benefit shareholders. The first resolution was approved by ca. 20% of the votes cast, while the second received lower support (11%).

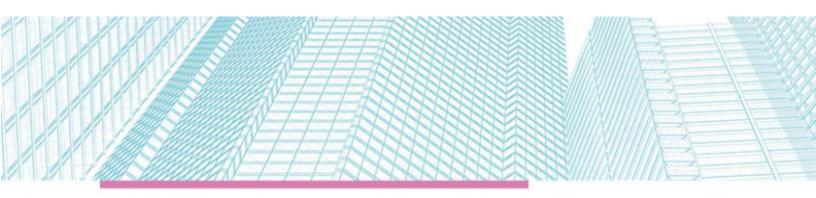
Finally, we highlight the shareholder proposal requesting that the board issue a tax transparency prepared in line with the Global Reporting Initiative's Tax Standard. We supported the resolution as we consider that the requested disclosure is essential for investors to adequately assess the company's risk profile. In light of recent regulatory developments - most notably, the EU "Public" country-by-country directive - we consider that it is in the company's best interest to prepare for the more stringent disclosure requirements and heightened expectations from regulators and investors. Around 23% of the votes were cast in favor of the proposal.

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Wales Pension Partnership Emerging Markets Fund





Proxy Voting Report Period: October 01, 2022 - December 31, 2022

| 766 | Number of meetings | 101 |
|-----|--------------------|------------------------------|
| | | |
| | | |
| 639 | With management | 620 |
| 46 | Against management | 146 |
| 3 | | |
| 78 | | |
| 0 | | |
| | | |
| 766 | Total | 766 |
| | 46 3 78 0 | Against management 3 78 0 |

In 35 (35%) out of 101 meetings we have cast one or more votes against management recommendation.

General Highlights

Anti-ESG shareholder proposals

Investors and issuers were faced with a transformed US AGM landscape in 2022. The growing national debate around sustainable investing prompted a dramatic increase in the number of shareholder proposals filed by conservative activists seeking to halt companies' ESG efforts and to combat "woke capitalism". These proposals, now widely referred to as "anti-ESG", entail new challenges for investors seeking to push US companies to step up their ESG efforts.

On the one hand, there are concerns that anti-ESG proponents may seek to take advantage of certain features of the US proxy machinery to block pro-ESG shareholder proposals from reaching ballots. The tactics that may be employed to achieve this are diverse, yet have a common denominator — they concern shareholder proposal excludability under US rules. A shareholder proposal becomes eligible for a vote if it reaches a company's proxy statement, but companies can exclude the proposal if it fails to meet certain procedural and substantive requirements.

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In addition, anti-ESG shareholder proposals are often verbatim copies of pro-ESG shareholder proposals; they tackle the same topics ranging from lobbying to racial equity, and often appear to be fueled by a desire to advance rather than hinder a company's ESG goals. Discerning the true objective of the proposal in many cases requires an in-depth analysis that spans well beyond the proxy materials made available by companies. This analysis covers aspects such as the proponent, the views expressed by the proponent, and any public statements made by the proponent regarding the shareholder proposal in question, thereby placing a burden on proxy analyses. Robeco assesses each shareholder proposal on a case-by-case basis and supports resolutions which aim to increase transparency on material ESG issues, enhance long-term shareholder value creation, address material ESG risks and enforce appropriate conduct.

Voting Highlights

Microsoft Corporation - 12/13/2022 - United States

Proposals: Shareholder Proposal Regarding Managing Climate Risk in Employee Retirement Options, Shareholder Proposal Regarding Report on Government Use of Technology, Shareholder Proposal Regarding Risks of Developing Military Weapons, and Shareholder Proposal Regarding Report on Tax Transparency.

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DELEGATED RESPONSIBILITIES

| | Delegation to Officer(s) | Delegated Officer(s) | Communication and Monitoring of Use of Delegation |
|--------|---------------------------------|--|---|
| 1.11.1 | Rebalancing and cash management | HCPF (having regard to ongoing advice of the IC and PAP) | High level monitoring at PFC with more detailed monitoring by PAP |

Rebalancing Asset Allocation

Background

The Investment Strategy Statement (ISS) includes a target allocation against which strategic performance is monitored (Strategic Allocation). There are strategic ranges for each asset category that allow for limited deviation away from the strategic allocation as a result of market movements. In addition there is a conditional medium term asset allocation range (Conditional range) to manage major risks to the long term strategic allocation which may emerge between reviews of the strategic allocation.

The Tactical Asset Allocation Group (Investment Consultant & Officers), which meets each month, considers whether it is appropriate to re-balance to the strategic asset allocation. Recommendations are made to the Head of the Clwyd Pension Fund who has delegated authority to make the decision. Re-balances or asset transitions may be required due to market movements, new cash into the Fund or approved changes to the strategic allocation following a strategic review.

Action Taken

As reported to the November Committee the following transitions were undertaken in the period October to December 2022.

October 2022 Redeem £125m BlackRock ESG Equity Fund

Invest £120m Insight Cash & Risk Management Framework

(Residual cash to Clwyd bank account)

November 2022 Redeem £90m Russell Emerging Market Equity Fund

Invest £90m Insight Cash & Risk Management Framework

Cash Management

Background

The Deputy Head of the Clwyd Pension Fund forecasts the Fund's 3 year cash flows in the Business Plan and this is monitored quarterly and revised on an annual basis. The bank account balance is monitored daily. The main payments are pension related, expenses and investment drawdowns. New monies come from employer and employee contributions and investment income or distributions. This cash flow management ensures the availability of funds to meet payments and investment drawdowns. The LGPS investment regulations only allow a very limited ability to borrow. There is no strategic asset allocation for cash, although there is a strategic range of +5% and a conditional range of +30% which could be used during times of major market stress.

Action Taken

The cash balance as at 31 December 2022 was £103.6m (£85.6m at 31st September 2022). Private Market distributions exceeded drawdowns by £13.4m during the quarter. The overall cash flow is monitored to ensure there is sufficient monies to pay benefits and capital calls for investments. Work is continuing with the Pappell 275nd Actuary to monitor the cash-flow

situation and be aware of any unforeseen issues. Monthly cash flows for the financial year 2022/23 are shown graphically at the end of the delegations appendix.

| | Delegation to Officer(s) | Delegated Officer(s) | Communication and Monitoring of Use of Delegation |
|------|---|--|---|
| 1.11 | .2 Short term tactical decisions relating to the 'best ideas' portfolio | HCPF (having regard to ongoing advice of the IC and PAP) | High level monitoring at PFC with more detailed monitoring by PAP |

Background

The Tactical Asset Allocation Group (Investment Consultant and Officers) meet each month to consider how to invest assets within the 'Best Ideas' portfolio given the shorter term market outlook (usually 12 months). The strategic asset allocation is 11% of the Fund. The investment performance target is CPI +3 %, although the aim is to also add value to the total pension fund investment performance.

Action Taken

Since the previous report to Committee in November 2022 the following transactions were agreed within the TAA (Best Ideas) Portfolio.

- Sell £22m LGIM Sterling Liquidity Fund
- Invest £22m BlackRock US Opportunities

The current allocations within the portfolio following the transactions are:

| • | US Equities | (1.5%) |
|---|----------------|--------|
| • | Commodities | (1.8%) |
| • | Infrastructure | (1.6%) |
| • | UK Equity | (0.6%) |
| • | Liquidity Fund | (5.5%) |

As at the end of December 2022, the Best Ideas portfolio 1 year performance was +3.2% against a target of +13.8% and the 3 year performance was +6.2% against a target of +8.6%.

The Best Ideas portfolio continues to add value to the Fund through its ability to make short-term tactical decisions. The portfolio has outperformed the wider Mercer DGF Universe 1 year and 3 year benchmark of -8.1% and +0.3%, respectively, and has added 1.7% of value at a total fund level for the year to December 2022.

| | Delegation to Officer(s) | Delegated Officer(s) | Communication and Monitoring of Use of Delegation |
|--------|---|---|---|
| 1.11.3 | Investment into new mandates / emerging opportunities | HCPF and either the CFM or CE (having regard to ongoing advice of the IC) | High level monitoring at PFC with more detailed monitoring by PAP |

Background

The Fund's current investment strategy includes a 27% asset allocation to private equity (8%), property (4%), infrastructure (including legacy timber and agriculture assets) (8%), private debt (3%) and impact / local investing (4%) These are higher risk investments, usually in limited partnerships, and as such, previously, these are smaller commitments in the range of £8m to £20m in each. Across these asset categories there are currently in excess of 65 investment managers, investing in 150+ limited partnerships of other vehicles.

The Private Equity & Real Estate Group (PERAG) of Officers and Consultants meet at least quarterly and are responsible for implementing and monitoring the investment strategy and limited partnerships across these asset classes. The investments in total are referred to as the 'In-House portfolio'. There is particular focus on Environmental, Social and Governance (ESG), sustainability and impact aspects on the investments made.

A review has been being undertaken of the existing portfolio and future cash flows by the Consultants and the results determined the forward work plan. It is anticipated that when the Wales Pension Partnership (WPP) are able to accommodate commitments in these alternative areas, the Fund will commit any available monies through the WPP. The Fund Consultants and WPP will work closely to ensure the available sub funds are suitable for the Funds existing Private Market strategy. Until these asset classes are available through the WPP, the Fund will continue to work with Mercer recommendations to deploy capital and look for any opportunities which fulfil the current agreed strategy.

Action Taken

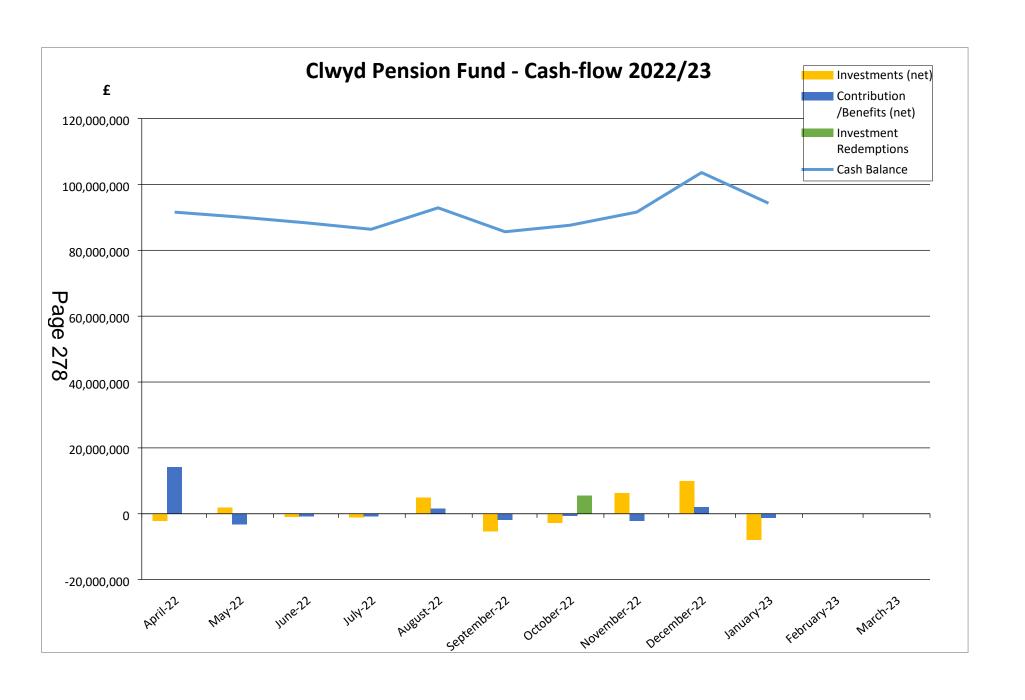
Due diligence continues to be completed by Mercer on several managers across several of the asset classes and recommendations made. Two further commitments have been agreed as detailed below and in 1.11 of the main report.

Property

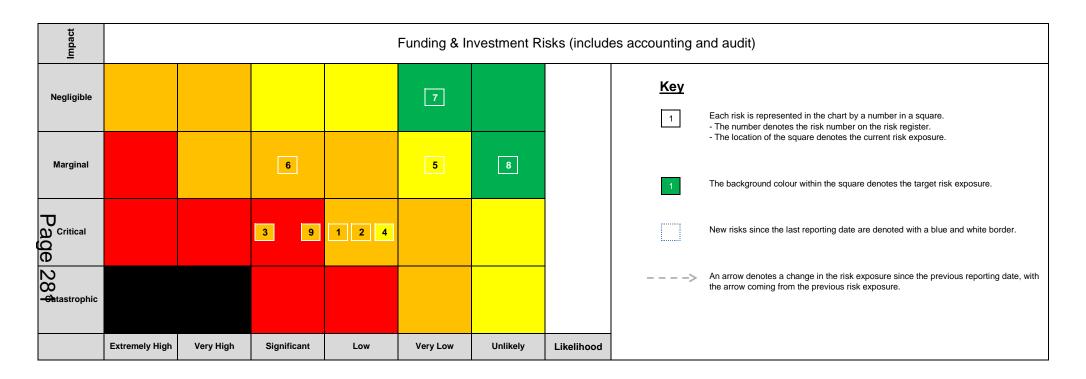
Newcore £15m

Infrastructure

Sandbrook I \$20m (£17m)







Clwyd Pension Fund - Control Risk Register

Funding & Investment Risks (includes accounting and audit)

Objectives extracted from Funding Strategy Statement (06/2021) and Investment Strategy Statement (03/2022):

- F1 Achieve and maintain assets equal to 100% of liabilities within the 13 year average timeframe whilst remaining within reasonable risk parameters
- F2 Determine employer contribution requirements, whilst recognising the constraints on affordability and strength of employer covenant, with the aim being to maintain as predictable an employer contribution requirement as possible
- F3 Recognising the constraints on affordability for employers, aim for sufficient excess investment returns relative to the growth of liabilities
 F4 Strike the appropriate balance between long-term consistent investment performance and the funding objectives
- F5 Manage employers' liabilities effectively through the adoption of employer specific funding objectives
- F6 Ensure net cash outgoings can be met as/when required
- F7 Minimise unrecoverable debt on employer termination.
- F8 Ensure that its future strategy, investment management actions, governance and reporting procedures take full account of longer-term risks and sustainability
- Promote acceptance of sustainability principles and work together with others to enhance the Fund's effectiveness in implementing these
- 12 Aim to use the Wales Pensions Partnership as the first choice for investing the Fund's assets subject to it being able to meet the requirements of the Partnership.

| Risk no: | Risk Overview (this will happen) | Risk Description (if this happens) | Strategic objectives at risk (see key) | Current impact (see kev) | Current likelihood (see key) | Current Risk Status | Internal controls in place | Target Impact (see kev) | Target Likelihood (see key) | Target Risk Status | М | leets target? | Date Not Met Target From | Expected Back on Target | Further Action and Owner | Risk Manager | Next review date | Last Updated |
|-------------|--|--|--|--------------------------------|------------------------------------|---------------------------|--|-------------------------------|-----------------------------------|--------------------------|---------------|--|-----------------------------|-------------------------------|--|---------------------|------------------|--------------|
| 1 | Employer contributions are unaffordable and/or unstable | An appropriate funding strategy can not be set | | Critical | Low | Clarab | 1 - Ensuring appropriately prudent assumptions on an ongoing basis 2 - All controls in relation to other risks apply to this risk 3 - Consider employer covenant and reasonable affordability of contributions for each employer as part of the valuation process and as part of the ongoing risk management framework. | Critical | Very Low | Cicioo | ⊕ c hi | urrent likelihood 1 too igh | 07/05/2020 | Mar 2023 | Discussions with Employers to assess affordability as part of Triennial Actuarial Valuation (DF) | Head of CPF | 28/04/2023 | 31/01/2023 |
| 2 | Funding level reduces, increasing deficit / reducing surplus | Movements in assets and/or liabilities (as described in 3,4,5) in combination, which leads to a reduction in funding level and increased contribution requirements in particular | F1/F2/F3/F4 /F5/F7 | Critical | Low | | See points within points 3,4 and 5 | Marginal | Low | | ⊕ ° | urrent impact 1 too high | 31/03/2016 | Mar 2023 | Equity Protection Strategy to be reviewed regularly (DF) In conjunction with Risks 3, 4 and 5 – overall return outlook will be considered as part of the investment strategy review (PL) See points within points 3, 4 and 5 | Head of CPF | 28/04/2023 | 31/01/2023 |
| 3 | Investment targets are not achieved therefore materially reducing solvency / increasing contributions | -Markets perform below actuarial assumptions - Fund managers and/or in-house investments don't meet their targets - Market opportunities are not identified and/or implemented Black swan event e.g. global pandemic such as Covid-19 - Wales Pension Partnership (WPP) does not provide CPF with portfolios to deliver the Investment Strategy - Internal team do not have sufficient knowledge in order to challenge the investment managers on the advice given or understand the implications of all investment choices issues on the fund | F1/F2/F3/F4 /F7 | Critical | Significant | | 1 - Use of a diversified portfolio (regularly monitored) 2 - Flightpath in place to exploit these opportunities in appropriate market conditions 3 - Monthly monitoring at Investment Day, FRMG and TAAG meetings 4 - Annual formal reviews of the continued appropriateness of the funding/investment strategies by the Pensions Advisory Panel and Committee 5 - On going monitoring of appointed managers (including in house investments) managed through regular updates and meetings with key personnel 6 - Officers regularly meet with Fund Managers, attend serminars and conferences to continually gain knowledge of Investment opportunities available 7 - Consideration and understanding of potential frest implications on inflation. 8 - Equity Protection and Currency Hedging Strategy in place to protect equity gains and potentially reduce votatility of contributions. 9 - Officers work closely with the WPP to ensure that CPF has the ability to pool its assets in an efficient and effective manner | Critical | Low | | c c | urrent likelihood 1 too gh | 02/08/2022 | Mar 2023 | Consider Inflation resilliency of the investment portfolio as part of the investment strategy review(DF) | Dep. Head of CPF | 28/04/2023 | 31/01/2023 |
| 4 | Value of liabilities increase due to market yields inflation moving out of line from Subarial assumptions | Market factors impact on inflation and interest rates | F1/F2/F4/F5 /F7 | Critical | Low | | 1 - LDI strategy in place to control/limit interest and inflation risks. 2 - Use of a diversified portfolio which is regularly monitored. 3 - Monthly monitoring of funding and hedge ratio position versus targets. 4 - Annual formal reviews of the continued appropriateness of the funding investment strategies by the Persions Advisory Panel and Committee. 5 - Consideration and understanding of potential Brexit implications. 6 - Consideration and understanding of potential Covid-19 implications. 7 - The level of hedging was increased over September as yield triggers were hit, the level of hedging continues to be monitored and reported. | Marginal | Very Low | | e c | urrent impact 1 too high urrent likelihood 1 too igh | 31/03/2016 | Mar 2023 | Consider as part of Triennial Actuarial Valuation (DF) | Dep. Head of CPF | 28/04/2023 | 31/01/2023 |
| 5 | Value of liabilities/contributions change due to demographics being out of line with assumptions | This may occur if employer matters (early retirements, pay increases, 50:50 take up), life expectancy and other demographic assumptions are out of line with assumptions | F1/F2/F5/F7 | Marginal | Very Low | | 1 - Regular monitoring of actual membership experience carried out by the Fund. 2 - Actuarial valuation assumptions based on evidential analysis and discussions with the Fund'employers. 3 - Ensure employers made aware of the financial consequences of their decisions 4 - In the case of early retirements, employers pay capital sums to fund the costs for non-ill health cases. | Marginal | Very Low | | © | | | | Consider as part of Triennial Actuarial Valuation (DF) | Dep. Head of CPF | 28/04/2023 | 31/01/2023 |
| 6 | Investment and/or funding objectives and/or strategies are no longer fit for purpose | Legislation changes such as LGPS regulations (e.g. asset pooling), 2022 consultation and other funding and investment related requirements - ultimately this could increase employer costs | F1/F2/F3/F4 /F5/F6/F7/I1 | Marginal | Significant | | 1 - Ensuring that Fund concerns are considered by the Pensions Advisory Panel and Committee as appropriate 2 - Employers and interested parties to be kept informed and impact monitored 3 - Monitor developments over time, working with investment managers, investment advisers, Actuary and other LOPS 4 - Participation in National consultations and lobbying 5 - Potential legislative agenda for ambitious net zero is an ongoing point of focus 6 - Continue with the monitoring of Link via the Host authority in terms of performance and ability to continue to provide polling services 7 - Fund policies updated to reflect lates flexibility Regulations on contribution rate reviews and deferred debt arrangements | Marginal | Low | | c c | urrent likelihood 1 too gh | 31/03/2016 | Mar 2023 | Ensure that the Host Authority is monitoring the WPP operator contract (PL) Respond to Government consultations on investments when released (DF) | Dep. Head of CPF | 28/04/2023 | 31/01/2023 |
| 7 | Insufficient cash or liquid assets to pay benefits | - Insufficient cash (due to failure in managing cash) or only illiquid assets available - longer term this will likely become a problem and would result in unanticipated investment costs Further risk presented with the introduction of exit credist for exiting employers in the 2018 Regulations update Private Markets distributions could dry up due to liquidity in markets. | F1/F6 | Negligible | Very Low | | 1 - Cashflow monitoring (including private markets) to ensure sufficient funds 2 - Ensuring all payments due are received on time including employer contributions (to avoid breaching Regulations) 3 - Holding sufficient liquid assets as part of agreed cashflow management policy 4 - Monitor cashflow requirements to ensure that they have enough liquid assets to pay the benefits when needed 5 - Cash management policy is documented to help monitor and manage cashflow issues 6 - Employers have been informed to notify Fund of any significant restructuring exercises. 7 - Employers have been informed to notify Fund of potential contract end dates (incl. changes) in sufficient time to reduce risk of large payments (i.e. through a contribution rate review in advance of the contract end | Negligible | Very Low | | © | | | | Ongoing monitoring of cashflow and collateral in the context of new valuation contributions (DF) | Dep. Head of CPF | 28/04/2023 | 31/01/2023 |
| 8 | Loss of employer income and/or other employers become liable for their deficits | Employer ceasing to exist with insufficient funding (bond or guarantee) | F5 / F7 | Marginal | Unlikely | | Consider profile of Fund employers and assess the strength their covenant and/or whether there is a quality guarantee in place. When setting terms of new admissions require a guarantee or bond. Formal consideration of this at each actuarist valuation plus proportionate monitoring of employer strength. 4 - Identify any deterioration and take action as appropriate through discussion with the employer. | Marginal | Unlikely | | © | | | | 1 - Update analysis as part of the Triennial Actuarial Valuation (DF) | Dep. Head of CPF | 28/04/2023 | 31/01/2023 |
| 9 | The Fund's Long term Investment Strategy fails to deliver on its ambition and objectives as a Responsible Investor. | Responsible Investment (including Climate Change) is not properly considered within the Fund's long-term Investment Strategy meaning it is not sustainable and does not address all areas of being a Responsible Investor 2. WPP does not provide CPF with the tools to enable implementation of RI policies | F1, F4, F8, I1, I2 | Critical | Significant | | Fund has in place Responsible Investment (RI) Strategy Refulcy has 5 Strategic RI Priorities WPP has RI policy in place Fund has adopted a 2045 Net Zero ambition for its Investment Strategy. | Critical | Low | | ⊕ c | urrent likelihood 1 too igh | 03/02/2020 | Mar 2023 | 1 - Implement Strategic RI Priorities (including TCFD), including ongoing analysis of the Fund's carbon Footprint. Identify sustainable investment opportunities and improve disclosure and reporting 2 - Work with WPP to ensure the Fund is able to Implement effectively via the Pool | Dep. Head of CPF | 28/04/2023 | 31/01/2023 |



CLWYD PENSION FUND COMMITTEE

| Date of Meeting | Wednesday, 15 February 2023 |
|-----------------|-----------------------------|
| Report Subject | Asset Pooling |
| Report Author | Head of Clwyd Pension Fund |

EXECUTIVE SUMMARY

The purpose of this report is to provide an update on the work undertaken by the Wales Pension Partnership (WPP) with pooling investments in Wales.

