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# Investment Discussion Forum

18 July 2022

# Agenda

## Part 1. Introduction

Summary of SIP feedback and the Trustee's response;

IC and Board decision making in relation to investment strategy;

## Part 2. Defined Benefit investment topics

Implementation of investment strategy (including the new Investment Framework);

Leverage and Hedging (approach and current position);

## Part 3. Other topics

Defined Contribution;

ESG and Net Zero.

# Part 1: Introduction

# Forum objectives and a summary of the SIP feedback and Trustee response

# Trustee response to the VIS and SIP consultation feedback

We received SIP consultation responses from 40 individual employers, representing 25 pre-92 employers (including 16 of the 24 Russell Group members) 11 post-92 employers, two non-HEIs and two Oxbridge colleges. Employers who responded to the consultation account for 52% of active scheme members and 51% of the Technical Provisions liability.

A detailed response to feedback on the VIS and SIP was shared with employers at the end of June, via three documents:
2022 SIP consultation - Trustee's response to employer feedback; 2022 SIP consultation - Analysis of feedback; 2022 SIP consultation – Trustee's response to Aon briefing.
The Trustee has also committed to sharing more information:

## Engagement events

- Six-monthly investment discussion forums;
- Quarterly briefing sessions for all employers on funding, investment, covenant and other topical matters, starting in Autumn 2022.

## Some minor changes to the SIP

- Reference to the basis risk between sterling and non-sterling assets (i.e., between UK index linked gilts and similar instruments issued by foreign governments);
- Reference to the counterparty risk that the Scheme faces in transacting with other financial institutions;
- Reference to the regular review by the Trustee Board of ESG-related policies to ensure they are in line with good practice.

## Additional information on investment strategy

- Providing the ranges of allocations around the VIS.

## Improving ease of online access to documents that provide more detail

- A new hub has been provided on the USS website to make it easier for employers to find specific documents in relation to investment strategy, as well as other related and relevant documents.
- [Investment-related documents and briefings (uss.co.uk)]

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# Investment Committee and Board decision making in relation to investment strategy

**Russell Picot**, Trustee Director and Chair of Investment Committee

# Remits of the USSL Trustee Board, Investment Committee and USS Investment Management Board

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## USSL Trustee Board

1. Overall leadership, strategy and oversight of USS Group
2. Responsible for approving overall investment strategy (DB and DC), investment objectives and risk appetites, IMAA with USSIM, investment related inputs for the valuation (upon IC recommendation)

## Investment Committee ("IC")