There was a WPP Joint Governance Committee (JGC) on 5 December 2022 and the draft minutes are appended for information which included the recommendation of the appointment for a Private Market Allocator for the Wales Pension Partnership.

The Head and Deputy Head of Clwyd Pension Fund continue to assist the Host Authority (Carmarthenshire County Council) and the WPP Oversight Adviser (Hymans Robertson) with their respective roles, as well as representing the interests of the Clwyd Pension Fund on the:

- Officer Working Group
- Risk sub-group
- Responsible Investment sub-group
- Private Markets sub-group
- Procurement sub-group.

RECOMMENDATIONS

1. That the Committee note and discuss the update and agree any comments or questions for WPP.

REPORT DETAILS 1.00 **Pooling Investment in Wales** 1.01 **Joint Governance Committee (JGC)** There was a WPP JGC on 5 December 2022. The draft minutes of that meeting are attached (Appendix 1). In summary the JGC considered or approved the following: An Update from the Host Authority. A risk register review which this quarter considered the training & resources risks, communication risks and investment risks. New Complaints Policy which provides guidance for the eight Constituent Authorities should they have a complaint about WPP. The annual review of the WPP Responsible Investment Policy following this review, the Policy has been updated to include a section on Human Rights, and within the section on Stewardship, extended to include voting on the pooled passive funds. An update from the Operator including the assets within the pool which are £14.8bn (including passive investments) as at September 2022. The JGC also received an update on the current organisation issues relating to Link Fund Solutions Ltd. An update on investment performance as at 30 September 2022. From a Clwyd Pension Fund point of view, this is for the Global Opportunities Equity Fund (invested since February 2019), Multi Asset Credit Fund (Invested since August 2020) and the Emerging Market Equity Fund (invested since October 2021). The Global Equities and Emerging Markets were ahead of benchmark at that date, but the Multi Asset Credit Fund remained behind their relevant benchmark during the quarter. Further information on the above is available in the full public agenda which

Further information on the above is available in the full public agenda which is available here: <u>Agenda for Wales Pension Partnership Joint Governance Committee on Monday, 5 December, 2022, 2.00 pm</u>

There were a further four items for which the public were excluded:

- The appointment of the Private Market Allocator for the WPP was approved.
- The Stock Lending Report was noted.
- The quarterly Engagement report was received from Robeco.

Responsible Investment and Climate Risk reports were received for the following sub funds:

- Absolute Return Bonds (ARB)
- Multi Asset Credit (MAC)

- UK Opportunities
- Emerging Market Equity.

1.02 Officer Working Group & Sub-Groups

The Deputy Head of Clwyd Pension Fund attends the Private Market subgroup and Responsible Investment (RI) sub-group. These are both complex areas and important for the Clwyd Pension Fund because 27% of our assets are in private markets and because of the ambitions within the Fund's Responsible Investment including the Climate Risk objectives. The Head of Clwyd Pension Fund attends the guarterly meetings of the Risk sub-group and all three groups report back to the Officer Working Group. The most recent sub-group to be established is for the procurement of an Operator when the current contract ends in December 2024.

An update was provided by WPP's Oversight Adviser and the Host Authority to the Officer Working Group on 7 February 2023 on the work of these groups and other matters. The main items for discussion in line with the WPP Business Plan were:

- Consideration of the proposed 2023 -2026 WPP Business Plan, including the training plan for 2023/24 (which will be brought to the Clwyd Pension Fund Committee in March).
- An update on the plans for the launch of the Sustainable Active equity sub fund which has been delayed until April 2023.
- An update on the progress of the Private Market Allocators, including the appointment of Schroders as Private Equity Allocator.
- An update on the Operator contract procurement.
- Reports from Link/Russell on investments and performance.
- Review of the governance matrix and certain items on the risk register.

There is nothing further to report in relation to the sale of Link Fund Solutions or the ongoing FCA investigation. As soon as formal notifications are received from the Host Authority, the Committee will be updated.

Further details will be provided in future updates when relevant matters are reported to the next JGC.

The WPP provides training for officers, JGC and constituent authority committee and board members. There was a training session on 5 December on Responsible Investment and Climate Risk and another is planned on Progress of other LGPS Pools and Collaboration Opportunities on 27 February 2023. Clwyd Pension Fund members are encouraged to attend.

1.03 **Private Markets Update**

Further to the appointment of Russell Investments as the Private Credit Allocator and GCM Grosvenor as Allocator for Infrastructure, the JGC on Page 285

5 December approved the recommended bidder for the Private Equity Allocator from the procurement exercise completed in July 2022. The contract was awarded on 20 December 2022 with Schroders being the successful bidder. Work is underway to complete the legal requirements by February/March 2023.

This should mean that all future commitments to those asset classes for 2023/24 can be actioned through the WPP.

In addition, work has started on the next phase to look at options available for allocations to Property as an asset class. There is an engagement day planned for officers and a selection of current managers in Cardiff on 10 March, which the Head and Deputy Head of Clwyd Pension Fund are attending.

1.04 | Responsible Investment Update

The RI sub-group met in December 2022 with the next meeting due on 14 February 2023. The main areas of discussion were:

- An All Wales Climate Report.
- Climate risk and ESG reports for the WPP Emerging Market Equity fund and the UK Opportunities Equity Sub Fund.
- A review of the 2023 workplan and cycle of future meetings.
- · Stock lending.
- LAPFF voting alerts.

Hymans Robertson as the Oversight Advisor to WPP had been asked to present a scoping document for an all-Wales climate report to the RI Sub-Group (RIWG). This was framed around WPP's climate 'journey', so providing an overview of where WPP is (and where it has come from) in terms of climate risk and opportunity. The report will serve a number of broader purposes:

- Help inform discussions around a common WPP climate goal and net-zero journey planning
- Provide each of the Constituent Authorities with a broad idea of their progress
- A precursor to upcoming Task Force on Climate-related Financial Disclosures (TCFD) reporting.

Reporting will use a baseline measurement date of 31 March 2019 (shortly following the launch of the first two pooled sub-funds) and use 31 March 2022 as the first comparison date to allow progress to be demonstrated over the period of operation of the WPP. Work is progressing on data gathering for this exercise.

1.05 | Operator Contract Procurement Update

With regard to the process for the operator procurement, regular meetings have been taking place between the Host Authority, Hymans Robertson as the Oversight Advisor to WPP, and Burges Salmon (Legal Advisor to WPP) to review and develop the required procurement documentation. Key dates

are indicated below:

- 17 January 2023, Prior Information Notice (PIN) was issued which set out the WPP purchasing intentions.
- 16 February 2023, first meeting of the Procurement sub-group.
- 17 February 2023, deadline for expressions of interest for a Market Engagement day.
- 9 March 2023, Market Engagement day to be held in Cardiff.
- May to July 2023, individual Constituent Authorities (CA) to approve evaluation and scoring criteria for final procurement documentation.

It is anticipated that the agreed Invitation to Tender (ITT) will be issued in Q3 2023/24 after which the final recommendation will require approval by the JGC and individual CA's March /April 2024.

The Head and Deputy Head of Clwyd Pension Fund will be involved throughout this process and are attending the engagement day on 9 March.

| 2.00 | RESOURCE IMPLICATIONS |
|------|---|
| 2.01 | There is considerable time allocated by the Head & Deputy of the Clwyd Pension Fund in delivering and monitoring the WPP Business Plan which is not recognised in the Clwyd Pension Fund budget, however it does result in greater reliance on external advisors on local matters than would otherwise be the case. |

| 3.00 | CONSULTATIONS REQUIRED / CARRIED OUT |
|------|--------------------------------------|
| 3.01 | None. |

| 4.00 | RISK MANAGEMENT |
|------|---|
| 4.01 | How the Wales Pension Partnership operates is key in enabling the Fund to implement its investment strategy. If performance is not in line with the assumptions in the Fund's strategy, it will impact on the cost of the scheme to employers at future Actuarial Valuations. In addition, further guidance on pooling is expected from Department for Levelling Up, Housing and Communities (DLUHC) shortly and the implications of that guidance are not yet known. |
| | The WPP risk register is included in the JGC agenda. The focus for the quarter to September was Training & Resource risk. All of those risks were on target. |
| | The current key WPP risk is the uncertainty on the change of ownership of Link Fund Solutions and the potential impact of the outcome of the Financial Conduct Authority (FCA) investigation. |

WPP investment and performance risks have also been updated and reported to the Officer Working Group and the JGC. The two risks currently behind target are:

- WPP sub funds fail to achieve long term investment targets, and
- WPP fail to adequately account for climate risk and other ESG factors.

In terms of the first risk there is currently only short term evidence to consider but several sub–funds are behind target at the time of review. The second risk identifies more work is required in considering the benefits of a more consistent approach across the constituent authorities in setting net zero targets.

The Head of Clwyd Pension Fund attends the WPP Risk sub group.

| 5.00 | APPENDICES |
|------|---|
| 5.01 | Appendix 1 – JGC 5 December 2022 draft minutes. |

| 6.00 | LIST OF ACCESSIBLE BACKGROUND DOCUMENTS | | |
|------|---|--|--|
| 6.01 | Earlier Committee reports on the progress of the WPP. | | |
| | Contact Officer: Telephone: E-mail: | Philip Latham, Head of Clwyd Pension Fund 01352 702264 Philip.Latham@flintshire.gov.uk | |

| 7.00 | GLOSSARY OF TERMS |
|------|---|
| 7.01 | (a) The Fund – Clwyd Pension Fund – The Pension Fund managed by Flintshire County Council for local authority employees in the region and employees of other employers with links to local government in the region |
| | (b) Administering authority or scheme manager – Flintshire County Council is the administering authority and scheme manager for the Clwyd Pension Fund, which means it is responsible for the management and stewardship of the Fund. |
| | (c) The Committee – Clwyd Pension Fund Committee – the Flintshire County Council committee responsible for the majority of decisions relating to the management of the Clwyd Pension Fund |
| | (d) LGPS – Local Government Pension Scheme – the national scheme, which Clwyd Pension Fund is part of |
| | (e) Inter-Authority Agreement (IAA) – the governance agreement between the eight Wales pension funds for purposes of pooling |

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- (f) Wales Pension Partnership (WPP) the name agreed by the eight Wales pension funds for the Wales Pool of investments
- (g) **The Operator** an entity regulated by the FCA, which provides both the infrastructure to enable the pooling of assets and fund management advice. For the Wales Pension Partnership, the appointed Operator is Link Fund Solutions Limited.
- (h) **Financial Reporting Council (FRC)** an independent regulator in the UK and Ireland, responsible for regulating auditors, accountants, and actuaries, and setting the UK's Corporate Governance and Steward.
- (i) **Financial Conduct Authority (FCA)** The Financial Conduct Authority (FCA) regulates the financial services industry in the UK. Its role includes protecting consumers, keeping the industry stable, and promoting healthy competition between financial service providers.
- (j) Department for Levelling Up, Housing and Communities (DLUHC)

 The Department for Levelling Up, Housing and Communities supports communities across the UK to thrive, making them great places to live and work.



WALES PENSION PARTNERSHIP JOINT GOVERNANCE COMMITTEE

Monday, 5 December 2022

PRESENT: Councillor C. Weaver (Chair)

Councillors:

- S. Churchman, T. Palmer, M. Lewis. P. Lewis, E. Williams, M, Ashford (s) and N. Yeowell
- O. Richards Scheme Member Representative (Co-opted non-voting member)

The following officers were in attendance:

- C. Moore Joint Committee Section 151 Officer (CCC)
- L. Rees-Jones Joint Committee Monitoring Officer (CCC)
- C. Lee Corporate Director of Resources (CoC)
- N. Aurelius Assistant Chief Executive Resources (TCC)
- J. Dong Deputy S151 Officer/ Chief Finance Officer (C&CS)
- D. Edwards Fund Director (GCC)
- J. Thomas Head of Financial Services (PCC)
- P. Latham Head of Clwyd Pension Fund (FCC)
- P. Griffiths Director Finance and Improvement (RCT)
- A. Parnell Treasury & Pensions Investment Manager (CCC)
- T. Williams Senior Financial Services Officer (CCC)
- J. Owens Democratic Services Officer (CCC) [Assisting]
- K. Evans Assistant Democratic Services Officer (CCC) [Note Taker]
- R. Morris Member Services Officer (CCC) [Assisting]
- S. Rees Simultaneous Translator (CCC)

Also in attendance to present reports:

- A. Johnston Hymans Robertson
- R. Barrack Hymans Robertson
- I. Colvin Hymans Robertson
- K. Midl Link Fund Solutions
- R. Thornton Link Fund Solutions
- J. Zealander Link Fund Solutions
- N. Round Northern Trust
- A. Knell Robeco
- A. Samson-Robeco
- I. Ali Russell Investments
- A. Quinn Russell Investments
- S.Gervaise-Jones Bfinance

Also present as observers:

- M. Falconer Pension Manager (CoC)
- C. Hurst Pension Fund Manager (PCC)
- D. Jones-Thomas Investment Manager (GCC)
- Y. Keitch Principal Accountant (RCT)
- G. Watkins Revenue Services Manager (CoC)



A. Bull – Pensions Investment Manager (TCC)

K. Cobb – Senior Accountant (C&CS)

Virtual Meeting - 2.10 - 4.29 pm

1. APOLOGIES FOR ABSENCE

Apologies for absence were received from Cllr Mark Norris (Rhondda Cynon Taf County Borough Council).

2. DECLARATIONS OF INTEREST

| Member | Agenda Item No. | Interest |
|----------------------|------------------|--|
| Cllr. M. Lewis | All agenda items | He is a member of Swansea Pension Fund along with his wife. |
| Cllr.S. Churchman | All agenda items | He is a member of the Gwynedd Pension Fund |
| Cllr. P. Lewis | All agenda items | He is a member of the Powys Pension Fund |
| Cllr. N. Yeowell | All agenda items | His father and two aunts are members of the Gwent Pension Fund and is in the process of joining the Gwent Pension Fund |
| Cllr. M. Ashford (s) | All agenda items | He is a member of the Gloucestershire and Swansea Pension Fund. |
| Cllr. T. Palmer | All agenda items | His partner and daughter are members of the Clwyd Pension Fund and is in the process of joining the Clwyd Pension Fund |
| Cllr. E. Williams | All agenda items | He is a member of the Dyfed Pension Fund |
| Cllr. C. Weaver | All agenda items | He is a member of the Cardiff & Vale Pension Fund |

[Note: There is an exemption within the Code of Conduct for Members, which allows a member who has been appointed or nominated by their Authority to a relevant body to declare that interest but remain and participate in the meeting.]

3. TO SIGN AS A CORRECT RECORD THE MINUTES OF THE MEETING OF THE JOINT COMMITTEE HELD ON THE 8TH JULY 2022

UNANIMOUSLY RESOLVED that the minutes of the Joint Governance Committee meeting held on 8th July, 2022 be signed as a correct record.

4. HOST AUTHORITY UPDATE



[NOTE: Councillors M. Lewis, C. Weaver, P. Lewis, N. Yeowell, S. Churchman, M. Ashford (s), T. Palmer and E. Williams had earlier declared an interest in this item.]

The Joint Committee received a progress update in relation to the following key areas:

- Governance;
- Ongoing establishment;
- Operator services;
- Communications and reporting;
- Training and meetings; and
- Resources, budget and fees.

UNANIMOUSLY RESOLVED that the Host Authority update be received.

RISK REGISTER Q3 & Q4 2022 REVIEW

[NOTE: Councillors M. Lewis, C. Weaver, P. Lewis, N. Yeowell, S. Churchman, M. Ashford (s), T. Palmer and E. Williams had earlier declared an interest in this item.]

The Joint Committee considered the Risk Register Q3 & Q4 2022 Review. The purpose of the WPP Risk Register is to:

- Outline the WPP's key risks and factors that may limit its ability to meet its objectives
- Quantify the severity and probability of the risk facing the WPP
- Summarise the WPP's risk management strategies
- Monitor the ongoing significance of these risks and the requirement for further risk mitigation strategies.

During Q3 2022, a review was undertaken of the Training & Resources and Communication Risks and during Q4 2022 the Investment Risks.

The next review will take place in Q1 2023 and will focus on risks G.1 to G.8 of the Governance & Regulation Risks section.

UNANIMOUSLY RESOLVED that the amendments to the WPP Risk Register, as detailed in the report, be approved.

6. NEW POLICIES / PLANS

[NOTE: Councillors M. Lewis, C. Weaver, P. Lewis, N. Yeowell, S. Churchman, M. Ashford (s), T. Palmer and E. Williams had earlier declared an interest in this item.]



The Joint Committee received a report on the new Complaints Policy. The Policy relates to the eight CA's of the WPP. It was noted that the IAA contains a section on the Alternative Dispute Resolution which sets out the process under which any dispute between the CA's in relation to matters covered by the IAA will be resolved.

UNANIMOUSLY RESOLVED that the Complaints Policy be approved.

7. ANNUAL POLICY REVIEWS

[NOTE: Councillors M. Lewis, C. Weaver, P. Lewis, N. Yeowell, S. Churchman, M. Ashford (s), T. Palmer and E. Williams had earlier declared an interest in this item.]

The Joint Committee received an updated report on the Responsible Investment Policy.

Following this year's review, the policy has been updated to include a section on Human Rights (section 5) and point no 8.2 under Stewardship has been extended to include the voting on the pooled passive funds.

It was noted that there was an amendment, to point 8.2, as highlighted, to the following sentence:

WPP has appointed a V&E Provider to undertake proxy voting on all shares held within WPP sub-funds, as well as the pooled passive funds **where possible**, and to undertake direct engagement with companies on behalf of WPP.

A query was raised regarding the wording, under the stock lending section point 8.8, as is unclear as to the actual percentage out on loan

It was agreed that the policy wording would be amended to reflect that the WPP will lend a maximum of 95% of the holding in any single stock.

UNANIMOUSLY RESOLVED that the Responsible Investment Policy, be approved, subject to the inclusion of the two amendments.

8. OPERATOR UPDATE

[NOTE: Councillors M. Lewis, C. Weaver, P. Lewis, N. Yeowell, S. Churchman, M. Ashford (s), T. Palmer and E. Williams had earlier declared an interest in this item.]

The Joint Committee received a presentation on the progress of the Wales Pension Partnership in relation to the following key areas:

- Current Fund Holdings
- Fund Launch Progress
- Corporate Update and Engagement



The report also provided an updated on the progress and milestones of the following Sub Funds:-

- Tranche 1 Global Equity
- Tranche 2 UK Equity
- Tranche 3 Fixed Income
- Tranche 4 Emerging Markets

Also, a Corporate and Engagement update including the engagement protocol and key meeting dates.

UNANIMOUSLY RESOLVED that the Operator Update be received

9. PERFORMANCE REPORTS AS AT 30 SEPTEMBER 2022

[NOTE: Councillors M. Lewis, C. Weaver, P. Lewis, N. Yeowell, S. Churchman, M. Ashford (s), T. Palmer and E. Williams had earlier declared an interest in this item.]

The Joint Committee received a presentation on the Performance Reports as at 30 September 2022. It was advised that the sub funds had outperformed/underperformed their respective benchmarks, as follows:

- Global Opportunities outperformed by 1.73% gross / 1.40% net
- Global Growth underperformed by 1.27% gross / 1.69% net
- Emerging Markets underperformed by 0.99% gross / 1.31% net
- UK Opportunities underperformed by 2.53% gross / 2.93% net
- Global Government Bond outperformed by 1.06% gross / 0.84% net
- Global Credit outperformed by 0.12% gross / underperformed by 0.03% Net

The MAC, ARB and UK credit have not met their targets.

UNANIMOUSLY RESOLVED that the Performance Reports of the following sub-funds, as at 30 September 2022, be noted:

- Global Opportunities Equity Fund
- Global Growth Equity Fund
- Emerging Markets Equity Fund
- UK Opportunities Equity Fund
- Global Government Bond Fund
- Global Credit Fund
- Multi Asset Credit Fund
- Absolute Return Bond Strategy Fund
- UK Credit Fund

10. EXCLUSION OF THE PUBLIC



UNANIMOUSLY RESOLVED, pursuant to the Local Government Act 1972, as amended by the Local Government (Access to Information) (Variation) (Wales) Order 2007, that the public be excluded from the meeting during consideration of the following items as the reports contained exempt information as defined in paragraph 14 of Part 4 of Schedule 12A to the Act.

11. GLOBAL SECURITIES LENDING REVIEW AS AT 30 SEPTEMBER 2022

Following the application of the public interest test it was UNANIMOUSLY RESOLVED, pursuant to the Act referred to in Minute 10 above, to consider this matter in private, with the public excluded from the meeting, as disclosure would adversely impact upon the Pension Fund by disadvantaging negotiations between the Investment Managers.

[NOTE: Councillors M. Lewis, C. Weaver, P. Lewis, N. Yeowell, S. Churchman, M. Ashford (s), T. Palmer and E. Williams had earlier declared an interest in this item.]

The Joint Committee considered the Global Securities Lending Review, as at 30th September, 2022.

UNANIMOUSLY RESOLVED that the Global Securities Lending Review as at 30th September, 2022 be noted.

12. ROBECO ENGAGEMENT SERVICE - Q3 2022 ENGAGEMENT REPORT

Following the application of the public interest test it was UNANIMOUSLY RESOLVED, pursuant to the Act referred to in Minute 10 above, to consider this matter in private, with the public excluded from the meeting, as disclosure would be likely to cause financial harm to the Pension Fund by prejudicing ongoing and future negotiations.

[NOTE: Councillors M. Lewis, C. Weaver, P. Lewis, N. Yeowell, S. Churchman, M. Ashford (s), T. Palmer and E. Williams had earlier declared an interest in this item.]

The Joint Committee considered the Engagement Report for Q3 2022, which ended on 30th September, 2022.

UNANIMOUSLY RESOLVED that the Engagement Report for Q3 of 2022 be noted.

13. WPP PRIVATE MARKET ALLOCATOR APPOINTMENTS

Following the application of the public interest test it was UNANIMOUSLY RESOLVED, pursuant to the Act referred to in Minute 10 above, to consider this matter in private, with the public excluded from the meeting, as disclosure would be likely to cause financial harm to the Pension Fund by prejudicing ongoing and future negotiations.



[NOTE: Councillors M. Lewis, C. Weaver, P. Lewis, N. Yeowell, S. Churchman, M. Ashford (s), T. Palmer and E. Williams had earlier declared an interest in this item.]

The Joint Committee considered a report to appoint a Private Market Allocator for the Wales Pension Partnership.

A two-stage competitive procedure with negotiation procurement process has been undertaken to appoint an Allocator for the Private Equity asset class.

UNANIMOUSLY RESOLVED that the Allocator Appointment, as detailed in the report, be approved

14. RESPONSIBLE INVESTMENT & CLIMATE RISK REPORT

Following the application of the public interest test it was UNANIMOUSLY RESOLVED, pursuant to the Act referred to in Minute 10 above, to consider this matter in private, with the public excluded from the meeting, as disclosure would be likely to cause financial harm to the Pension Fund by prejudicing ongoing and future negotiations.

[NOTE: Councillors M. Lewis, C. Weaver, P. Lewis, N. Yeowell, S. Churchman, M. Ashford (s), T. Palmer and E. Williams had earlier declared an interest in this item.]

The Joint Committee received a report on the Responsible Investment & Climate Risk Reports for the following sub funds:

- Absolute Return Bond (ARB) sub fund
- Multi Asset Credit (MAC) sub fund
- UK Opportunities sub fund
- Emerging Markets sub fund

UNANIMOUSLY RESOLVED that the Responsible Investment & Climate Risk Reports, as above, be noted.

| CHAIR | DATE |
|-------|------|







| CLWYD PENSION FUND COMMITTEE | | |
|---|--|--|
| Date of Meeting Wednesday, 15 February 2023 | | |
| Report Subject Economic and Market Update and Investment Strategy and Manager Summary | | |
| Report Author | | |

EXECUTIVE SUMMARY

The purpose of this report is to update the Committee on the Economy and Markets, and the Performance of the Fund's investments. The reports cover periods ending 31 December 2022, and are attached as appendices to this report.

Economy and Markets

- Inflation and central bank policy were again key market drivers. Developed market central banks continued tightening monetary policy throughout the quarter but the pace of tightening began to slow in the US, amid an encouraging downwards trend in inflation.
- Global equity markets returns were positive in October and November –
 sentiment being driven by a tentative slowdown in inflation and resilient
 economies. December saw equity markets give back some gains following
 the hawkish messaging from central banks. Overall, global equities returned
 7.5% in local currency terms (2.1% in sterling terms).
- In the UK, quarter-on-quarter GDP was -0.3% to the end of September 2022 (non-annualised) after increasing by 0.1% in the previous quarter.

Performance Monitoring Report

- Over the three months to 31 December 2022, the Fund's total market value decreased by £2.5m to £2,213.4m.
- Fund Performance over 3 months, 12 months, and 3 years; 0.0%, -10.6% and +3.9% p.a. respectively.
- Performance over the 12 month period was largely driven by sharp rises in gilt yields and negative performance across global equities.
- Fund Performance is ahead of the composite benchmark for the 3 year period, though behind in relation to the 3 and 12 month periods.
- Emerging markets equity and multi-asset credit positions are underweight to target allocations. The CRMF is overweight to its target (a result of the asset reorganisation in October 2022). All positions are within target ranges as at quarter end.

Performance of the Fund is reviewed monthly by the Fund's Officers and advisers.

| DEC | | | TI/ | JNIG |
|-----|--|-----|-----|------|
| REC | | NUA | ш | フNO |

That the performance of the Fund over periods to the end of December 2022 are noted along with the Economic and Market update which effectively sets the scene.

REPORT DETAILS

| 1.00 | INVESTMENT AND FUNDING RELATED MATTERS |
|------|---|
| 1.01 | Economic and Market Update |
| | The economic and market update for the quarter from the Fund's Investment Consultant is attached at Appendix 1. The report contains the following key sections: |
| | Economic and Market Background – an overview of markets in the quarter, including commentary on key economic indicators Equity Market Review – information on the performance of equity markets during the quarter and key drivers of markets Bond Market (Fixed Income) Review – provides an update on bond yield movements and interest rates for the period Currencies, Commodities and Alternatives Review – provides an update on the performance of Sterling against other currencies as well as highlighting movements in major commodity and alternatives asset classes for the period |
| 1.02 | Inflation and central bank policy continued to drive markets in the final quarter of 2022. Inflation in the US slowed for the fifth straight month in December, to the lowest level since the end of 2021. It also showed tentative signs of peaking in the UK and Eurozone albeit from more elevated levels. Central banks however have continued to tighten monetary policy and maintained a hawkish outlook, resulting in elevated market volatility. |
| | The 'Santa' rally in the first two months of the fourth quarter came to a premature end in December as investor optimism over receding inflation was displaced by continued hawkish messages by central banks and more signs of a weakening economy. |
| | There are clear signs that the US economy is slowing rapidly as tighter financial conditions are now taking effect. The UK and Eurozone are likely already in a recession. |
| | The Ukraine conflict remained in a stalemate, another Chinese company was blacklisted by the US and China responded with air drills around Taiwan after President Biden increased military aid to the island. |
| | The US dollar continued to give back some of its gains from earlier in the year, even as risk sentiment faded. Therefore, the US dollar weakened against sterling following hawkish rhetoric from both central banks. |
| | Sterling did however depreciate against the Euro and Yen over the quarter. |
| | A verbal update will be provided to Committee on market movements since the writing of this report. |

1.03 **Performance Monitoring report**

Over the 3 months to 31 December 2022, the Fund's total market value decreased by £2.5m to £2,213.4m.

The Total Fund has decreased in value by £271.2m in 12 months to 31 December 2022.

Total Fund value movement was largely driven by the rising gilt yields, impacting the CRMF portfolio as well as negative equity and credit returns.

- 1 04 It is appropriate to measure performance at a Total Fund level by comparing to a number of different targets:
 - The first of these is the assumed return that the Actuary includes within the triennial valuation - **Actuarial Target**. This is the most crucial target as actual performance needs to be ahead of this to ensure that the Fund maintains or improves. its funding level. This currently set at CPI (Consumer Price Index) +1.75% p.a. for past service liabilities and CPI + 2.25% for future service liabilities.
 - The second performance measure is the overall assessment of potential return when the Fund reviews and sets its investment strategy – **Strategic Target.** (This is currently CPI +3.4% p.a.)
 - The final target is the composite benchmark **Total Benchmark**. This is a composite of each of the individual manager benchmarks, weighted by strategic target allocation. For most investment managers the benchmark does not include an expectation of outperformance, with the exception of WPP Global Opportunities Equity Fund, WPP Emerging Market Equity Fund and Wellington Emerging Market Equities which have since been disinvested (October 2021) but contribute towards long term performance.

The performance against all benchmarks is shown on Page 8 of the report, and repeated below:

| Total | Quarter (%) | 1 Year (%) | 3 Years (%) |
|--|----------------|---------------|----------------|
| Total Scheme | 0.0 | -10.6 | +3.9 |
| Total Benchmark | +1.3 | -9.6 | +3.7 |
| Strategic Target (CPI +3.4% p.a.) | +3.6 | +14.3 | +9.0 |
| Actuarial Target – Past Service Liabilities (CPI +1.75% p.a.) | +3.2 | +12.4 | +7,3 |
| Actuarial Target – Future Service Liabilities (CPI +2.25% p.a.) | +3.3 | +13.0 | +7.8 |
| | | | |

1.05 The strongest absolute returns over the quarter came from WPP Global Opportunities Fund (+2.1%), WPP Multi-Asset Credit Fund (+4.0%) and the Tactical Allocation portfolio (+1.6%).

> WPP Emerging Markets Equity and Private Equity also generated positive returns over the quarter, returning +1.5% and +0.8%, respectively. Page 301

In the 12 months to 31 December 2022, the best returns came from Private Markets and the Tactical Allocation portfolio. Private Markets returning +15.2%, whilst the Tactical Allocation portfolio returned +3.5%. The Hedge Fund portfolio also generated positive returns over the period of +1.9%.

The liability hedging portfolio performed negatively over the quarter to 31 December 2022 as real yields rose, although this was partially offset by the fall in the value of the liabilities.

The performance of individual managers is shown in the report and is regularly reviewed by Officers and advisers. At this stage there are no concerns that need addressing, however all positions are being monitored closely.

1.06 All portfolio allocations held sit within the agreed strategic tolerance with the exception of property within Private Markets, which is marginally overweight, and Infrastructure, which is marginally underweight.

| 2.00 | RESOURCE IMPLICATIONS |
|------|---|
| 2.01 | None directly as a result of this report. |

| 3.00 | CONSULTATIONS REQUIRED / CARRIED OUT |
|------|---|
| 3.01 | None directly as a result of this report. |

| 4.00 | RISK MANAGEMENT |
|------|---|
| 4.01 | The Fund's investment strategy has been designed to provide an appropriate trade-off between risk and return. The Fund faces three key investment risks: Equity risk, Interest Rate Risk and Inflation Risk. |
| | Diversification of the Fund's growth assets away from equities seeks to reduce the amount of the equity risk (though it should be recognised that Equities remain an important long term source of expected growth). The implementation of the Fund's De-Risking Framework (Flightpath) has been designed to mitigate the Fund's Interest Rate and Inflation Risks. |
| 4.02 | This report addresses some of the risks identified in the Fund's Risk Register. Specifically, this covers the following (either in whole or in part): • Governance risk: G2 • Funding and Investment risks: F1 - F6 |
| 4.03 | The Flightpath Strategy manages/controls the interest rate and inflation rate impact on the liabilities of the Fund to give more stability of funding outcomes and employer contribution rates. The Equity option strategy will |

provide protection against market falls for the synthetic equity exposure via the Insight mandate only. The collateral waterfall framework is intended to increase the efficiency of the Fund's collateral, and generate additional yield in a low governance manner. Hedging the currency risk of the market value of the synthetic equity portfolio will protect the Fund against a strengthening pound.

| 5.00 | APPENDICES |
|------|---|
| 5.01 | Appendix 1 – Economic and Market Update – 31 December 2022 Appendix 2 – Performance Monitoring Report – 31 December 2022 |

| 6.00 | LIST OF ACCESS | IBLE BACKGROUND DOCUMENTS |
|------|--|---------------------------|
| 6.01 | Economic and Market Update and Performance Monitoring Report 31 December 2022. | |
| | Contact Officer: Philip Latham, Head of Clwyd Pension Fund 01352 702264 E-mail: Philip Latham, Head of Clwyd Pension Fund 01352 702264 philip.latham@flintshire.gov.uk | |

| 7.00 | GLOSSARY OF TERMS |
|------|--|
| 7.01 | A list of commonly used terms are as follows: |
| | (a) Absolute Return – The actual return, as opposed to the return relative to a benchmark. |
| | (b) Annualised – Figures expressed as applying to 1 year. |
| | (c) Duration – The weighted average time to payment of cash flows (in years), calculated by reference to the time and amount of each payment. It is a measure of the sensitivity of price/value to movements in yields. |
| | (d) Market Volatility – The impact of the assets producing returns different to those assumed within the actuarial valuation basis, excluding the yield change and inflation impact. |
| | (e) Money-Weighted Rate of Return – The rate of return on an investment including the amount and timing of cash flows. |
| | (f) Relative Return – The return on a fund compared to the return on index or benchmark. This is defined as: Return on Fund minus Return on Index or Benchmark. |
| | (g) Three-Year Return – The total return on the fund over a three year period expressed in percent per annum. |

- (h) **Time-Weighted Rate of Return –** The rate of return on an investment removing the effect of the amount and timing of cash flows.
- (i) **Yield (Gross Redemption Yield) –** The return expected from a bond if held to maturity. It is calculated by finding the rate of return that equates the current market price to the value of future cash flows.

A comprehensive list of investment terms can be found via the following link:

https://www.schroders.com/en/uk/adviser/tools/glossary/



Clwyd Pension Fund Economic and Market Update – Q4 2022

Monthly Capital Market Monitor

December 2022

Markets close out a disappointing year

December was a disappointing end to a bad year. Investors had few places to hide as traditional safe haven assets such as bonds fell in tandem with equities. The final month of the year saw negative returns for equities, commodities and slightly negative returns for bonds as fears that have driven negative investor sentiment for most of 2022 returned: no end in sight for monetary tightening and uncertainty over the duration and severity of the economic slowdown that started in 2022.

The year began with optimism. Most of the world got through the year without a major escalation of Covid restrictions, with the notable exception of China. A monetary tightening cycle was anticipated, but it was expected to be gradual because 'transitory' inflation was expected to recede due to improving supply chains. Alas, this goldilocks scenario did not play out. The beginning of a major conflict in Ukraine led to a commodity price shock, exacerbating demand-driven inflation from reopening economies. Inflation soon reached the highest levels in four decades. Central banks switched from being complacent to being proactive and initiated the fastest monetary tightening cycle in recent history. This led to a substantial economic slowdown, and asset valuations adjusted to the end of the low interest rate environment that had persisted since the GFC. China experienced a challenging year, keeping much of its economy locked down which depressed economic activity there until protests forced a UQrn late in the year. 2022 was therefore marred by fear and uncertainty over inflation, the monetary response, geopolitical escalation and what could be a looming recession.

What made 2022 different was high inflation forcing central banks to hike even as economic activity cooled rapidly. 10-year yields more than doubled over the year as a consequence and bonds delivered negative returns. The simultaneous declines in stocks and bonds led to negative returns of 5.7% for a 60% MSCI ACWI / 40% Bloomberg Aggregate portfolio. The best places to hide were commodities that delivered double digit positive returns, more defensive sectors such as consumer staples and alternative safe haven assets such as gold or hedge funds that delivered flat to slightly negative returns, outperforming a 60/40 portfolio by a wide margin.

2022 had silver linings as well. Labour market resilience and strong household balance sheets after a substantial tightening in monetary conditions and potentially peaking inflation raise the odds of a soft landing. Supply chains improved substantially, which eased inflationary pressures. The world, including China, has moved beyond Covid restrictions. Firms have found ways to alleviate the commodities shock and reshuffle supply chains. The return of higher rates has begun to clear some excesses from the system. Higher expected returns for most asset classes constitute an opportunity for investors. Uncertainty remains high but there are some reasons for optimism going into 2023¹.

At a Glance
Market Returns in % as of end of December 2022 in GBP

| Major Asset Class Returns | 1M | YTD | 1Y |
|---|------|-------|-------|
| MSCI ACWI | -4.9 | -8.1 | -8.1 |
| S&P 500 | -6.7 | -7.8 | -7.8 |
| FTSE All Share | -1.4 | 0.3 | 0.3 |
| MSCI World ex-UK | -5.3 | -8.0 | -8.0 |
| MSCI EM | -2.4 | -10.0 | -10.0 |
| Bloomberg Global Aggregate | -0.5 | -5.7 | -5.7 |
| ICE Bank of America Sterling Non-Gilt index | -1.7 | -17.8 | -17.8 |
| Bloomberg High Yield | -1.6 | -0.5 | -0.5 |
| FTSE WGBI | -1.2 | -8.0 | -8.0 |
| FTA UK Over 15 year gilts | -8.4 | -40.1 | -40.1 |
| FTA UK 5+ year ILG's | -6.0 | -38.0 | -38.0 |
| NAREIT Global REITs | -3.6 | -14.9 | -14.9 |
| Bloomberg Commodity TR | -3.4 | 30.7 | 30.7 |

Source: Refinitiv; as of 31/12/22

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Market drivers

Santa Rally ends prematurely amid central bank hawkishness, economic slowdown

- The 'Santa' rally in the first two months of the fourth quarter came to a premature end in December as investor optimism over receding inflation was displaced by continued hawkish messages by central banks and more signs of a weakening economy.
- The Global economy is clearly slowing. November retail sales fell on a month over month basis in spite of holiday shopping season. The forward looking composite purchasing manager indices (PMI) fell deeper into recessionary territory. The labour market remains tight but non farm job creation has fallen back to the lowest level in over a year and more high profile layoffs were announced. There are clear signs that the US economy is slowing rapidly as tighter financial conditions are now taking effect. The UK and Eurozone are likely already in a recession but PMIs recovered slightly over the month and for Japan, its PMI came out of contractionary territory. Chinese data remained weak, reflecting lockdowns in prior months, but the reopening moved forward at a fast pace.
- Inflation continued to be a silver lining. In the US it slowed for the fifth straight mom to the lowest level since the end of 2021. It also showed tentative signs of peaking in the UK and Eurozone albeit from more elevated levels. In Japan, inflation reached another record, although it is still much lower than in other developed countries. Meanwhile, inflation fell below 2% in China.
- Markets rallied when the US inflation figure came out and the Federal Reserve increased short dates rates by 50 rather than 75 basis points. However, to investors' disappointment, the Federal Reserve did not indicate an end to the hiking cycle but primed investors instead for a continuation through the spring of 2023 at least, although likely in smaller increments. The Bank of England and European Central Bank raised rates by 50 basis points as well and gave equally hawkish forward guidance. The Bank of Japan surprised investors when it widened the tolerance range for the 10-year yield, but there were different interpretations of what the exact rationale for this policy change was.
- Geopolitical events were not market moving this month. The Ukraine conflict remained in a stalemate, another Chinese company was blacklisted by the US and China responded with air drills around Taiwan after President Biden increased military aid to the island. Peru was in turmoil after its President was ousted when he tried to dissolve Congress to avoid an impeachment vote.

Consumer Price Index (Year-over-Year)



Source: Bloomberg; as of 31/12/22

105

104

103

102

101

100

99

98

97

96

95



Goldman Sachs US Financial Conditions Index

2 % Japan 0 -2

Month of Forecast Source: Bloomberg; as of 31/12/22

Jul-22 Oct-22

Apr-22

University of Michigan Consumer Sentiment Index



Source: Bloomberg; as of 31/12/22

Mar-22

Sep-21

Equities

Global equities finish 2022 close to bear market territory (USD terms) in the worst year for equities since 2008

- Positive momentum for global equities seen over the first two months of the fourth quarter of 2022 did not last into December which was exacerbated for unhedged sterling investors by a depreciating dollar. The MSCI ACWI, S&P 500 and FTSE All Share indices returned -4.9%, -6.7% and -1.4% respectively. For 2022 as a whole, equities had their worst year since 2008. Global equities in US dollar terms ended the year near bear market territory (defined as a decline of more than 20%), however, meaningful US dollar appreciation mitigated the shock for sterling investors with unhedged exposure to US equities.
- In December, negative market sentiment returned as investor focus pivoted from favorable inflation trends towards continued monetary tightening and the ongoing economic slowdown, which earnings estimates may not yet fully reflect. For 2022 as a whole, equities were driven down by the monetary policy response to the inflation shock as well as seismic geopolitical events that had the greatest market impact in the first half of 2022. Over the year, value experformed growth by a wide margin, while small-caps modestly underperformed large-caps.
- Value 2022 as a whole is expected to still show positive earnings growth for the S&P500, most of it was concentrated in the first half of the year with 2022Q4 likely showing negative earnings growth for the first time since late 2020¹.
- In December, equity markets held up better outside the US as the US dollar weakened against major currencies and growth stocks, which have greater representation in US equity indices, bore the brunt of this monetary policy driven sell-off. UK equities as measured by the unhedged FTSE 100 index therefore ended the month marginally negative when the S&P 500 had negative returns of almost -7%. For the year as a whole, unhedged international developed equities also outperformed the US despite the stronger dollar.
- Emerging markets had negative returns in December but outperformed US
 equities by a wide margin. Weakness in India, Brazil, Taiwan and Korea were
 offset by strength in China as investor sentiment improved amid the rapid
 reopening of its economy. For 2022 as a whole, emerging market equities
 declined around 10%, slightly worse than the S&P 500.
- Equity volatility increased slightly throughout the month but remained at the lowest levels for the year. 2022 saw four substantial volatility spikes when the VIX reached levels above 30, driven by geopolitical events, high inflation readings and more monetary tightening being priced in.

Global Equity Performance (GBP)



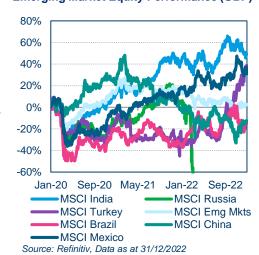
Source: Refinitiv, Data as at 31/12/2022

European Equity Performance (GBP)

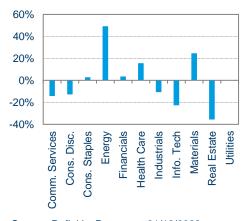


Source: Refinitiv, Data as at 31/12/2022

Emerging Market Equity Performance (GBP)



MSCI UK 2022 Sector Performance

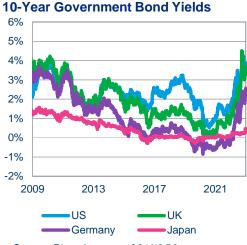


Source: Refinitiv. Data as at 31/12/2022

Fixed income

Bond returns negative for December with double digit losses for 2022

- Bond yields rose across major regions as fixed income investors positioned for continued monetary tightening following hawkish guidance from all major central banks over the month.
- Ten-year UK yields rose by roughly 50 basis points to almost 3.66%, while 30-year yields also rose by around 52 basis points to 3.94%. Yield movements were similar for Germany and were much more muted in the US where 10 year yields increased by 26 basis points. This was driven by persistent inflation, hawkish rhetoric from respective central banks and the fact that policy rates for both regions are still much lower than in the US. The Japanese 10-year yield increased by 16 basis points after the Bank of Japan's surprise announcement that it would increase the tolerance for its yield curve control program from 25 to 50 basis points. For 2022, yields across major regions soared, which led to a dismal year for fixed income assets except the shortest durations.
- Inflation expectations for the UK, as measured by the 10-year inflation breakeven rate, fell from 3.81% to 3.62%. In the UK, the inflation outlook beginning to look more favourable as energy prices have been falling. However, the UK is yet to witness a continued downturn in inflation prints in the US. The breakeven rate rose to almost 4.6% during the first half of 2022 when inflation trended upwards before stabilizing and beginning a downward trajectory as inflation began to recede later in the year.
- Rising rates and lower inflation expectations pushed up real yields for December, especially outside the US where nominal rates increased by more. For 2022 as a whole, real yields increased substantially, which explains poor returns for inflation linked bonds in a year where inflation was high.
- Credit spreads fell slightly, both for investment-grade and high yield.
 Credit returns were slightly negative in December. For 2022, credit suffered double digit losses, more so for investment grade than high yield due to the longer duration for the former.
- Emerging market hard currency debt was down slightly, while local currency debt rose 2.2% (USD). Over the fourth quarter of 2022, a weaker dollar helped emerging market debt pare back more substantial losses that were seen earlier in the year at the height of dollar strength. The improving outlook for China's property market and its economy as a whole towards the end of the year also added to positive momentum.



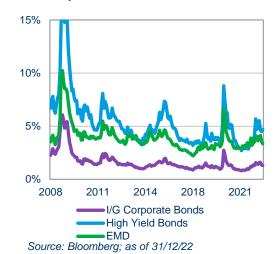
Source: Bloomberg; as of 31/12/22

1% O% Jan-20 Aug-20 Mar-21 Oct-21 May-22 Dec-22 US Germany Australia Japan

10-Year minus 2-Year Yield Spread

Source: Bloomberg; as of 31/12/22

Credit Spreads



10-Year Inflation Breakeven Rates



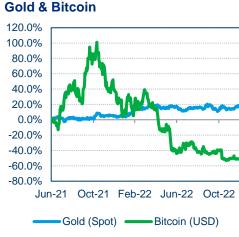


Currencies, commodities and alternatives

Recent weakness for dollar and commodities, but strong positive performance for 2022

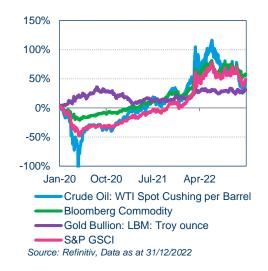
- The US dollar continued to give back some of its gains from earlier in the year even as risk sentiment faded. It weakened most substantially against Japanese yen following the surprise widening of the tolerance range for the 10-year yield by the Bank of Japan. US dollar also weakened against euro and sterling following hawkish rhetoric from both central banks. Emerging market currency performance was more mixed. Chinese renminbi strengthened against US dollar, the Indian rupee weakened and other emerging market currencies were flat to slightly weaker. 2022 saw sustained weakness in Sterling specifically versus the dollar which was phenomenally strong due to tighter monetary policy. Sterling was also weak versus the euro given the more favorable inflationary outlook on the continent.
- Bitcoin recovered slightly but remained volatile as newsflow on crypto assets remained negative. The crypto exchange FTX that collapsed in November is now being treated as a major fraud case. Its former CEO was extradited from the Bahamas to the US to face criminal charges. 2022 has seen the onset of another crypto winter. Bitcoin lost around 65% (USD Price) for the year.
- Sold strengthened for the second month in a row, rising by 2.7%. Higher nominal yields were offset by a weaker US dollar. Gold ended the year flat in USD terms and up 12.5% in sterling terms and 60/40 portfolios suffered mid-single digit losses in sterling terms.
- Commodity indices weakened over the month, with the more energy heavy Bloomberg Commodity index down by over 3%. Investors were concerned about falling demand amid a global slowdown, but there were hopes that China's reopening could mitigate weakness in western countries. For 2022 as a whole, commodities rose by double digit levels as inflation soared and geopolitical events led to expectations of shortages and commodity supply chain disruptions.
- Global REITs fell by 3.6% and were down almost 15% for 2022 as both equities and the US housing market weakened substantially.
- Hedge fund performance was mixed in December. The HFRX Equal Weighted Strategies Index posted marginal losses for the month, outperforming the -4.6% return for a 60% MSCI ACWI / 40% Bloomberg Aggregate portfolio. For 2022 as a whole, hedge funds returned 7.5% compared to -5.7% for 60/40 portfolios. Performance was strongest for macro hedge funds and CTAs and weakest for relative value strategies.

Currency Returns 30% 15% 0% -15% Jan-20 Aug-20 Mar-21 Oct-21 May-22 Dec-22 Dollar Index British Pound Japanese Yen Euro Chinese yuan JPM EM Currency Index Source: Bloomberg; as of 31/12/22



Source: Refinitiv, Bloomberg. Data as at

Commodities

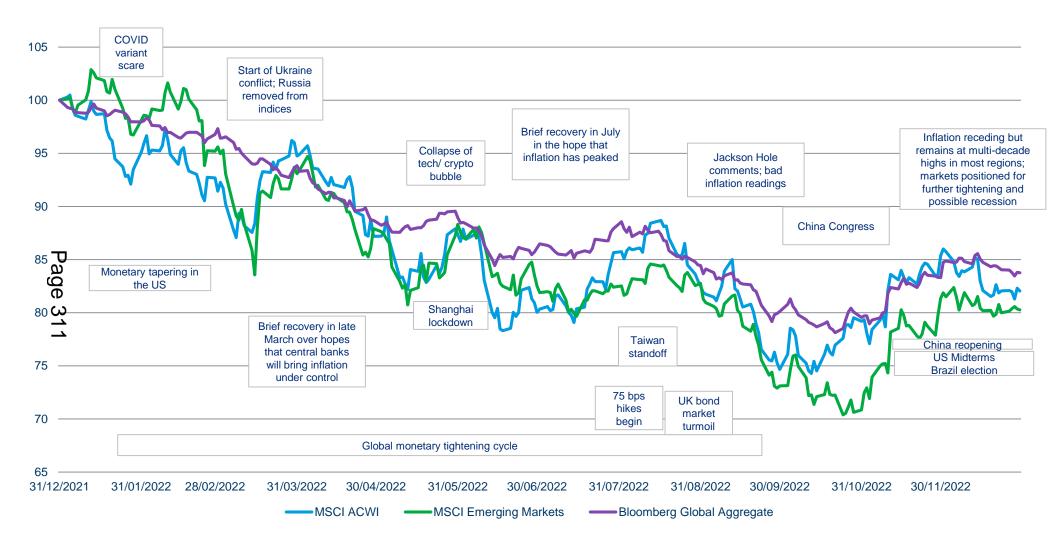


REITs, Hedge Funds, Infrastructure





2022 in Review (in US \$) Markets and major developments



Source: Refinitiv and Mercer Research: as of 31/12/22

All indices in USD. Total return indices for MSCI ACWI, S&P 500, MSCI EAFE, MSCI Emerging Markets and Bloomberg US Aggregate. Price returns for NASDAQ.

Note: For visual reasons, events might not exactly pinpoint to the day they actually happened. We do not imply a direct causal relationship between market movements and every single event.



Valuations and yields

Ending 31 December 2022

Valuations

| valuations | | | | |
|----------------------|------------|------------|------------|------------|
| FTSE ALL-Share | 31-12-2022 | 30-09-2022 | 30-06-2022 | 31-03-2022 |
| Index Level | 8391.9 | 7706.0 | 7981.3 | 8404.7 |
| P/E Ratio (Trailing) | 13.9 | 13.0 | 16.6 | 14.7 |
| CAPE Ratio | 18.2 | 16.4 | 18.5 | 19.9 |
| Dividend Yield | 3.7 | 4.0 | 4.1 | 3.5 |
| P/B | 1.5 | 1.5 | 1.7 | 1.8 |
| P/CF | 5.2 | 4.8 | 5.8 | 6.4 |
| NUSCI World ex-UK | 31-12-2022 | 30-09-2022 | 30-06-2022 | 31-03-2022 |
| dex Level | 7866.8 | 7187.2 | 7644.0 | 9147.4 |
| P/E Ratio (Trailing) | 16.9 | 15.6 | 16.6 | 20.5 |
| PE Ratio | 24.6 | 23.4 | 24.9 | 29.1 |
| Dividend Yield | 2.3 | 2.3 | 2.2 | 1.8 |
| P/B | 2.8 | 2.6 | 2.6 | 3.2 |
| P/CF | 11.3 | 9.8 | 11.0 | 14.1 |
| MSCI EM | 31-12-2022 | 30-09-2022 | 30-06-2022 | 31-03-2022 |
| Index Level | 486.1 | 443.1 | 501.1 | 565.8 |
| P/E Ratio (Trailing) | 12.2 | 11.5 | 12.5 | 14.0 |
| CAPE Ratio | 11.0 | 10.1 | 12.5 | 13.7 |
| Dividend Yield | 3.4 | 3.6 | 3.1 | 2.5 |
| P/B | 1.6 | 1.5 | 1.7 | 1.8 |
| P/CF | 8.2 | 6.7 | 8.5 | 8.3 |
| | | | | |

Yields

| Global Bonds | 31-12-2022 | 30-09-2022 | 30-06-2022 | 31-03-2022 |
|--|--|--|---|--|
| Germany – 10Y | 2.57 | 2.11 | 1.34 | 0.55 |
| France - 10Y | 3.12 | 2.72 | 1.92 | 0.98 |
| US - 10Y | 3.87 | 3.83 | 3.01 | 2.34 |
| Switzerland – 10Y | 1.62 | 1.23 | 1.07 | 0.60 |
| Italy – 10Y | 4.72 | 4.52 | 3.26 | 2.04 |
| Spain 10Y | 3.66 | 3.29 | 2.42 | 1.44 |
| Japan – 10Y | 0.42 | 0.24 | 0.23 | 0.22 |
| Euro Corporate | 4.32 | 4.24 | 3.29 | 1.55 |
| Euro High Yield | 8.32 | 9.01 | 7.81 | 5.18 |
| EMD (\$) | 8.55 | 9.57 | 8.56 | 6.42 |
| EMD (LCL) | 7.00 | 7.32 | 7.30 | 6.48 |
| | - 40 | 5 .00 | 4.70 | 2.00 |
| US Corporate | 5.42 | 5.69 | 4.70 | 3.60 |
| US Corporate US Corporate High Yield | 5.42 8.96 | 5.69 9.68 | 8.80 | 6.01 |
| • | | 9.68 | 8.80 | |
| US Corporate High Yield | 8.96 | 9.68 | 8.80 | 6.01 |
| US Corporate High Yield UK Bonds | 8.96 31-12-2022 | 9.68 30-09-2022 | 8.80 30-06-2022 | 6.01 31-03-2022 |
| US Corporate High Yield UK Bonds SONIA | 8.96 31-12-2022 3.43 | 9.68 30-09-2022 2.19 | 8.80 30-06-2022 1.19 | 6.01 31-03-2022 0.69 |
| US Corporate High Yield UK Bonds SONIA 10 year gilt yield | 8.96 31-12-2022 3.43 3.67 | 9.68 30-09-2022 2.19 4.10 | 8.80 30-06-2022 1.19 2.21 | 6.01 31-03-2022 0.69 1.59 |
| US Corporate High Yield UK Bonds SONIA 10 year gilt yield 30 year gilt yield 10 year index linked gilt | 8.96 31-12-2022 3.43 3.67 3.96 | 9.68 30-09-2022 2.19 4.10 3.83 | 8.80 30-06-2022 1.19 2.21 2.56 | 6.01 31-03-2022 0.69 1.59 1.75 |
| US Corporate High Yield UK Bonds SONIA 10 year gilt yield 30 year gilt yield 10 year index linked gilt yield 30 year index linked gilt | 8.96 31-12-2022 3.43 3.67 3.96 0.06 | 9.68 30-09-2022 2.19 4.10 3.83 0.07 | 8.80 30-06-2022 1.19 2.21 2.56 -1.40 | 6.01 31-03-2022 0.69 1.59 1.75 -2.74 |
| US Corporate High Yield UK Bonds SONIA 10 year gilt yield 30 year gilt yield 10 year index linked gilt yield 30 year index linked gilt yield | 8.96 31-12-2022 3.43 3.67 3.96 0.06 0.55 | 9.68 30-09-2022 2.19 4.10 3.83 0.07 0.07 | 8.80 30-06-2022 1.19 2.21 2.56 -1.40 -0.68 | 6.01 31-03-2022 0.69 1.59 1.75 -2.74 -1.92 |
| US Corporate High Yield UK Bonds SONIA 10 year gilt yield 30 year gilt yield 10 year index linked gilt yield 30 year index linked gilt yield AA corporate bond yield | 8.96 31-12-2022 3.43 3.67 3.96 0.06 0.55 4.79 | 9.68 30-09-2022 2.19 4.10 3.83 0.07 0.07 5.62 | 8.80 30-06-2022 1.19 2.21 2.56 -1.40 -0.68 3.40 | 6.01 31-03-2022 0.69 1.59 1.75 -2.74 -1.92 2.38 |

Source: Bloomberg, Refinitiv

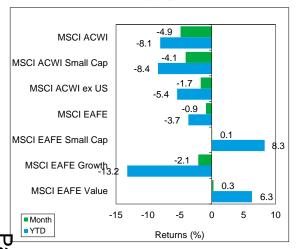
Source: Bloomberg, Refinitiv



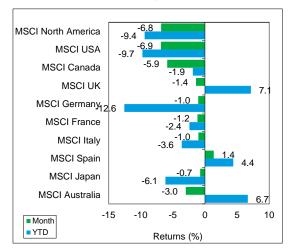
Performance Summary (GBP)

International Equity ending 31 December 2022

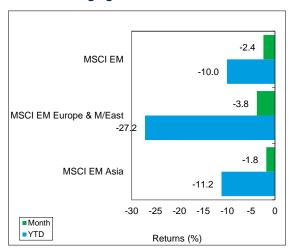
International Equity Performance



Developed Country Performance



Emerging Market Performance



| (0 | | | | | | | | | | | | | | | |
|---------------------|-------|-------|--------|--------|---------|---------|---------|---------|----------|----------|-------|-------|------|-------|------|
| Ingex Returns | 1 Mth | 3 Mth | YTD | 1 Year | 2 Years | 3 Years | 5 Years | 7 Years | 10 Years | 20 Years | 2021 | 2020 | 2019 | 2018 | 2017 |
| MŞCI ACWI | -4.9 | 1.9 | -8.1 | -8.1 | 4.9 | 7.4 | 7.7 | 11.3 | 11.3 | 9.6 | 19.6 | 12.7 | 21.7 | -3.8 | 13.2 |
| MSCI ACWI IMI | -4.8 | 2.0 | -7.7 | -7.7 | 5.2 | 7.8 | 8.0 | 11.7 | 11.8 | 10.4 | 19.8 | 13.2 | 22.1 | -4.0 | 13.8 |
| MSCI ACWI Small Cap | -4.1 | 2.5 | -8.4 | -8.4 | 3.6 | 6.5 | 5.7 | 10.3 | 11.0 | 11.5 | 17.2 | 12.7 | 19.8 | -9.1 | 13.1 |
| MSCI ACWI ex US | -1.7 | 6.1 | -5.4 | -5.4 | 1.4 | 3.3 | 3.3 | 7.9 | 7.0 | 8.3 | 8.8 | 7.2 | 16.8 | -8.9 | 16.2 |
| MSCI EAFE | -0.9 | 8.9 | -3.7 | -3.7 | 4.0 | 4.2 | 4.0 | 7.6 | 7.9 | 8.0 | 12.3 | 4.5 | 17.3 | -8.4 | 14.2 |
| MSCI EAFE Growth | -2.1 | 6.8 | -13.2 | -13.2 | -1.3 | 3.8 | 4.9 | 8.2 | 8.8 | 8.2 | 12.3 | 14.6 | 23.0 | -7.4 | 17.7 |
| MSCI EAFE Value | 0.3 | 11.0 | 6.3 | 6.3 | 9.1 | 3.9 | 2.6 | 6.7 | 6.7 | 7.6 | 11.9 | -5.6 | 11.6 | -9.5 | 10.9 |
| EM | -2.4 | 1.8 | -10.0 | -10.0 | -5.9 | 0.5 | 0.9 | 8.3 | 4.5 | 10.3 | -1.6 | 14.7 | 13.8 | -9.3 | 25.4 |
| North America | -6.8 | -0.7 | -9.4 | -9.4 | 7.5 | 10.4 | 11.1 | 13.9 | 14.7 | 10.7 | 27.6 | 16.2 | 25.7 | 0.1 | 10.4 |
| Europe | -1.0 | 10.8 | -4.4 | -4.4 | 6.0 | 4.7 | 4.3 | 7.7 | 7.8 | 8.0 | 17.4 | 2.1 | 19.0 | -9.6 | 14.6 |
| EM Europe & M/East | -3.8 | -6.0 | -27.2 | -27.2 | -4.6 | -6.6 | -1.8 | 5.0 | -1.1 | 6.3 | 25.1 | -10.4 | 14.6 | -2.2 | 5.8 |
| EM Asia | -1.8 | 2.9 | -11.2 | -11.2 | -7.8 | 1.9 | 1.7 | 8.8 | 6.7 | 10.6 | -4.2 | 24.4 | 14.6 | -10.2 | 30.5 |
| Latin America | -5.0 | -1.9 | 22.6 | 22.6 | 6.7 | -1.7 | 1.3 | 9.5 | 0.8 | 11.2 | -7.2 | -16.5 | 12.9 | -0.8 | 13.0 |
| USA | -6.9 | -0.7 | -9.7 | -9.7 | 7.3 | 10.5 | 11.3 | 14.0 | 15.2 | 10.8 | 27.6 | 17.0 | 25.8 | 0.9 | 10.7 |
| Canada | -5.9 | -0.3 | -1.9 | -1.9 | 11.7 | 8.4 | 6.5 | 11.6 | 6.8 | 10.2 | 27.1 | 2.1 | 22.6 | -12.1 | 6.0 |
| Australia | -3.0 | 7.3 | 6.7 | 6.7 | 8.5 | 7.5 | 6.5 | 10.4 | 7.2 | 11.0 | 10.4 | 5.4 | 18.2 | -6.5 | 9.6 |
| UK | -1.4 | 8.6 | 7.1 | 7.1 | 13.2 | 3.6 | 3.4 | 6.7 | 6.2 | 7.1 | 19.6 | -13.2 | 16.4 | -8.8 | 11.7 |
| Germany | -1.0 | 15.6 | -12.6 | -12.6 | -3.6 | 0.2 | -0.7 | 4.7 | 5.8 | 8.7 | 6.3 | 8.1 | 16.1 | -17.3 | 16.6 |
| France | -1.2 | 13.4 | -2.4 | -2.4 | 8.5 | 5.9 | 5.9 | 10.1 | 9.4 | 8.3 | 20.6 | 0.9 | 20.9 | -7.3 | 17.6 |
| Italy | -1.0 | 17.3 | -3.6 | -3.6 | 5.8 | 3.3 | 3.4 | 5.8 | 6.2 | 4.0 | 16.1 | -1.3 | 22.4 | -12.6 | 17.3 |
| Spain | 1.4 | 14.1 | 4.4 | 4.4 | 3.4 | -0.5 | -1.1 | 3.8 | 4.2 | 6.5 | 2.3 | -7.7 | 7.7 | -11.0 | 16.0 |
| Japan | -0.7 | 5.1 | -6.1 | -6.1 | -1.8 | 2.2 | 2.6 | 6.7 | 8.8 | 6.8 | 2.6 | 10.9 | 15.0 | -7.5 | 13.3 |
| Brazil | -3.9 | -5.0 | 28.5 | 28.5 | 3.5 | -5.6 | 1.5 | 13.5 | 1.2 | 12.8 | -16.6 | -21.5 | 21.4 | 5.7 | 13.4 |
| China | 4.2 | 5.3 | -12.1 | -12.1 | -16.7 | -4.5 | -2.3 | 6.1 | 5.6 | 12.1 | -21.0 | 25.5 | 18.7 | -13.8 | 40.7 |
| India | -6.4 | -5.4 | 3.6 | 3.6 | 14.9 | 13.9 | 8.5 | 12.2 | 10.7 | 14.3 | 27.4 | 12.0 | 3.4 | -1.5 | 26.7 |
| Russia | 0.0 | 0.0 | -100.0 | -100.0 | -99.9 | -98.9 | -92.6 | -83.0 | -72.5 | -44.1 | 20.1 | -15.2 | 45.1 | 5.8 | -3.9 |

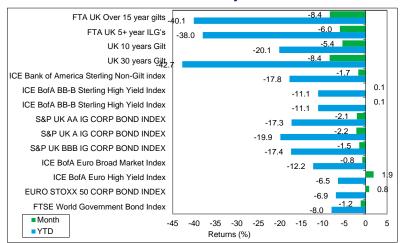


Source: Bloomberg, Refinitiv

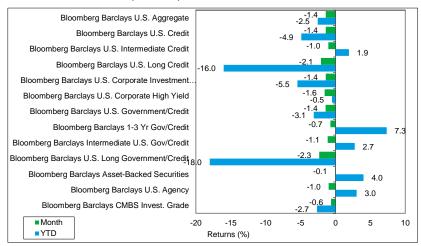
Performance Summary (GBP)

Fixed Income ending 31 December 2022

Bond Performance by Duration



Sector, Credit, and Global Bond Performance

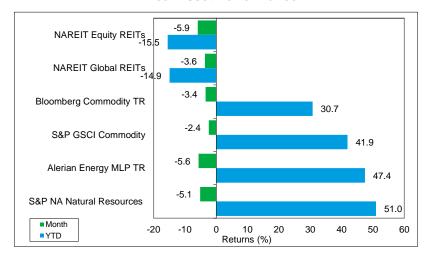


| Index Returns | 1 Mth | 3 Mth | YTD | 1 Year | 2 Years | 3 Years | 5 Years | 7 Years | 10 Years 20 | Years | 2021 | 2020 | 2019 | 2018 | 2017 |
|--|-------|-------|-------|--------|---------|---------|---------|---------|-------------|-------|------|------|------|------|------|
| FTA UK Over 15 year gilts | -8.4 | -1.8 | -40.1 | -40.1 | -25.5 | -14.1 | -6.6 | -2.0 | 0.3 | 3.5 | -7.3 | 13.9 | 12.0 | 0.3 | 3.3 |
| TA UK 5+ year ILG's | -6.0 | -7.5 | -38.0 | -38.0 | -19.6 | -10.1 | -5.0 | 0.1 | 2.0 | 4.8 | 4.2 | 12.4 | 6.8 | -0.4 | 2.5 |
| UK 10 years Gilt | -5.4 | 2.3 | -20.1 | -20.1 | -13.2 | -7.0 | -2.9 | -0.5 | 0.6 | 3.6 | -5.7 | 6.6 | 5.2 | 2.0 | 2.7 |
| UK 30 years Gilt | -8.4 | -1.4 | -42.7 | -42.7 | -26.8 | -15.2 | -7.3 | -2.6 | 0.1 | 3.3 | -6.4 | 13.8 | 11.7 | 0.4 | 3.1 |
| ICE Bank of America Sterling Non-Gilt index | -1.7 | 6.2 | -17.8 | -17.8 | -10.7 | -4.9 | -1.5 | 1.0 | 2.0 | 4.0 | -3.0 | 8.0 | 9.5 | -1.6 | 4.3 |
| ICE BofA BB-B Sterling High Yield Index | 0.1 | 6.5 | -11.1 | -11.1 | -4.3 | -1.0 | 1.7 | 3.9 | 5.0 | 10.1 | 3.0 | 6.1 | 13.8 | -1.4 | 8.2 |
| S&P UK AA IG CORP BOND INDEX | -2.1 | 4.9 | -17.3 | -17.3 | -11.2 | -5.3 | -1.9 | 8.0 | 1.5 | 3.8 | -4.8 | 7.7 | 7.3 | -0.3 | 3.2 |
| S&P UK A IG CORP BOND INDEX | -2.2 | 5.7 | -19.9 | -19.9 | -12.2 | -5.8 | -1.9 | 8.0 | 1.9 | 3.9 | -3.9 | 8.4 | 10.4 | -1.5 | 3.6 |
| S&P UK BBB IG CORP BOND INDEX | -1.5 | 6.9 | -17.4 | -17.4 | -10.2 | -4.3 | -0.9 | 1.6 | 2.5 | 5.0 | -2.4 | 8.7 | 11.6 | -2.6 | 5.5 |
| ICE BofA Euro Broad Market Index | -0.8 | 0.3 | -12.2 | -12.2 | -10.5 | -4.2 | -2.2 | 1.6 | 1.6 | 4.3 | -8.8 | 9.9 | 0.1 | 1.6 | 4.7 |
| ICE BofA Euro High Yield Index | 1.9 | 5.8 | -6.5 | -6.5 | -4.8 | -0.5 | 0.2 | 5.1 | 4.2 | 8.6 | -3.1 | 8.6 | 5.1 | -2.5 | 11.0 |
| EURO STOXX 50 CORP BOND INDEX | 8.0 | 2.0 | -6.9 | -6.9 | -7.1 | -2.2 | -1.5 | 2.3 | 1.7 | | -7.2 | 8.5 | -0.9 | 0.1 | 5.5 |
| FTSE World Government Bond Index | -1.2 | -3.7 | -8.0 | -8.0 | -7.0 | -2.7 | -0.2 | 2.3 | 1.8 | 3.8 | -6.1 | 6.7 | 1.8 | 5.3 | -1.8 |
| Bloomberg Barclays U.S. Aggregate | -1.4 | -5.1 | -2.5 | -2.5 | -1.6 | 0.3 | 2.3 | 3.6 | 3.9 | 4.4 | -0.7 | 4.3 | 4.6 | 5.8 | -4.9 |
| Bloomberg Barclays U.S. Credit | -1.4 | -3.7 | -4.9 | -4.9 | -2.6 | 0.2 | 2.7 | 4.8 | 4.7 | 5.3 | -0.2 | 6.0 | 9.4 | 3.7 | -2.7 |
| Bloomberg Barclays U.S. Intermediate Credit | -1.0 | -4.6 | 1.9 | 1.9 | 0.9 | 1.9 | 3.4 | 4.6 | 4.7 | 5.0 | -0.1 | 3.8 | 5.4 | 5.9 | -4.9 |
| Bloomberg Barclays U.S. Long Credit | -2.1 | -2.1 | -16.0 | -16.0 | -8.5 | -2.8 | 1.5 | 5.4 | 5.1 | 6.5 | -0.3 | 9.8 | 18.6 | -1.1 | 2.7 |
| Bloomberg Barclays U.S. Corporate Investment Grade | -1.4 | -3.6 | -5.5 | -5.5 | -2.8 | 0.2 | 2.7 | 4.9 | 4.9 | 5.4 | -0.2 | 6.5 | 10.2 | 3.3 | -2.5 |
| Bloomberg Barclays U.S. Corporate High Yield | -1.6 | -3.0 | -0.5 | -0.5 | 2.8 | 3.1 | 4.6 | 7.8 | 6.9 | 8.3 | 6.1 | 3.9 | 10.0 | 3.6 | -1.3 |
| Bloomberg Barclays U.S. Government/Credit | -1.4 | -5.2 | -3.1 | -3.1 | -2.0 | 0.5 | 2.5 | 3.9 | 4.0 | 4.5 | -0.9 | 5.6 | 5.6 | 5.4 | -4.6 |
| Bloomberg Barclays 1-3 Yr Gov/Credit | -0.7 | -5.8 | 7.3 | 7.3 | 3.8 | 2.6 | 3.1 | 3.6 | 3.6 | 3.2 | 0.4 | 0.4 | 0.3 | 7.2 | -7.1 |
| Bloomberg Barclays Intermediate U.S. Gov/Credit | -1.1 | -5.4 | 2.7 | 2.7 | 1.1 | 1.8 | 3.0 | 3.9 | 4.0 | 4.2 | -0.6 | 3.2 | 2.8 | 6.7 | -6.2 |
| Bloomberg Barclays U.S. Long Government/Credit | -2.3 | -4.6 | -18.0 | -18.0 | -10.2 | -3.2 | 1.1 | 4.4 | 4.5 | 6.1 | -1.6 | 12.5 | 15.0 | 1.1 | 1.4 |
| Bloomberg Barclays CMBS Invest. Grade | -0.6 | -4.0 | -2.7 | -2.7 | -1.6 | 0.6 | 2.3 | 3.2 | 3.3 | 3.9 | -0.4 | 5.2 | 4.9 | 4.7 | -2.7 |
| Bloomberg Barclays U.S. Mortgage Backed Securities | -1.4 | -4.8 | -1.2 | -1.2 | -0.7 | -0.2 | 1.7 | 3.0 | 3.6 | 4.2 | -0.2 | 0.8 | 2.4 | 6.9 | -5.9 |
| Bloomberg Barclays Municipal Bond | -0.6 | -2.8 | 2.0 | 2.0 | 2.2 | 2.2 | 3.4 | 4.3 | 4.8 | 4.7 | 2.3 | 2.2 | 3.6 | 6.8 | -2.8 |

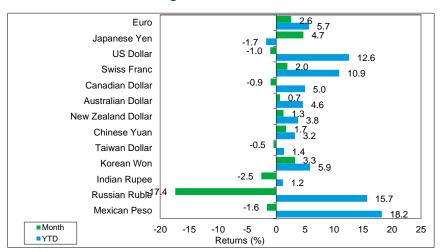
Performance Summary (GBP)

Alternatives ending 31 December 2022

Real Asset Performance



Performance of Foreign Currencies versus the US Dollar



| Index Returns | 1 Mth | 3 Mth | YTD | 1 Year | 2 Years | 3 Years | 5 Years | 7 Years | 10 Years | 20 Years | 2021 | 2020 | 2019 | 2018 | 2017 |
|--------------------------|-------|-------|-------|--------|---------|---------|---------|---------|----------|----------|-------|-------|------|-------|-------|
| NAREIT Equity REITs | -5.9 | -3.4 | -15.5 | -15.5 | 9.8 | 3.5 | 6.9 | 8.7 | 10.4 | 11.0 | 42.6 | -8.1 | 23.7 | 1.9 | -0.7 |
| NAREIT Global REITs | -3.6 | -0.6 | -14.9 | -14.9 | 4.5 | -0.9 | 3.1 | 5.8 | 7.1 | 9.5 | 28.4 | -11.0 | 18.3 | 1.2 | 1.8 |
| Bloomberg Commodity TR | -3.4 | -5.1 | 30.7 | 30.7 | 29.5 | 16.3 | 9.0 | 9.6 | 1.7 | 2.9 | 28.3 | -6.1 | 3.5 | -5.7 | -7.1 |
| S&P GSCI Commodity | -2.4 | -4.0 | 41.9 | 41.9 | 41.8 | 14.1 | 9.0 | 10.2 | -0.3 | 1.1 | 41.6 | -26.1 | 13.1 | -8.5 | -3.4 |
| Alerian Energy MLP TR | -5.6 | 2.2 | 47.4 | 47.4 | 44.4 | 13.0 | 6.6 | 7.5 | 5.1 | 10.6 | 41.5 | -30.9 | 2.4 | -7.0 | -14.6 |
| Oil | -1.4 | -6.3 | 20.2 | 20.2 | 37.1 | 13.1 | 8.4 | 15.0 | 1.7 | 6.4 | 56.4 | -23.0 | 29.3 | -20.2 | 2.7 |
| Gold | 2.7 | 1.4 | 12.5 | 12.5 | 4.6 | 9.7 | 9.4 | 11.3 | 3.9 | 10.2 | -2.6 | 20.6 | 14.3 | 3.9 | 3.8 |
| S&P NA Natural Resources | -5.1 | 9.7 | 51.0 | 51.0 | 46.0 | 18.7 | 9.7 | 12.6 | 7.2 | 9.9 | 41.2 | -21.5 | 13.1 | -16.2 | -7.5 |
| Euro | 2.6 | 1.1 | 5.7 | 5.7 | -0.4 | 1.5 | 0.0 | 2.7 | 0.9 | 1.6 | -6.9 | 5.6 | -5.6 | 1.1 | 4.0 |
| Japanese Yen | 4.7 | 1.8 | -1.7 | -1.7 | -5.7 | -3.2 | -0.8 | 1.6 | -1.2 | 0.9 | -10.3 | 2.0 | -2.9 | 9.1 | -5.4 |
| US Dollar | -1.0 | -7.2 | 12.6 | 12.6 | 6.6 | 3.3 | 2.4 | 2.9 | 3.1 | 1.5 | -1.1 | -3.1 | -3.9 | 6.2 | -8.7 |
| Swiss Franc | 2.0 | -1.3 | 10.9 | 10.9 | 4.2 | 4.8 | 3.4 | 4.1 | 2.9 | | -3.0 | 6.2 | -2.1 | 5.0 | -4.7 |
| Canadian Dollar | -0.9 | -5.9 | 5.0 | 5.0 | 3.4 | 1.8 | 0.8 | 3.3 | -0.1 | 2.2 | 8.0 | -1.4 | 1.3 | -2.6 | -2.2 |
| Australian Dollar | 0.7 | -3.6 | 4.6 | 4.6 | -0.3 | 1.7 | -0.6 | 1.9 | -1.3 | 2.4 | -5.8 | 5.9 | -4.0 | -4.0 | -1.6 |
| New Zealand Dollar | 1.3 | 2.3 | 3.8 | 3.8 | -0.4 | 0.7 | -0.1 | 1.8 | 0.3 | | -5.0 | 3.1 | -2.9 | 0.2 | -6.9 |
| Chinese Yuan | 1.7 | -5.3 | 3.2 | 3.2 | 3.4 | 3.3 | 1.0 | 1.9 | 1.9 | 2.4 | 2.7 | 3.2 | -5.2 | 0.7 | -2.5 |
| Taiwan Dollar | -0.5 | -4.1 | 1.4 | 1.4 | 1.9 | 2.4 | 1.7 | 3.9 | 2.5 | 2.1 | 1.3 | 3.4 | -1.4 | 2.8 | -1.1 |
| Korean Won | 3.3 | 5.0 | 5.9 | 5.9 | -1.2 | 0.2 | -1.0 | 1.8 | 1.4 | 1.1 | -8.7 | 3.2 | -7.2 | 1.9 | 3.1 |
| Indian Rupee | -2.5 | -8.7 | 1.2 | 1.2 | 0.2 | -1.7 | -2.8 | -0.3 | -1.1 | -1.3 | -1.9 | -5.3 | -6.0 | -2.9 | -2.9 |
| Russian Ruble | -17.4 | -22.3 | 15.7 | 15.7 | 7.3 | -2.1 | -2.4 | 3.0 | -5.5 | -2.6 | -1.0 | -18.6 | 7.4 | -11.9 | -3.1 |
| Brazilian Real | -1.4 | -4.9 | 18.8 | 18.8 | 5.7 | -5.7 | -6.7 | -1.2 | -6.3 | -0.5 | -6.8 | -24.9 | -7.4 | -9.1 | -10.4 |
| Mexican Peso | -1.6 | -4.2 | 18.2 | 18.2 | 7.8 | 2.2 | 2.5 | 1.2 | -1.0 | -1.6 | -3.0 | -8.2 | 0.3 | 5.5 | -3.8 |
| BofA ML All Convertibles | -4.1 | -5.7 | -8.5 | -8.5 | -0.9 | 11.7 | 11.9 | 13.4 | 13.4 | 10.2 | 7.6 | 41.7 | 18.4 | 6.4 | 3.9 |
| 60%S&P 500/40% Barc Agg | -4.6 | -2.1 | -5.7 | -5.7 | 5.0 | 6.8 | 8.1 | 10.3 | 11.2 | 8.6 | 17.7 | 10.6 | 17.7 | 3.3 | 4.8 |



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Clwyd Pension Fund Monitoring Report Quarter to 31 December 2022

Kieran Harkin

February 2023



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- When there is no (or limited) recognised or secondary market, for example, but not limited to property, hedge funds, private equity, infrastructure, forestry, swap and other derivative based funds or portfolios it may be difficult for you to obtain reliable information about the value of the investments or deal in the investments.
- Care should be taken when comparing private equity / infrastructure performance (which is generally a money-weighted performance) with quoted investment performance (which is generally a time-weighted performance). Direct comparisons are not always possible.

Kieran Harkin

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|-----|----------------------------|----|
| ííí | Strategy Monitoring | 6 |
| X X | Investment Manager Summary | 9 |
| ISI | Appendix | 14 |

Overview

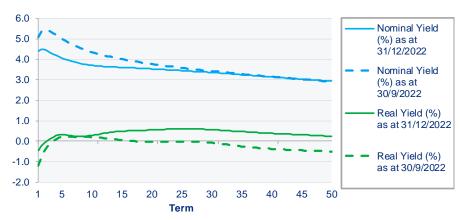


Executive Dashboard

| Page 7 | Asset Allocation | | Page 8 | Investment Performance | | | | |
|---|--|----------------------------------|---|---------------------------------------|------------------|--|--|--|
| are all underweight (-4.9%, within ranges as at quarter | s equity, global equity and credit, -4.3 and -1.9% respectively) but end. Cash, CRMF are the most and +3.9%, respectively), but end. | Signal Previous Qtr Current Qtr | The Fund returned 0.0% over the quarter against a benchmark of 1.3%. Over the one year and three year periods to 31 December 2022, the Fund returned -10.6% and 3.9% p.a. against a benchmark of -9.6% and 3.7% p.a., respectively. | | | | | |
| Asset Allocation vs Rang Property and infrastructure | ges are marginally outside their respec | ctive ranges. | Performance vs Target The one year and three year performance is behind the strategic target and the actuarial past service and future service liabilities targets. | | | | | |
| Page 12 | Manager Research | | Additional Comments | | | | | |
| No significant news to repo | Pr | Signal evious Qtr urrent Qtr | | rategy is currently under review in o | conjunction with | | | |

Market Conditions

| | Values | at (%) | C | %) | |
|-------------------------------------|------------|------------|-------|----------|-------|
| Yield / Spread | 31/12/2022 | 30/09/2022 | 3M | 12M | 3Y |
| Over 5Y Index-Linked Gilts Yield | 0.41 | -0.16 | 0.57 | 2.84 | 2.30 |
| Over 15Y Fixed Interest Gilts Yield | 3.90 | 3.74 | 0.15 | 2.78 | 2.62 |
| Over 10 Year Non-Gilts Yield | 5.53 | 6.20 | -0.63 | 3.21 | 3.02 |
| Over 10 Year Non-Gilts Spread | 1.56 | 2.07 | -0.50 | 0.42 | 0.26 |
| | £1 is | worth | App | reciatio | n (%) |
| Exchange Rates | 31/12/2022 | 30/09/2022 | 3M | 1Y | 3Y |
| US Dollar (\$) | 1.203 | 1.116 | 7.76 | -11.19 | -3.16 |
| Euro (€) | 1.127 | 1.140 | -1.09 | -5.37 | -1.52 |
| 100 Japanese Yen (¥) | 1.587 | 1.616 | -1.77 | 1.76 | 3.30 |



3 months to 31/12/2022 12 months to 31/12/2022 0.3% **UK Equities** 8.9% 2.1% Global Equity -7.3% -15.3% Global Equity (LOC) 7.5% Sustainable Equities -8.1% 2.0% Emerging Market Equity (LOC) -13.5% 7.0% Global High Yield (LOC) -11.8% 5.0% Emerging Market Debt (Local Currency Debt) -0.6% 0.6% -7.4% Emerging Market Debt (Hard Currency Debt) 0.3% -10.1% **UK Property** -14.5% -40.1% Over 15 Year Gilts -1.8% -38.0% Over 5 Year Index-Linked Gilts -7.5% -17.8% All Stocks UK Corporate Bonds 6.2% 1.4% Cash 0.7% 41.9% Commodities -4.0%

Source: Refinitiv. All returns are shown in sterling unless otherwise stated. Local currency returns (LOC) are an approximation of a currency hedged return.

Mercer's latest strategic investment insights



Market Environment

Monthly capital market monitor:

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Periodic table of index returns: Q3 2022



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Mercer's advice on net-zero

Advancing the transition: Seeking to mitigate risk and drive adaptation beyond COP27 Solving investor challenges: Investing towards a sustainable future



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Quarterly alternatives report - Q4 2022

Real estate global market summary - October 2022

Capturing themes in private markets: Part 1 – Inflation playbook | Part 2 – Positioning for transition | Part 3 – Modern diversification

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Building infrastructure into your equity portfolio

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Mercer CFA Institute Global Pension Index 2022: Paper | Regional webinars

Systematic macro hedge funds - Trending into the new regime

The future of globalization

The case for China revisited (includes summary & full-length versions)

Findings from the 2022 Global Wealth Management Investment Survey

Top considerations for global segments

Endowments and foundations: Plotting a course through volatile markets: Paper

Podcast | Survey

Financial intermediaries: New beginnings: Paper | Podcast | Survey

Insurers – Paper | Podcast | Findings from the 2022 global insurance investment

survey

<u>Defined Contribution: US | Canada</u>

Defined Benefit: US



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Transitioning between elements

Investors face an inflation conundrum due to competing global forces

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Personal accountability, and the risks that lie ahead

Seven must-ask questions for your fund manager

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Complexity drives investment outsourcing

Update: The Tortoise and the Hare – the history of central bank hiking cycles

How to overcome the challenges of investing in private assets

Not-For-Profit portfolios must work harder in the new macro environment

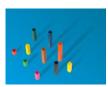
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<u>UK LDI - Implications of recent events for derivatives</u> investors in other countries

September 30 webinar: <u>Major panic over a mini budget?</u>
What does it all mean for your scheme?

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The return of inflation

What now?



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Investing in Hedge Funds

The polarizing debate

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Strategy Monitoring



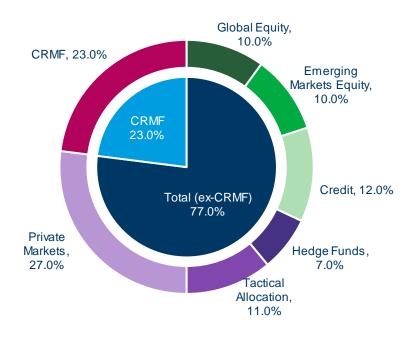
Asset Allocation

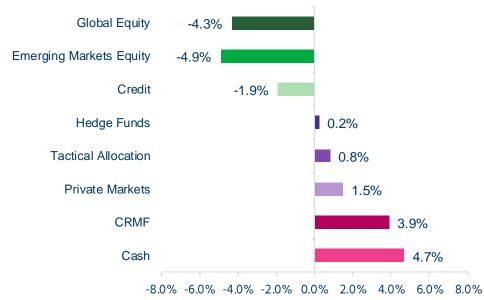
| | 30/09/2022 Market Value (£M) | Net Cash Flow (£M) | Investment Growth/ Decline (£M) | 31/12/2022 | 30/09/2022 Allocation (%) | | | 31/12/2022 B'mark Range (%) |
|-----------------|------------------------------------|-----------------------|--|------------|---------------------------------|-------|-------|-----------------------------------|
| Total | 2,216.0 | -4.4 | 1.9 | 2,213.4 | 100.0 | 100.0 | 100.0 | |
| Total (ex-CRMF) | 1,752.0 | -232.4 | -4.8 | 1,514.7 | 79.1 | 68.4 | 77.0 | |
| Total CRMF | 378.4 | 210.0 | 6.8 | 595.1 | 17.1 | 26.9 | 23.0 | 10.0 - 35.0 |
| Cash | 85.6 | 18.0 | 0.0 | 103.6 | 3.9 | 4.7 | 0.0 | 0.0 - 5.0 |

Source: Investment Managers and Mercer. Figures may not sum to total due to rounding.

Benchmark Asset Allocation as at 31 December 2022

Deviation from Benchmark Asset Allocation



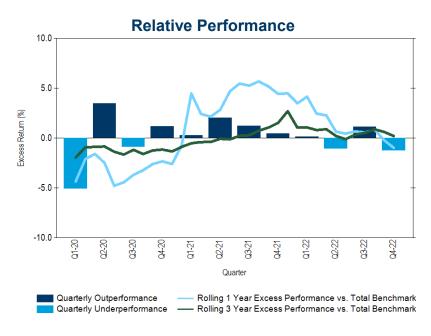


Investment Performance

| | 2022 Q4 (%) | 1 Yr (%) | 3 Yrs (%) |
|--|-------------|----------|-----------|
| Total | 0.0 | -10.6 | 3.9 |
| Total Benchmark | 1.3 | -9.6 | 3.7 |
| Strategic Target (CPI +3.4% p.a.) | 3.6 | 14.3 | 9.0 |
| Actuarial Target - Past Service Liabilities (CPI +1.75% p.a.) | 3.2 | 12.4 | 7.3 |
| Actuarial Target - Future Service Liabilities (CPI + 2.25% p.a.) | 3.3 | 13.0 | 7.8 |

Figures shown are net of fees and based on performance provided by the Investment Managers, Mercer estimates and Refinitiv.

Strategic and Actuarial targets are derived from realised CPI over the corresponding periods. Prior to Q2 2022, CPI was based on Mercer's Market Forecasting Group assumptions. For periods over one year the figures in the table above have been annualised.



Investment Manager Summary



Manager Allocation

| | Investment Manager | 30/09/2022 Market Value (£M) | Net Cash Flow (£M) | Investment Growth/ Decline (£M) | 31/12/2022 Market Value (£M) | 30/09/2022 Allocation (%) | 31/12/2022 Allocation (%) | 31/12/2022 B'mark (%) | 31/12/2022 B'mark Range (%) |
|---|-----------------------|------------------------------------|-----------------------|--|------------------------------------|---------------------------------|---------------------------------|-----------------------------|-----------------------------------|
| Total | | 2,216.0 | -4.4 | 1.9 | 2,213.4 | 100.0 | 100.0 | 100.0 | |
| Total (ex-CRMF) | | 1,752.0 | -232.4 | -4.8 | 1,514.7 | 79.1 | 68.4 | 77.0 | |
| Total Equity | | 449.2 | -215.5 | 5.2 | 238.8 | 20.3 | 10.8 | 20.0 | 10.0 - 30.0 |
| Global Equity | | 247.2 | -125.5 | 4.3 | 125.9 | 11.2 | 5.7 | 10.0 | 5.0 - 15.0 |
| WPP Global Opportunities | Russell | 123.3 | 0.0 | 2.6 | 125.9 | 5.6 | 5.7 | 10.0 | 5.0 - 15.0 |
| World ESG Equity | BlackRock | 123.9 | -125.5 | 1.7 | | 5.6 | | | |
| Emerging Markets Equity | | 202.1 | -90.0 | 0.9 | 113.0 | 9.1 | 5.1 | 10.0 | 5.0 - 15.0 |
| WPP Emerging Markets Equity | Russell | 202.1 | -90.0 | 0.9 | 113.0 | 9.1 | 5.1 | 10.0 | 5.0 - 15.0 |
| Total Credit | | 214.6 | 0.0 | 8.9 | 223.5 | 9.7 | 10.1 | 12.0 | 10.0 - 14.0 |
| WPP Multi-Asset Credit | Russell | 214.6 | 0.0 | 8.9 | 223.5 | 9.7 | 10.1 | 12.0 | 10.0 - 14.0 |
| Total Hedge Funds | | 161.2 | 0.0 | -1.0 | 160.3 | 7.3 | 7.2 | 7.0 | 5.0 - 9.0 |
| Hedge Funds | Man | 161.2 | 0.0 | -1.0 | 160.3 | 7.3 | 7.2 | 7.0 | 5.0 - 9.0 |
| Total Tactical Allocation | | 257.3 | 0.0 | 4.2 | 261.5 | 11.6 | 11.8 | 11.0 | 9.0 - 13.0 |
| Best Ideas | Various | 257.3 | 0.0 | 4.2 | 261.5 | 11.6 | 11.8 | 11.0 | 9.0 - 13.0 |
| Total Private Markets | | 669.6 | -16.9 | -22.1 | 630.7 | 30.2 | 28.5 | 27.0 | 15.0 - 37.0 |
| Property | Various | 149.5 | -0.9 | -11.3 | 137.3 | 6.7 | 6.2 | 4.0 | 2.0 - 6.0 |
| Private Equity | Various | 213.6 | -11.7 | 1.5 | 203.4 | 9.6 | 9.2 | 8.0 | 6.0 - 10.0 |
| Local / Impact | Various | 85.1 | 4.8 | -4.4 | 85.5 | 3.8 | 3.9 | 4.0 | 0.0 - 6.0 |
| Infrastructure | Various | 139.6 | -3.5 | -5.2 | 130.9 | 6.3 | 5.9 | 8.0 | 6.0 - 10.0 |
| Private Credit | Various | 68.0 | -3.4 | -2.4 | 62.2 | 3.1 | 2.8 | 3.0 | 1.0 - 5.0 |
| Timber/ Agriculture | Various | 13.9 | -2.2 | -0.3 | 11.4 | 0.6 | 0.5 | | |
| Total CRMF | | 378.4 | 210.0 | 6.8 | 595.1 | 17.1 | 26.9 | 23.0 | 10.0 - 35.0 |
| Cash and Risk Management Framework (CRMF) | Insight | 378.4 | 210.0 | 6.8 | 595.1 | 17.1 | 26.9 | 23.0 | 10.0 - 35.0 |
| Cash | | 85.6 | 18.0 | 0.0 | 103.6 | 3.9 | 4.7 | 0.0 | 0.0 - 5.0 |
| Cash | | 85.6 | 18.0 | 0.0 | 103.6 | 3.9 | 4.7 | 0.0 | 0.0 - 5.0 |

Source: Investment Managers and Mercer. Figures may not sum to total due to rounding.

Net cashflows exclude the reinvestment of income.

Hedged Funds (Legacy) valuation includes the Liongate portfolios.

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Manager Performance

| | Investment Manager | 2022 Q4 (%) | B'mark (%) | 1 Yr (%) | B'mark (%) | 3 Yrs (%) | B'mark (%) |
|---|-----------------------|-------------|------------|----------|------------|-----------|------------|
| Total | | 0.0 | 1.3 | -10.6 | -9.6 | 3.9 | 3.7 |
| Total Equity | | 0.8 | 2.0 | -9.4 | -7.8 | 3.6 | 5.8 |
| WPP Global Opportunities | Russell | 2.1 | 2.4 | -4.4 | -6.2 | 8.7 | 9.5 |
| WPP Emerging Markets Equity | Russell | 1.5 | 2.2 | -11.5 | -8.7 | | |
| Total Credit | | 4.0 | 1.7 | -12.4 | 5.4 | -2.2 | 3.8 |
| WPP Multi-Asset Credit | Russell | 4.0 | 1.7 | -12.4 | 5.4 | | |
| Total Hedge Funds | | -0.6 | 1.6 | 1.9 | 4.9 | 3.5 | 4.2 |
| Hedge Funds | Man | -0.6 | 1.6 | 1.9 | 4.9 | 3.5 | 4.2 |
| Total Tactical Allocation | | 1.6 | 3.5 | 3.5 | 13.8 | 7.3 | 8.3 |
| Best Ideas | Various | 1.6 | 3.5 | 3.5 | 13.8 | 6.9 | 7.8 |
| Total Private Markets | | -3.3 | -0.6 | 15.2 | 4.0 | 13.2 | 5.1 |
| Property | Various | -7.6 | -14.5 | -0.1 | -10.1 | 4.1 | 2.2 |
| Private Equity | Various | 0.8 | 1.9 | 19.8 | 6.5 | 19.0 | 5.7 |
| Local / Impact | Various | -5.0 | 1.9 | 21.8 | 6.5 | | |
| Infrastructure | Various | -3.7 | 1.9 | 23.0 | 6.5 | 11.1 | 5.7 |
| Private Credit | Various | -3.6 | 1.8 | 13.2 | 7.5 | 7.1 | 7.5 |
| Timber/ Agriculture | Various | -2.3 | 1.9 | 25.0 | 6.5 | 8.2 | 5.7 |
| Total CRMF | | -3.3 | -3.3 | -45.3 | -45.3 | -6.1 | -6.1 |
| Cash and Risk Management Framework (CRMF) | Insight | -3.3 | -3.3 | -45.3 | -45.3 | -6.1 | -6.1 |

Figures shown are net of fees and based on performance provided by the Investment Managers, Mercer estimates and Refinitiv.

For periods over one year the figures in the table above have been annualised.

Prior to 30 November 2020, performance for all portfolios and sub-totals/total was estimated based on MWRR approach.

Russell WPP Global Opportunities and Russell Emerging Markets portfolios benchmark performance includes the outperformance target.

Total hedge funds performance includes performance of the legacy Liongate portfolio.

Hedge funds, best ideas and private markets portfolios performance has been estimated by Mercer.

Private Credit benchmark was revised to Absolute Return 7.5% p.a. in Q4 2020 and for all preceding periods.

Manager Ratings

| | Investment Manager | 12m Perf | 3yr Perf |
|---|--------------------|----------|----------|
| WPP Global Opportunities | Russell | • | • |
| WPP Emerging Markets Equity | Russell | • | |
| WPP Multi-Asset Credit | Russell | • | |
| Hedge Funds | Man | • | • |
| Best Idea | Various | • | • |
| Property | Various | | • |
| Private Equity | Various | | • |
| Local / Impact | Various | | |
| Infrastructure | Various | | • |
| Private Credit | Various | | • |
| Timber/ Agriculture | Various | | • |
| Cash and Risk Management Framework (CRMF) | Insight | • | • |

| | Active Funds , Target Specified | Active Funds , Target Not Specified | Passive Funds |
|--|--|-------------------------------------|-------------------------|
| Meets criteria | Target or above performance | Benchmark or above performance | Within tolerance range |
| Partially meets criteria | Benchmark or above performance, but below target | | |
| Does not meet criteria | Below benchmark performance | Below benchmark performance | Outside tolerance range |
| Not applicable | | | |

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Appendix



Appendix A

Benchmarks

| Name | Investment Manager | B'mark (%) | Performance Benchmark |
|---|-----------------------|---------------|--|
| Total | | 100.0 | - |
| Total (ex-CRMF) | | 77.0 | - |
| Total Equity | | 20.0 | Composite Weighted Index |
| WPP Global Opportunities | Russell | 10.0 | MSCI AC World (NDR) Index +2.0% p.a. |
| WPP Emerging Markets Equity | Russell | 10.0 | MSCI Emerging Markets Index +1.5% p.a. |
| Total Credit | | 12.0 | SONIA +4.0% p.a. |
| WPP Multi-Asset Credit | Russell | 12.0 | SONIA +4.0% p.a. |
| Total Hedge Funds | | 7.0 | SONIA +3.5% p.a. |
| Hedge Funds | Man | 7.0 | SONIA +3.5% p.a. |
| Total Tactical Allocation | | 11.0 | UK Consumer Price Index +3.0% p.a. |
| Best Ideas | Various | 11.0 | UK Consumer Price Index +3.0% p.a. |
| Total Private Markets | | 27.0 | Composite Weighted Index |
| Property | Various | 4.0 | MSCI UK Monthly Property Index |
| Private Equity | Various | 8.0 | SONIA +5.0% p.a. |
| Local / Impact | Various | 4.0 | SONIA +5.0% p.a. |
| Infrastructure | Various | 8.0 | SONIA +5.0% p.a. |
| Private Credit | Various | 3.0 | Absolute Return +7.5% p.a. |
| Timber/ Agriculture | Various | | SONIA +5.0% p.a. |
| Total CRMF | | 23.0 | Composite Liabilities & Synthetic Equity |
| Cash and Risk Management Framework (CRMF) | Insight | 23.0 | Composite Liabilities & Synthetic Equity |

Figures may not sum to total due to rounding.

Performance benchmark for WPP Global Opportunities and Russell Emerging Markets portfolios include the outperformance target.

Private Credit benchmark was revised to Absolute Return 7.5% p.a. in Q4 2020 and for all preceding periods.

Cash & Risk Management Framework benchmark is assumed equal to fund performance for calculation purposes.



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CLWYD PENSION FUND COMMITTEE

| Date of Meeting | Wednesday, 15 February 2023 |
|-----------------|--|
| Report Subject | Funding, Flightpath and Risk Management Framework Update |
| Report Author | Head of Clwyd Pension Fund |

EXECUTIVE SUMMARY

The estimated funding position at 31 December 2022 of 105% is around 12% ahead of the expected position based on the 2019 valuation plan. The objectives and update on the various parts of the Risk Management Framework are included in the Appendix, showing the management of interest rate and inflation risk, equity market risk, currency risk, liquidity and collateral risk.

The total gain since inception of the synthetic equity strategy to 31 December 2022 is c. £60.9m. The currency hedging positions have made a loss of £19.6m in total since inception to 31 December 2022 due to weakening of sterling over that period versus the dollar. This is offset against gains on the physical overseas equity holdings.

The Fund remains in a healthy position in terms of funding level versus the expected position, despite a challenging market environment. The Fund has benefitted from having the Flightpath in place, as the hedging and financing legs of the equity protection strategy have increased in value as equity markets have fallen. The inflation protection has also reduced the funding strain from the increase in inflation expectations over the year.

Following the extreme volatility in the UK gilt market, Fund Officers instructed sales from the Fund's equity portfolio (totalling £215m) in October and November to support the collateral position, replacing the majority of exposure (£210m) synthetically to maintain the overall strategic exposures of the Fund. This has allowed Officers to re-instate the trigger framework in December 2022, with levels raised to capture more attractive gilt prices. Fund Officers have also developed a plan for sourcing further liquidity at short notice to withstand future gilt market volatility, which has stabilised significantly since the date of the last Committee report.

The report also includes proposed changes to the Scheme of Delegation to clarify actions that can be taken by Officers when managing the Cash and Risk Management framework. These are set out in Appendix 2.

| RECO | RECOMMENDATIONS | | | | | |
|------|--|--|--|--|--|--|
| 1 | That the Committee note and consider the contents of the report. | | | | | |
| 2 | That the Committee approve the proposed updates to the Fund's Scheme of Delegations. | | | | | |

REPORT DETAILS

| 1.00 | FUNDING, FLIGHTPATH AND RISK MANAGEMENT STRUCTURE UPDATE |
|------|--|
| 1.01 | Update on funding and the flightpath framework |
| | The monthly summary report as at 31 December 2022 from Mercer on the funding position and an overview of the risk management framework is attached in Appendix 1. It includes a "traffic light" of the key components of the Flightpath and hedging mandate with Insight. The report will be presented at the meeting including a reminder of the principle objectives of the framework. |
| 1.02 | The estimated funding level is 105% at 31 December 2022, which is 12% ahead of the expected position when measured relative to the 2019 valuation expected funding plan. The investment environment has continued to be bearish over 2022 amid rising inflation and interest rates. |
| | A trigger of 110% has been put in place to prompt future FRMG de-risking discussions and a formal protocol was proposed and ratified by the Committee. The funding level is below this trigger currently but if breached, this would prompt further analysis on whether the Fund can take de-risking actions to provide more certainty for employers without inadvertently putting upwards pressure on contributions in future. This trigger will be kept under review over time and will take into account the 2022 valuation and emerging contributions in due course. |
| 1.03 | Fund Officers paused the trigger framework prior to 30 September 2022 to prevent additional collateral strain being put on the risk management framework. The trigger framework has now been reinstated, with levels raised with respect to nominal yields by 0.5% p.a. to capture opportunities from yields being elevated relative to normal levels. |
| | The level of hedging was approximately 50% for interest rates and 40% for inflation at 31 December 2022. The liability hedging portfolio performed negatively over the quarter to 31 December 2022 as real yields rose, although this was partially offset by the fall in the value of the liabilities. The hedging implemented to date provides access to a lower risk investment strategy but maintaining a sufficiently high real yield/return expectation to achieve the funding and contribution targets. |
| 1.04 | Based on data from Insight, our analysis shows that the management of the Insight Liability Hedging mandate is rated as "green" as at the end of Q3 2022, meaning it is operating in line within the tolerances monitored by Mercer. |
| | The Cash Plus Fund is rated "green" as the Fund had sufficient collateral to withstand the stresses as at 30 September 2022, although additional collateral was required to bolster the position and enable the Fund to take |

advantage of opportunities. The Cash Plus Fund has underperformed since inception and over Q3 2022. The collateral waterfall has returned £4.0m at 30 September 2022 since implementation at 31 January 2019.

The collateral waterfall structure will be reviewed on an ongoing basis and Officers have carried out additional work to understand the liquidity of the wider investment strategy to understand where capital could be sourced at short notice, should it be required in future to supplement available collateral within the Flightpath.

1.05 Update on Risk Management framework

(i) Synthetic equity and equity protection strategy

The Fund gains exposure to equity markets via derivatives and protects this exposure against potential falls in the equity markets via the use of an equity protection strategy. This provides further stability (or even a reduction) in employer deficit contributions (all other things equal) in the event of a significant equity market fall although it is recognised it will not protect the Fund in totality.

It should be noted that, having an equity protection policy in place will protect from any large changes in equity markets. Importantly over the longer-term the increased security allows the Actuary to include less prudence/buffer in the Actuarial Valuation assumptions; this translated into lower contributions at the 2019 valuation, whilst maintaining the equity exposure supports a lower cost of accrual than under traditional de-risking methods.

The Fund has a bespoke synthetic equity and equity protection strategy, which is implemented through a Total Return Swap ("bespoke TRS") contract with JP Morgan, held within the Insight QIAIF (the fund that implements the risk management strategies on the Fund's behalf). The TRS contract is for a fixed term of 3 years up to 2024.

The Fund implemented c. £215m of exposure in long-only synthetic equity positions in October and November 2022 to replicate the exposure lost through equity sales to support the collateral position within the Flightpath. Both positions consist of broad developed market exposure and are implemented through equity total return swap.

As at 31 December 2022, the total performance since inception of the bespoke TRS synthetic equity and equity protection strategy in May 2018 was an increase of c. £60.9m. Relative to investing in passive equities (and assuming no costs to do so), the strategy has underperformed by c. £88m since inception. The underperformance is largely driven by the rise in equity markets since inception of the strategy meaning the protection has become less valuable. Over the year to date the Fund has benefitted from the protection provided by the equity protection strategy due to sustained falls in equity markets.

1.06 (ii) Collateral update

Officers took a number of actions to support the collateral position in Q3 2022. This included instructing sales from the Fund's equity portfolio (totalling c.£215m) to support the collateral position. The equity exposure (c.£215m) was replaced synthetically with Insight so as to maintain the overall strategic allocation of the portfolio.

Actions taken by Fund Officers have ensured that the QIAIF continues to have a healthy collateral position despite the recent increases in interest rates, which have caused the value of liability hedging assets to fall. Officers continue to monitor the collateral position and at the date of this report no further action has been needed by Officers.

1.07 (ii) Currency hedging gain/loss

The currency risk associated with the market value of the synthetic equity strategy is hedged and has made a loss of £19.6m since inception on 8 March 2019 to 31 December 2022 due to the material weakening of sterling over that period, particularly versus the US dollar.

The Fund's overseas developed market physical equity holdings are currency hedged and have made a loss of c. £17.4m since inception of the strategy due to the material weakening of sterling versus the US dollar over that period.

Overall the action to hedge the Fund's developed equity currency risk has resulted in a loss of £36.9m since inception of the strategies, although this will have been offset by rises in value of the overseas equity holdings due to these currency movements.

1.08 Decisions made since previous report

Following the pausing of the interest rate triggers in late September, the FRMG agreed at the 31 October meeting to reinstate the triggers but increase the interest rate trigger levels by 0.5% to target a 5% interest rate trigger level in light of further uncertainty. Insight have now reinstated the trigger framework at the new levels.

1.09 Update to Scheme of Delegation

The Pension Fund Committee has previously delegated a number of responsibilities to Fund Officers. The intention behind this is to ensure that decisions and actions are taken at the right level and in a timely manner. These are listed in the Scheme of Delegation shown in Appendix 2.

Fund Officers recently identified that the delegations relating to the Fund's Risk Management Framework could do with further clarification including ensuring it is clear that the reference to deciding actions relating to the inflation and interest rate triggers, which has been delegated to the Head of Clwyd Pension Fund, does include changing the trigger levels. The Scheme of Delegation in Appendix 2 includes suggested updates (highlighted in yellow, bold and italics) to clarify what elements of the Risk

| Management Framework are delegated to the Head of Clwyd Pension | |
|---|--|
| Fund. | |

| 2.00 | RESOURCE IMPLICATIONS |
|------|---|
| 2.01 | None directly as a result of this report. |

| 3.00 | CONSULTATIONS REQUIRED / CARRIED OUT |
|------|--------------------------------------|
| 3.01 | None required. |

| 4.00 | RISK MANAGEMENT | | |
|------|---|--|--|
| 4.01 | This report addresses some of the risks identified in the Fund's Risk Register. Specifically, this covers the following (either in whole or in part): • Governance risk: G2 • Funding and Investment risks: F1 - F6 | | |
| 4.02 | The Flightpath Strategy manages/controls the interest rate and inflation rate impact on the liabilities of the Fund to give more stability of funding outcomes and employer contribution rates. The Equity option strategy will provide protection against market falls for the synthetic equity exposure via the Insight mandate only. The collateral waterfall framework is intended to increase the efficiency of the Fund's collateral, and generating additional yield in a low governance manner. Hedging the currency risk of the market value of the synthetic equity portfolio will protect the Fund against a strengthening pound which would be detrimental to the Fund's deficit. Hedging the currency risk of the developed market physical equity exposure will mitigate the risk of a strengthening pound. | | |

| 5.00 | APPENDICES |
|------|---|
| 5.01 | Appendix 1 - Monthly monitoring report – 31 December 2022 Appendix 2 – Updated Scheme of Delegation |

| 6.00 | LIST OF ACCESSIBLE BACKGROUND DOCUMENTS | | |
|------|---|---|--|
| 6.01 | – 8 Novemb Actuarial Va 2016 and Re Flightpath U Report to Pe | ension Fund Committee – Flightpath Strategy Proposals per 2016, Report to Pension Fund Committee – 2016 aluation and Funding/Flightpath Update – 27 September eport to Pension Fund Committee – Funding and Update – 22 March 2016. Ension Fund Committee – Overview of risk management – Previous monthly reports and more detailed quarterly | |
| | Contact Officer: | Philip Latham, Head of Clwyd Pension Fund 01352 702264 | |
| | Telephone: E-mail: | philip.latham@flintshire.gov.uk | |

| 7.00 | GLOSSARY OF TERMS |
|------|--|
| 7.01 | (a) The Fund – Clwyd Pension Fund – The Pension Fund managed by Flintshire County Council for local authority employees in the region and employees of other employers with links to local government in the region. |
| | (b) Administering Authority or Scheme Manager – Flintshire County Council is the administering authority and scheme manager for the Clwyd Pension Fund, which means it is responsible for the management and stewardship of the Fund. |
| | (c) The Committee – Clwyd Pension Fund Committee - the Flintshire County Council committee responsible for the majority of decisions relating to the management of the Clwyd Pension Fund. |
| | (d) LGPS – Local Government Pension Scheme – the national scheme, which Clwyd Pension Fund is part of |
| | (e) FSS – Funding Strategy Statement – the main document that outlines how we will manage employers contributions to the Fund |
| | (f) Actuary - A professional advisor, specialising in financial risk, who is appointed by Pension Funds to provide advice on financial related matters. In the LGPS, one of the Actuary's primary responsibilities is the setting of contribution rates payable by all participating employers as part of the actuarial valuation exercise. |
| | (g) ISS – Investment Strategy Statement The main document that outlines our strategy in relation to the investment of assets in the Clwyd Pension Fund |
| | (h) Total Return Swap – An agreement between two parties constituting the exchange of the return from a financial asset. One party makes payments based on a set rate, either fixed or variable. |
| | Further terms are defined in the Glossary in the report in Appendix 1 |



Risk management framework

Monthly Monitoring Report: 31 December 2022

Clwyd Pension Fund February 2023

Nick Page FIA CERA



Overriding objectives



Versus

Achieve returns in excess of CPI required under funding arrangements

Objectives are two-fold but conflicting

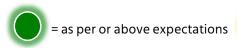
• Risk needs to be taken in order to achieve returns, but risk does not guarantee returns

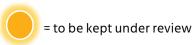
Need to ensure a reasonable balance between the two objectives

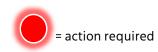
• Do you need to take the same level of risk when 70% funded (say) as when 110% funded?



Executive summary









Overall funding position at 31 December 2022

- •Ahead of existing recovery plan
- •Funding level above 100%



Liability hedging mandate at 30 September 2022

- •Insight in compliance with investment guidelines
- •Performed in line with the benchmark over Q3 2022
- •Hedge ratios in line with target levels



Synthetic equity mandate at 31 December 2022

- •Insight in compliance with investment guidelines
- •Underperformed the benchmark over the month



Currency hedging at 31 December 2022

- Currency hedging overlay implemented in the QIAIF in August 2019
- •As at 31 December 2022, the market value of the currency hedge on physical equities since inception on 22 August 2019 was -£17.4m



Cash Plus Funds, collateral and counterparty position at 30 September 2022

- •The Cash Plus Fund has underperformed the benchmark since inception and also over the quarter. We will continue to monitor performance.
- •The Insight QIAIF can sustain at least a 1.7% rise in interest rates or 2.7% fall in inflation without eliminating all headroom.

The funding position is 105% which is ahead of the target by around 12%. There is continuing uncertainty in the outlook for future returns and inflation which could impact on the future funding requirements.

The interest rate and inflation trigger framework was paused in October 2022 following significant volatility in gilt markets. 11 interest rate triggers were breached in September 2022, which led to additional collateral being provided to the RMF over October.

A dynamic protection structure was implemented in late May 2018, with refinements made in November 2020. The TRS structure rolled on 23 May 2021 with no further changes to the strategy. No action required.

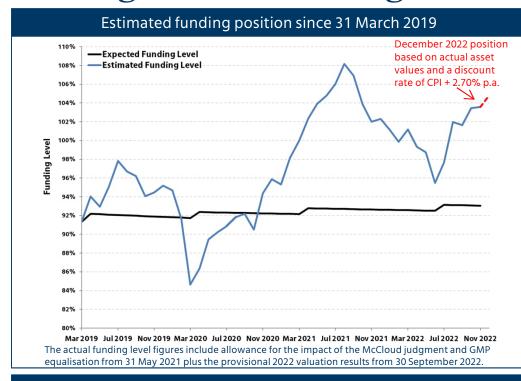
No action required.

Overall, the collateral waterfall has returned £4.0m at 30 September 2022 since implementation at 31 January 2019 versus the previous structure.

The Fund has sufficient collateral to withstand the stresses as at 30 September 2022. No action required.



Funding level monitoring to 31 December 2022



Funding Level Triggers

Following a breach of the 100% soft trigger, it was concluded at the FRMG on 9 July 2021 that the funding level was not currently sufficiently high to warrant de-risking in a traditional sense via a change in long term strategy.

It was agreed that a new trigger will be put in place to prompt FRMG discussions regarding potential actions as the funding level approaches 110% on a consistent approach to the 2019 valuation funding basis. This funding level will be monitored approximately by Mercer on a daily basis.

Comments

The **black line** shows a projection of the *expected* funding level from the 31 March 2019 valuation based on the assumptions (and contributions) outlined as part of the 2019 actuarial valuation. The expected funding level at 31 December 2022 was around 93%.

The **blue line** shows an estimate of the progression of the funding level from 31 March 2019 to 30 November 2022. The **red dashed line** shows the progression of the estimated funding level over December 2022. At 31 December 2022, we estimate the funding level and surplus to be:

105% £102m

From 30 September 2022, we have allowed for the impact of the 2022 valuation outcomes based on the draft Funding Strategy Statement assumptions. The Fund's position was ahead the expected funding level based on the **2019 valuation** expectations at 31 December 2022 by around 12% on the current funding basis.

Uncertainty continues to be prevalent in the investment and fiscal environments due to the geo-political uncertainty and economic outlook – in particular inflation which has a direct impact on the Fund's liabilities. In particular when assessing the funding levels from 31 March 2022 onwards above, we have incorporated an allowance for observed CPI inflation to provide a better estimate of future pension increases and therefore liability cashflows. For these funding levels we have also allowed for the change in interest/inflation rate plus the economic outlook and the impact on expected asset returns when considering the appropriate discount rate as agreed at the FRMG.

The funding progression will be restated relative to the final 2022 valuation once the final contributions and assumptions are agreed which will be in April 2023.



Update on market conditions and triggers





Relative to the position at end November, yields rose across the curve.

The Fund paused the interest rate trigger framework on 23 September 2022. As at 31 December 2022, the third interest rate trigger had been breached in three of the four maturity bands. The trigger framework was reinstated on 23 December 2022.



Comments

Inflation expectations rose at the long end of the curve over December 2022.

The target hedge ratios for the portfolio are 50% for interest rates and 40% for inflation expectations.

^{*}Hedge ratios calculated with reference to 2019 valuation cash flow analysis and relying on a discount rate of gilts + 3.9% p.a..



Update on equity protection mandate

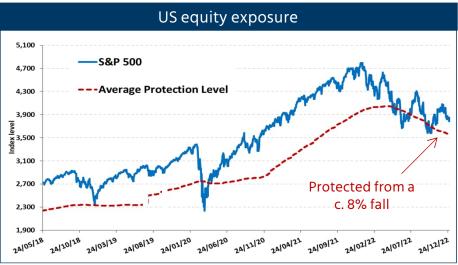


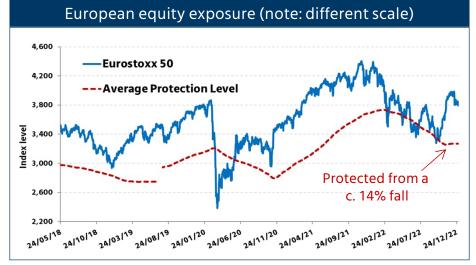


• The Fund implemented a dynamic equity protection strategy on 24 May 2018 with exposure of £362m. The equity protection strategy was revised in Q4 2020, increasing the call frequency to 2 weekly. This ensures that the Fund can participate in more upside as equity markets rise. The TRS structure was extended for a further 3 years on 23 May 2021 with no further changes to the strategy.

Comments

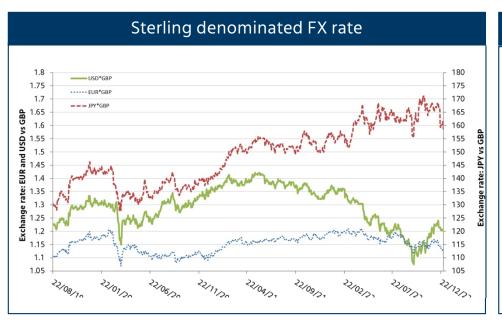
- Equity markets fell over December. Both the financing and hedging legs made positive returns which reduced the overall negative return.
- The strategy has outperformed passive equities over the month and over the year to 31 December 2022. As at the same date, there was a gain of c. £60.9m on the strategy since inception.
- From inception on 8 March 2019 to 31 December 2022, the currency hedge of the market value of the synthetic equity mandate has resulted in a c. £19.6m loss relative to an unhedged position, as sterling has weakened versus the dollar level since inception.







Developed market physical equity currency hedge



Comments

- A currency hedge was placed on the physical, developed equity portfolio to lock-in gains from sterling weakness and reduce currency risk.
- The hedge has been implemented via a currency overlay, using 3 month forward contracts, within the Insight QIAIF. The hedge is updated quarterly to allow for changes in the underlying equity exposure.
- As at 31 December 2022, the market value of the currency hedge since inception on 22 August 2019 was -£17.4m.
- The market value of the currency hedge fell over December as sterling depreciated against the Euro and Yen, which was only partially offset by appreciation relative to USD.

| | Currency basket weight | FX performance (since inception*) | FX change in performance since 30 November 2022 |
|-----|------------------------|-----------------------------------|--|
| EUR | 13% | £1.3m | (£0.2m) |
| JPY | 7% | £3.9m | (£0.3m) |
| USD | 80% | (£22.6m) | £0.4m |
| | 100% | (£17.4m) | (£0.1m) |

^{*}Insight transacted on the currency hedge on 22 August 2019.

Figures may not sum due to rounding.



Glossary

- **Actuarial Valuation** The formal valuation assessment of the Fund detailing the solvency position and determining the contribution rates payable by the employers to fund the cost of benefits and make good any existing shortfalls as set out in the separate Funding Strategy Statement.
- Collateral Liquid assets held by the Fund as security which may be used to offset the potential loss to a counterparty.
- **Counterparty** Commonly an investment bank on the opposite side of a financial transaction (e.g. swaps).
- **Deficit** The extent to which the value of the Fund's liabilities exceeds the value of the Fund's assets.
- **Dynamic protection strategy** Strategy to provide downside protection from falls in equity markets where the protection levels vary depending on evolution of the market.
- Equity option A financial contract in which the Fund can define the return it receives for movements in equity values.
- **Flightpath** A framework that defines a de-risking process whereby exposure to growth assets is reduced as and when it is affordable to do so i.e. when "triggers" are hit, whilst still expecting to achieve the overall funding target.
- Funding level The difference between the value of the Fund's assets and the value of the Fund's liabilities expressed as a percentage.
- **Funding & Risk Management Group (FRMG)** A subgroup of Pension Fund officers and advisers set up to discuss and implement any changes to the Risk Management framework as delegated by the Committee. It is made up of the Clwyd Pension Fund Manager, Pension Finance Manager, Fund Actuary, Strategic Risk Adviser and Investment Advisor.
- **Hedging** A strategy aiming to invest in low risk assets when asset yields are deemed attractive. Achieved by investing in government backed assets (or equivalent) with similar characteristics to the Fund future CPI linked benefit payments.
- **Hedge ratio** The level of hedging in place in the range from 0% to 100%.
- Insight QIAIF (Insight Qualifying Investor Alternative Investment Fund) An investment fund specifically designed for the Fund to allow Insight to manage the liability hedging and synthetic equity assets.



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The analysis contained in this paper is subject to and compliant with TAS 100 regulations.





Delegation of Functions to Officers by Pension Fund Committee - August 2022 February 2023

Key:

PFC – Pension Fund Committee PAP - Pension Advisory Panel HCPF – Head of Clwyd Pension Fund

CFM – Corporate Finance Manager — CMHR - Corporate Manager — Human — PAM – Pensions Administration Manager

Resources and Organisational

Development

DHCPF – Deputy Head of Clwyd Pension

Fund

IC – Investment Consultant

FA – Fund Actuary

IA – Independent Advisor

Updates since last version are shown in highlighted bold and italics.

| Function delegated to PFC | Further Delegation to Officer(s) | Delegated Officer(s) | Communication and Monitoring of Use of Delegation |
|--|--|--|---|
| Investment strategy - approving the Fund's, Investment Strategy Statement including setting the Responsible Investment Policy and investment targets and ensuring these are aligned with the Fund's specific liability profile and risk appetite. Monitoring the implementation of these policies and strategies on an ongoing basis. | Rebalancing and cash management Implementation of strategic allocation including use of both rebalancing and conditional ranges Short term tactical decisions relating to the 'best ideas' portfolio Risk Management Framework Implementation of the agreed <i>Risk Management</i> | HCPF (having regard to ongoing advice of the IC and PAP) | High level monitoring at PFC with more detailed monitoring by PAP |

| Function delegated to PFC | Further Delegation to Officer(s) | Delegated Officer(s) | Communication and Monitoring of Use of Delegation |
|--|--|---|---|
| Par | Framework - market Flightpath triggers and - Setting of inflation and interest rate triggers and deciding action(s) to be taken when those Flightpath funding triggers are reached within the existing constraints of the Investment Strategy (excluding 110% funding level trigger) | | |
| Page 352 | Risk Management Framework - Agreeing actions to be taken on 110% funding level trigger | HCPF following the process as outlined in the Appendix | The process as outlined in the Appendix |
| | Investment into new mandates / emerging opportunities | HCPF and either the CFM or CMHR (having regard to ongoing advice of the IC) | High level monitoring at PFC with more detailed monitoring by PAP |
| | Completion and submission of request to opt up to professional client status under the terms of MIFID II | HCPF | Ongoing reporting to PFC for noting, with more detailed monitoring by PAP |
| In relation to Wales Pooling Collaboration arrangements: Nominating Flintshire County Council's officers to the Officer Working Group. | To be the CPF designated members of the Officer Working Group | HCPF and DHCPF | High level monitoring at PFC with more detailed monitoring by PAP |

| Function delegated to PFC | Further Delegation to Officer(s) | Delegated Officer(s) | Communication and Monitoring of Use of Delegation |
|--|--|---|---|
| In relation to Wales Pooling Collaboration arrangements: Delegating powers to Flintshire County Council's own officers and the Host Council where required. | All matters included in the Inter Authority Agreement as being responsibilities of officers and the Host Council | Officers – HCPF who may delegate to DHCPF subject to ongoing advice from CFM Host Council – Carmarthenshire County Council | High level monitoring at PFC with more detailed monitoring by PAP |
| Selection, appointment and | Ongoing monitoring of Fund Managers | HCPF and either the CFM or CMHR (having regard to ongoing advice of the IC) and subject to ratification by PFC | High level monitoring at PFC with more detailed monitoring by PAP |
| lismissal of the Fund's advisers, ncluding actuary, benefits consultants, investment consultants, global custodian, fund | Selection, appointment and dismissal of Fund Managers | HCPF and either the CFM or CMHR (having regard to ongoing advice of the IC) and subject to ratification by PFC | Notified to PFC via ratification process. |
| managers, lawyers, pension funds wadministrator, and independent oprofessional advisers. | Setting of objectives for investment related consultancy contracts in line with CMA requirements ¹ , and monitoring against those objectives. | HCPF and DHCPF | High level information provided to PFC following annual review. |

¹ In accordance with Investment Consultancy and Fiduciary Management Market Investigation Order 2019

| Function delegated to PFC | Further Delegation to Officer(s) | Delegated Officer(s) | Communication and Monitoring of Use of Delegation |
|--|---|--|---|
| Agreeing the terms and payment of bulk transfers into and out of the Fund. | Agreeing the terms and payment of bulk transfers into and out of the Fund where there is a bulk transfer of staff from the Fund. Exceptions to this would be where there is a dispute over the transfer amount or it relates to significant assets transfers relating to one employer or the Fund as a whole | HCPF and either the CFM or CMHR after taking appropriate advice from the FA. | Ongoing reporting to PFC for noting |
| Making decisions relating to employers joining and leaving the Fund. This includes which employers are entitled to join the Fund, any requirements relating to their entry, ongoing monitoring and the basis for leaving the Fund. | Making decisions relating to employers joining and leaving the Fund and compliance with the Regulations and policies. This includes which employers are entitled to join the Fund, any requirements relating to their entry, ongoing monitoring and the basis for leaving the Fund including flexibility of exit payments and deferred debt arrangements ² . | HCPF and either the CFM or CMHR after taking appropriate advice from the FA. | Ongoing reporting to PFC for noting |

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² Note that any employer appeals to decisions made by officers relating to flexibility of exit payments and deferred debt arrangements are to be decided by the Pension Fund Committee.

| | Function delegated to PFC | Further Delegation to Officer(s) | Delegated Officer(s) | Communication and Monitoring of Use of Delegation |
|---|---|---|--|---|
| | Funding Strategy – approving the Fund's Funding Strategy Statement including ongoing monitoring and management of the liabilities, ensuring appropriate funding plans are in place for all employers in the Fund, overseeing the triennial valuation and interim valuations, and working with the actuary in determining the appropriate level of employer contributions for each employer. | Working with the actuary in determining the appropriate level of employer contributions for each employer between formal actuarial valuations ³ | HCPF and either the CFM or CMHR after taking appropriate advice from the FA. | Ongoing reporting to PFC for noting |
| , | Discretions – determining how the various administering authority discretions are operated for the Fund. | Approving administering authority discretions policy (including the Voluntary Scheme Pays Policy and Over/underpayments Policy) other than in relation to: • any key strategy/policies and • matters relating to admission bodies and bulk transfers as included in the preceding two rows. | HCPF and either CFM or CMHR (having regard to the advice of the rest of the PAP) | Copy of policies to be circulated to PFC members once approved. |

³ Note that any employer appeals to decisions made by officers relating to the rate of contributions between valuations are to be decided by the Pension Fund Committee.

| Function delegated to PFC | Further Delegation to Officer(s) | Delegated Officer(s) | Communication and Monitoring of Use of Delegation |
|---|--|---|---|
| Agreeing the Administering Authority responses to consultations on LGPS matters and other matters where they may impact on the Fund or its stakeholders. | Agreeing the Administering Authority responses where the consultation timescale does not provide sufficient time for a draft response to be approved by PFC. | HCPF and either the CFM or CMHR, subject to agreement with Chair and Vice Chair (or either, if only one available in timescale) | PFC advised of consultation via e-mail (if not already raised previously at PFC) to provide opportunity for other views to be fed in. Copy of consultation response provided at following PFC for noting. |
| Agreeing the Fund's Knowledge and Skills Policy for all Pension Fund Committee members and for all officers of the Fund, including determining the Fund's knowledge and skills framework, identifying training requirements, developing training plans and monitoring compliance with the policy. | Implementation of the requirements of the CIPFA Code of Practice ⁴ | HCPF | Regular reports provided to PFC and included in Annual Report and Accounts. |
| Determining the Pension Fund's aims and objectives, strategies, statutory compliance statements, policies and procedures for the overall management of the Fund | Making minor changes to existing strategies, statutory compliance statements, policies and procedures. These will still be required to be considered by the PFC in line with the period stated in that document. | HCPF and either the CFM or CMHR | Ongoing reporting to PFC for noting |

⁴ CIPFA Code of Practice recommends each administering authority delegates responsibility for implementation to a senior officer.

| Function delegated to PFC | Further Delegation to Officer(s) | Delegated Officer(s) | Communication and Monitoring of Use of Delegation |
|--|--|--|---|
| The Committee may delegate a | Personal Data Retention Policy - | PAM in consultation with HCPF | Ongoing reporting to PFC for noting Fundamental changes to this Policy will be highlighted to the Pension Fund Committee prior to its approval to allow the Committee to highlight any concerns. |
| | Policy for Administration and Communication of Tax Allowances to Scheme Members - | PAM in consultation with HCPF | Ongoing reporting to PFC for noting Fundamental changes to this Policy will be highlighted to the Pension Fund Committee prior to its approval to allow the Committee to highlight any concerns. |
| The Committee may delegate a limited range of its functions to one or more officers of the Authority. The Pension Fund Committee will be responsible for outlining expectations in relation to reporting progress of delegated functions back to the Pension Fund Committee. | Other urgent matters as they arise | HCPF and either CFM or CMHR, subject to agreement with Chair and Vice Chair (or either, if only one is available in timescale) | PFC advised of need for delegation via e-mail as soon as the delegation is necessary. Result of delegation to be reported for noting to following PFC. |
| | Other non-urgent matters as they arise | Decided on a case by case basis | As agreed at PFC and subject to monitoring agreed at that time. |

Process for the actions to be taken following a breach of the 110% funding level trigger*5

The funding level be monitored daily using projected asset and liability values from the PFaroe platform. On breaching the 110% funding level, a notification will be sent to the Funding and Risk Management Group (FRMG) via email on that or the following Business Day;

- Mercer will then independently verify the asset and liability values over the following 10 Business Days (the length of this
 period reflects the timeframe to receive updated data from the Fund's investment managers) to confirm that the 110% trigger
 has indeed been breached;
- Mercer will conduct analysis of the funding position assuming that the trigger has been breached, and will circulate an advice note to the FRMG no later than 20 Business Days from the initial trigger notification;
- The FRMG will hold a call within 25 Business Days of the trigger notification to discuss the advice note and any recommendation made by the Fund's advisers to the FRMG.
- The Head of Clwyd Pension Fund will then consider the advice received relating to de-risking, and will report via email their intended decision on this matter to the Pension Fund Committee;
- The Committee will be invited to provide feedback over the following 5 Business Days and:
 - o If, after receiving any comments, there are no outstanding issues for discussion (including where no comments have been received from the Committee) regarding the Head of Clwyd Pension Fund's proposed decision, if the decision is to de-risk, the FRMG will liaise with investment managers to agree documentation and instructions in line with the agreed actions within 35 Business Days from the initial trigger notification.
 - O However, if there are any issues highlighted by PFC members that require discussion, a special Committee meeting will be called to consider the issues and at that meeting the Committee will be asked whether or not to endorse the Head of Clwyd Pension Fund's intended way forward (noting that this meeting will need to be scheduled as a matter of urgency).

⁵ Agreed at 9 February 2022 Pension Fund Committee

 Following a decision to go ahead with the de-risking actions, the FRMG will work with investment managers to implement the agreed de-risking activity, which will then be reported to Committee at the next regular meeting.

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CLWYD PENSION FUND COMMITTEE

| Date of Meeting | Wednesday, 15 February 2023 |
|-----------------|-----------------------------|
| Report Subject | Pension Board Minutes |
| Report Author | Head of Clwyd Pension Fund |

EXECUTIVE SUMMARY

The Clwyd Pension Board met on the 30 September 2022 and an update was provided at the last Committee meeting. The Pension Board Protocol requires that the Board minutes are provided to the Pension Fund Committee. The Board minutes have now been finalised and are therefore attached for information.

| RECOMMENDATIONS | |
|-----------------|---|
| 1 | That the Committee note the attached Pension Board minutes. |

REPORT DETAILS

| 1.00 | PENSION BOARD MINUTES | |
|------|---|--|
| 1.00 | I LITOION DOAND WINTO I LO | |
| 1.01 | The Clwyd Pension Board met on the 30 September 2022 and an update was provided at the last Committee meeting. The Pension Board Protocol requires that the Board minutes are provided to the Pension Fund Committee. The Board minutes have now been finalised and are therefore attached in Appendix 1. | |
| 1.02 | As reported at the last Committee meeting, some of the key highlights of the meeting include: | |
| | An update on the progress of Committee induction training. | |
| | Discussion around the workforce issues within the Fund. There had been ongoing concerns about difficulties filling all the vacant roles and succession planning for staff who are approaching retirement age. | |
| | An update on the approach being taken to implement the new Communications Strategy including plans to capture members' needs and next steps. | |
| | Discussion relating to an update from the Board Secretary on the governance arrangements in place to allow the Fund to respond to market turbulence which was experienced in early September. | |
| | Discussion relating to the Wales Pensions Partnership (WPP) contract with Link Fund Solutions as the Operator for the asset pooling arrangement. Officers had been involved in discussions with the WPP Host Authority and their oversight advisers. | |
| | The Board considered their response to the findings of the Pension Board Effectiveness survey. They observed the Board appears to be a well-run and effective group. Areas they discussed included access to Board papers, hybrid/face to face meetings and trying to space meetings out more evenly. | |
| | These were discussed alongside a number of standing and other items covering information such as administration performance, asset pooling arrangements, risks to the Fund, breaches of the law, the ongoing 2022 Actuarial Valuation, cyber security and business continuity. | |
| 1.03 | The next Pension Board meeting is on the 1 March 2023. | |

| 2.00 | RESOURCE IMPLICATIONS |
|------|--|
| 2.01 | There are no resource implications to highlight other than those mentioned in the minutes. However it is worth noting that there has been some success recruiting to vacant posts since the meeting. |

| 3.00 | CONSULTATIONS REQUIRED / CARRIED OUT |
|------|--------------------------------------|
| 3.01 | None. |

| 4.00 | RISK MANAGEMENT |
|------|---|
| 4.01 | There are no specific risks to highlight. The Pension Board is a key part of the Fund's governance, providing oversight and assurance on administration and governance matters. |

| 5.00 | APPENDICES |
|------|--|
| 5.01 | Appendix 1 – Pension Board Minutes – 30 September 2022 |

| 6.00 | LIST OF ACCESSIBLE BACKGROUND DOCUMENTS | |
|------|---|---|
| 6.01 | None in this report | |
| | Contact Officer: | Philip Latham, Head of Clwyd Pension Fund |
| | Telephone: | 01352 702264 |
| | E-mail: | philip.latham@flintshire.gov.uk |

| 7.00 | O CLOSSARY OF TERMS | |
|------|---|--|
| 7.00 | 00 GLOSSARY OF TERMS | |
| 7.01 | (a) CPF – Clwyd Pension Fund – The Pension Fund managed by Flintshire County Council for local authority employees in the region and employees of other employers with links to local government in the region. | |
| | (b) Administering authority or scheme manager – Flintshire County Council is the administering authority and scheme manager for the Clwyd Pension Fund, which means it is responsible for the management and stewardship of the Fund. | |
| | (c) Committee or PFC – Clwyd Pension Fund Committee – the Flintshire County Council Committee responsible for the majority of decisions relating to the management of the Clwyd Pension Fund. | |
| | (d) Board, LPB or PB – Local Pension Board or Pension Board – each LGPS Fund has an LPB. Their purpose is to assist the administering authority in ensuring compliance with the scheme regulations, TPR requirements, and efficient and effective governance and administration of the Fund. | |
| | (e) LGPS – Local Government Pension Scheme – the national scheme, which Clwyd Pension Fund is part of. | |

- (f) SAB The national Scheme Advisory Board the national body responsible for providing direction and advice to LGPS administering authorities and to DLUHC.
- (g) **DLUHC Department of Levelling Up, Housing and Communities** the government department responsible for the LGPS legislation.
- (h) **JGC Joint Governance Committee** the joint committee established for the Wales Pension Partnership asset pooling arrangement.
- (i) CIPFA Chartered Institute of Public Finance and Accountancy a UK-based international accountancy membership and standard-setting body. They set the local government accounting standard and also provide a range of technical guidance and support, as well as advisory and consultancy services. They also provide education and learning in accountancy and financial management.
- (j) TPR The Pensions Regulator TPR has responsibilities to protect the UK's workplace pensions and make sure employers, scheme managers and pension specialists can fulfil their duties to scheme members. This includes oversight of public service pension schemes, including the LGPS. Specific areas of oversight are set out in legislation and also expanded on within TPR's Guidance and Codes of Practice.
- (k) PLSA Pensions and Lifetime Savings Association PLSA aims to bring together the industry and other parties to raise standards, share best practice and support its members. It works collaboratively with members, government, parliament, regulators and other stakeholders to help build sustainable policies and regulations which deliver a better income in retirement.
- (I) **HMT His Majesty's Treasury** HMT has a responsibility to approve all LGPS legislation before it is made.

FLINTSHIRE COUNTY COUNCIL (As Lead Authority for the Clwyd Pension Fund)

CLWYD PENSION FUND BOARD

Minutes of the meeting of the Clwyd Pension Fund Board of Flintshire County Council (as Administering Authority for the Clwyd Pension Fund), held virtually by WebEx on Wednesday, 30 September at 9.30 am.

THE BOARD:

Present:

Chair: Mrs Karen McWilliam (Independent Member)

Member Representatives: Mrs Elaine Williams, Mr Phil Pumford

Employer Representatives: Mr Steve Jackson

Apologies:

Employer Representatives: Mr Steve Gadd

IN ATTENDANCE

Mr Phil Latham (Head of Clwyd Pension Fund and Secretary to the Board)
Mrs Karen Williams (Pension Administration Manager)
Mrs Debbie Fielder (Deputy Head of Clwyd Pension Fund)
Mr Chris Emmerson (Aon)

Actions

1. APOLOGIES/ WELCOME

Apologies were received from Steve Gadd prior to the meeting.

The Chair proposed that considering the ongoing financial market turbulence, the board would defer the discussion on cashflow management and instead use the time to discuss how the Fund is managing the current situation.

2. DECLARATIONS OF INTEREST

No new declarations were made or recorded other than noting that the Chair and Mr Emmerson would be leaving the meeting for the final item relating to the Chair's position.

3. MINUTES AND MATTERS ARISING

The Chair asked for comments on the minutes of which there were none and the draft minutes of the meeting held on 8 June 2022 were confirmed as a correct record by all Board members.

4. ACTION TRACKER

The contents of the Action Tracker were discussed. As previously agreed, completed actions are now removed from the Action Tracker once reported as completed to the Board.

The following comments were made on the Action Tracker:

- 70th action: Due to the complexity of the situation updates are being received periodically from WPP but it is expected that this action will continue for some time.
- 77th action: Due to the workload of the Deputy Head of Fund there has been a conscious decision to delay this action until after the production of the 2022 accounts.
- 107th action: This was discussed within the agenda item below (Item 13).
- 109th action: This was discussed within the agenda item below (Item 7).
- 110th action: The changes to the constitution have gone to the Democracy & Constitution committee for approval.

5. COMMITTEE INDUCTION TRAINING

There are five new Committee members, who have been completing their induction training. Committee members have been provided with slides and reading material prior to the induction training sessions which are 90 minutes to two hours. They have now completed four sessions. The final session is on cyber resilience is likely to be in October.

All induction sessions have had at least half the new Committee members in attendance, with the recording having been provided

to those committee members who were unable to attend. Officers will follow up with members who have received the recordings to check that the sessions have completed.

The Committee and Board will need to complete a training needs analysis after induction training so that future training can be planned.

A key part of the training is ensuring committee members understand their role and in particular the fiduciary responsibility to scheme members and employers.

6. WORKFORCE UPDATE

The Pensions team has completed their move to the fourth floor of County Hall. Staff are on a rota to encourage them to come back into the office. There are 28 desks, which covers about half the team per day. The Board Secretary noted that the office has a "buzz" again and the impromptu feedback was that people were positive about the new space.

Currently the accommodation at County Hall is likely to only be available for a limited number of years. The Fund will need to be clear on long term accommodation requirements to ensure that this can be built into the Council's plans.

The Flintshire County Council hybrid working policy has not yet been issued

The Board Secretary discussed the national picture on recruitment and noted that there are a large number of recruitment and retention issues across both the private and public sectors. At the national LGPS level, DLUHC has recognised that this area is an issue.

The Good Governance review is due to be released early next year, and DLUHC are planning to accept most of the recommendations. An additional requirement they are considering is for each Fund to issue a workforce policy. The Chair noted that it would be helpful if both SAB and DLUHC issued guidance on how to manage the challenges relating to LGPS funds being tied to local authority pay levels and evaluation policies.

The Board Secretary noted that the Council is looking at what options there are to assist with recruitment to Council vacancies. It was confirmed to the Board that workforce issues will be on the agenda at the Advisory Panel and this will be picked up directly with Sharon Carney (FCC's Corporate Manager, People and Organisational Development who is also on the Advisory Panel).

Within the finance team, there are three ongoing vacancies. Two of those posts are new posts designed as part of the restructuring of this team that was completed a few years ago but they have been unsuccessful in recruiting to them. Currently Mercer are assisting with more of the finance work to allow the Mrs Fielder to focus on closing the Fund accounts for the year.

The key focus within the finance team now is to appoint a qualified accountant for the Fund. However, one concern is that the Council have found difficulty with recruiting qualified accountants. Separately, the job description for the governance officer vacancy has been reviewed to ensure that it is suitable and also more appealing. Mrs Fielder noted that her current plans are to retire in Summer 2024, and so that there are around 2 years to perform the training for the new accountant and ensure that team is fully resourced and able to carry out their responsibilities.

Mr Jackson noted that the Board were very grateful for Mrs Fielder providing the Fund with two years' notice of her intention to retire. He also noted that the recruitment challenge should be discussed with the Council, to ensure that the Council understands what the salary level needs to be to ensure suitable talent can be recruited to ensure continuity of the high performance of the Fund.

The Board Secretary also noted that the Council is likely to require business cases for new officer roles, as the Council moves into budgetary controls. This was a concern to the Board. They felt that the Fund should be exempt from such measures and agreed that this should be highlighted at the Advisory Panel.

Action - The Chair put a request to the Advisory Panel that the Fund is exempt from putting in business cases for the Fund to recruit.

[Post meeting note – following this escalation, Sharon Carney agreed with the FCC Chief Executive that the Fund would be exempt if any such measures were put in place].

Mrs K Williams has been reworking the administration team's job titles to attract more people, and they went to the local college to try and raise awareness with potential recruits. The Board Secretary noted that pay is an issue for some roles on the administration side too relative to the private sector.

Mrs K Williams also noted that there are 9 members of the team who are or will be in the 55 to 60 age bracket over the next few years and so there is a significant succession risk.

Chair

She also highlighted that work loads are increasing in some areas. For example, there are potentially over 10,000 members who may need further information about retirement over the next 2 years, which is a very large increase in this area. There are about 4,000 deferred members who may seek to access their benefits early. Recent experience suggests many of those eligible will take their benefits early. The positive news is that the administration team is aware of this issue thanks to the better data they now receive. The Board Secretary also noted that he was extremely pleased that the historical backlogs no longer exist which will help with the ongoing challenges.

Mrs E Williams questioned why the Council policies have to apply to the Fund given that staff are paid out of Fund assets. The Chair noted that as the Fund officers are employed by the Council, the Council's pay rates and employment policies are directly applicable.

7. COMMUNICATIONS STRATEGY IMPLEMENTATION

Mrs K Williams ran through the implementation of the new Communications Strategy. She noted that the Fund had managed to recruit the new Communications Officer which had been extremely positive.

The Fund is now planning satisfaction surveys and focus groups to feed in the communications strategy implementation so that the Fund can better understand what the members want in relation to communications.

The Fund is also looking to develop short videos including one to explain the annual benefit statements which is intended to help reduce the number of queries that the Fund receives.

At this point the Fund is just asking for people to volunteer to take part in these focus groups as part of the satisfaction survey. However, if required a more direct approach to enrol participants will be taken. Mrs K Williams confirmed that there would be no payment for taking part in the focus groups.

8. 2022 ACTUARIAL VALUATION

Mrs Fielder updated the Board on the progress with the actuarial valuation. There was a steering group meeting on 29 September and overall the timetable remained on track.

Valuation results have been shared with the three Councils, and there is a plan to discuss these with the college and university shortly. The draft Funding Strategy Statement will go to the next committee after which it will be sent to the employers for consultation.

The results currently being shared are contingent on the Committee approving the Funding Strategy Statement at the next meeting. The most interesting element proposed at this point is that surpluses are being passed back to employers in a managed fashion.

9. TCFD CONSULTATION

The consultation has come out earlier than expected and the officers are working on the response with help from Mercer. The consultation is focused on how the LGPS will manage TCFD and how this might differ from the private sector implementation.

The timing is relatively good for the Fund as the deadline is after the next Committee, allowing this to be discussed and approved at the next meeting.

10. RECENT MARKET TURBULANCE

The Chair noted that the Board's remit does not cover what the Fund invests in and how these investments are managed. However, the Board's remit does cover effective and efficient governance of the Fund's investments.

The Board Secretary gave an overview of the governance in place for the investments of the Fund including the following points:

- The key document is the Investment Strategy Statement which is approved by the Committee.
- The ISS contains ranges for the level of investment in various assets which allows the Fund to respond, and still meet the Fund's strategy requirements, where atypical market movements mean changes in investments are necessary. The Fund also has an effective Scheme of Delegation to officers, and this is supported by professional advice from the investment advisors, who at the moment are Mercer. The Advisory Panel are also kept up to date with developments.
- The Funding Risk Management Group (FRMG) meets to discuss how to manage the situation as frequently as is needed, but at the moment that group has been meeting daily to allow the Fund to take urgent action if needed.
- There is also another group the Tactical Allocation Group (TAG) - which meets to determine any changes to the

- asset allocations with the Best Ideas portfolio. This group saw risks emerging and so held slightly more assets in cash to retain a lower risk position.
- There are also delegations from the Fund to Insight Asset Management, to manage the effect of changing interest rates. The Board Secretary takes great comfort that Insight Asset Management can close down the process in the interest of the Fund without the Fund having to take direct action.
- The Fund also has a collateral waterfall which has prevented the Fund from becoming a forced seller of assets. This collateral waterfall has worked as intended, which bought the officers' time to determine which assets should be moved into the collateral waterfall to top it back up.

The Board Secretary noted that there will be some losses to the Fund's assets because this is an unusual situation, however due to the way the structure is set up these losses won't be completely locked in, which also protects the Fund.

The officers are now starting discussions with the Fund's investment consultants, Mercer, on the review of the overall investment strategy, to determine what opportunities there are and how they ensure that the strategy stays relevant over the long term.

Despite the assets reducing, the liabilities have also fallen which has improved the funding level for the Fund. The Actuary is spending time considering what the most appropriate discount rate to use for future valuations is.

The Board thanked the Board Secretary, Mrs Fielder and the whole team for the work they had been carried out during the recent turbulence in the markets. It was also noted that the governance arrangements provide the necessary agility to allow effective management of the assets of the Fund.

The Chair noted that the key governance elements are ensuring that the right advice has been received and the right decisions have been documented. This will feed through to the update reports provided to the Committee.

The Board Secretary also noted that there may be some external criticisms of the Fund's investment strategies, and this needs to be managed as well.

11. ADMINISTRATION UPDATE

The Chair invited Mrs K Williams to provide the administration update.

Mrs K Williams covered the KPIs particularly noting that these show the number of cases being completed is increasing both over the last month and over the last 12 months. The KPI's for benefit quotations have improved slightly, but this is due to enhancements to MSS allowing members to have better control of the quotes they receive. Overall, the number of cases completed is slightly lower than previous months, and this is probably due to staff holidays. Despite this, the number of cases has increased dramatically compared to the equivalent month last year.

A key area of focus is to ensure that the team manages to stay broadly on top of the number of cases being completed, to avoid the return of a significant backlog. It was noted that this work needs to be managed in a way to ensure that other projects such as the Pensions Dashboard and late pay award can be managed without a drop in the completion of BAU cases.

Mrs K Williams noted that some additional facilities have been made available on Member Self-Service (MSS), such as on-line retirement processing. However, managing member expectations continues to be needed around the speed of services which require officer input.

Mrs K Williams noted the Fund would plateaux at a Common and Scheme Specific data score of around 98% as the benefit of fixing the remaining data issues is lower than the cost of the time taken to fix the issue. However, these will be categorised and prioritised, and if they can be resolved efficiently then the officers will seek to do so.

Mrs K Williams also provided updates on the employer performance reports. She also confirmed there had been no pension scams and she shared the website analytics.

12. MCCLOUD REMEDY PROJECT

Mrs K Williams provided an update on the McCloud project. The Fund has a meeting with Heywood Pension Solutions to discuss the bulk upload process and data validation. The aim is to avoid as much manual intervention in the process as possible. Flintshire and Wrexham are using the ELT which is positive but she noted that some other employers are suffering from resourcing challenges.

The next McCloud project Steering Group meeting has been deferred, and instead a covering note will be issued to the Steering Group. There is an expectation that the new regulations will not be released before Christmas 2022. If there is a major change in this, the need for a Steering Group meeting will be reconsidered.

The Board confirmed that they are happy with deferring the next McCloud Steering Group meeting.

13. CYBER & BUSINESS CONTINUITY

Mrs K Williams discussed the positive progress with Flintshire County Council. The questionnaire has now been completed to allow Aon's cyber specialists to assess Flintshire's cyber security resilience in relation to the systems and infrastructure that the Fund relies on. The aim is to take the results of the review to the November committee meeting.

14. COMPLIMENTS AND COMPLAINTS (INCLUDING IDRP)

Mrs K Williams +noted there had been a number of positive messages received, and pleasingly no complaints raised to the Fund.

15. ASSET POOLING

The Board Secretary noted that the WPP Joint Governance Committee did not take place due to the period of national mourning following the death of the Queen. The next meeting will be held on 5 December 2022. The main impact of the cancellation of the meeting is that the Fund may not be able to use WPP for private equity allocations in 2023/24 as hoped and will instead continue to use Mercer for this work in the meantime.

There are two issues with Link Fund Solutions who are the Pool's platform provider. The first is the FCA investigation of Link Fund Solutions' management of the Woodford Fund. The second is the planned purchase of Link Group by Dye & Durham.

Following the FCA's notices about the possible redress payment of approximately £300M for Link Fund Solutions, the purchase of Link Group by Dye & Durham will no longer be proceeding.

The Board Secretary noted that he is confident that assets of the Fund remain safe based on verbal assurances from WPP and the WPP advisors. The Board Secretary had also asked for assurance from WPP and their advisors on the position of Link Fund Solutions if this situation escalated, impacting business as

usual for WPP and the Fund. Assurance was given that legal advice had been sought by WPP.

However, the Board Secretary expressed discomfort in the absence of any written confirmation to Constituent Authorities of the position from the WPP.

The Chair also noted there was a risk that WPP and the Fund may see a reduction in service from Link Fund Solutions due to the ongoing uncertainty of their trading position.

The Board highlighted their concern about the lack of formal communications with assurances from WPP.

Action - The Board asked the Chair to escalate, through the Board Chair's group, a request for additional formal communications with assurances to be issued to the Fund.

The WPP is continuing their progress on launching a global equity sustainable investment sub-fund.

There has been an agreement that Hymans, WPP's Oversight Advisor, will gather the information about Carbon exposure to provide to Welsh Government to assist with their questions about carbon exposure and Net Zero.

There has been some progress on the appointments of Private Market allocators. Work is now being started on Property exposures across the eight funds in the WPP.

16. RISK REGISTER

The Chair provided a brief overview of the changes included in the latest risk register. The Board had no further comments on this area.

The Chair noted that Flintshire County Council have reviewed how they manage their risk register. Some consideration may need to be given to the risk register reporting in the future.

17. BREACHES LOG

It was noted that there were several new breaches relating to an employer who is facing ongoing issues providing either payment or remittances.

Action - The Board requested that an email is sent to this employer noting that if there are any further breaches the Fund will need to report this employer to the Pensions Regulator.

Deputy Head of Clwyd Pension Fund

Chair

The Board had no further comments on this area.

18. UPDATES FROM RECENT EVENTS ATTENDED BY BOARD MEMBERS

Mrs E Williams gave an update on the Barnet Waddingham Pension Board event. As part of the event, she led the discussions on the TPR Code of Practice within her subgroup, and found the discussions very helpful. It was recommended that a member of the Board take part in this event again in the future.

19. CONSIDERATION OF 31 AUGUST 2022 COMMITTEE PAPERS

The Board had no comments on this area.

20. INPUT INTO ADVISORY PANEL AND CPF COMMITTEE

It was agreed to raise the following points at the next meeting of the Advisory Panel:

- a) The Board's concerns about:
 - the ongoing resourcing situation of the Fund,
 - the ongoing FCA investigation and potential sale of Link Fund Solutions: and
- b) the Fund's strong governance arrangements and how this allowed the officers to manage the recent market turbulence.

Action - Chair to raise these points

Chair

21. PENSION BOARD EFFECTIVENESS SURVEY

The Chair introduced the results of the Pension Board Effectiveness Survey that was run over the summer.

There are a small number of key themes: access to Pension Board information and Pension Fund documents, the format and timing of Board meetings and the feasibility of reporting information on an exception basis. It was noted that in each area concerns were only raised by one or two members.

The Chair ran through what a document management system might include and how this would help with access to information and documents. The officers put forward a proposal to use a document management tool for the ongoing McCloud project, which would allow the McCloud Steering Group to determine if the system is suitable and useful. If this group finds the tool useful then it could be extended to the Board. The immediate feedback from the Board is that this system could add real value. The Chair ran through the considerations around exception reporting. There

was a concern raised that if the officers do not share all information with the Board, then the officers are determining what is being shown. The Board determined that as an oversight board it was helpful to see all the information. However, it was agreed it was important to ensure most time is spent on discussions on the key items and less on items only provided for information.

The Chair highlighted that a briefing note could be issued with the Board agenda, as is done for the Committee. However, the Board agreed that this was not necessary for the Board meetings.

Action - Board members did agree that the agenda should be structured to put the items for discussions at the beginning and the items for note at the end.

The Chair noted that the Fund has three meetings, whilst TPR suggests four. However, generally, the Boards that have four meetings do have shorter meetings. The Board considered that three meetings left them quite well spaced, but that it was not practical to cut down the agenda as most of the items are standing items. It was therefore agreed to continue with three long meetings.

The Board agreed that hybrid meetings are very difficult to manage and should be avoided. The feeling was that there should be at least one meeting a year should be face to face and that at the end of each Board meeting, the members agree whether the next meeting should be face to face, hybrid or virtual. The Board also noted that the spacing of the meetings could be improved.

Action - The Board agreed that the next meeting on 1 March 2022 would be face to face, and that the format of all the next meeting would be agreed as part of each meeting.

Action - The Board also requested that dates for Board meetings are considered for the 2023/24 Scheme year to ensure they are better spaced.

22. FUTURE WORK PLANS

The Board noted the items on the future work plan.

The Chair noted the Good Governance consultation response is expected early next year along with the TPR Single code of practice.

Action - Add management of Cashflows and Good Governance project to the agenda for the next meeting

Board Secretary

Board Secretary

Board Secretary

Board Secretary

23. PENSION BOARD BUDGET

Mrs Fielder noted the Pension Board budget and asked the Board to raise any questions. No questions were raised.

24. FUTURE DATES

The Board were asked to note the proposed dates relating to future meetings as follows.

- 1 March 2023
- 27 June 2023.

The Board were further asked to note other meetings and training including the essential training on 5 October covering the investment strategy review, and the WPP training on Roles and Responsibilities on 19 October. Also available is the LGA Conference in Cardiff on 19 to 20 January and the Investment conference at Carden Park later in the year.

There is also PFC on 23 November and the AJCM on 13 December.

25. ANY OTHER BUSINESS

There was no other business raised by the Board.

The Chair and Mr Chris Emmerson (Aon) left the meeting due to conflict of interest with item 26.

26. REVIEW/TENDER INDEPENDENT ADVISOR CONTRACT

The Board Secretary asked for views and comments from Board Members on recommending to the next Pension Fund Committee the use of the two year extension period within the Independent Advisor (and hence Board Chair) contract.

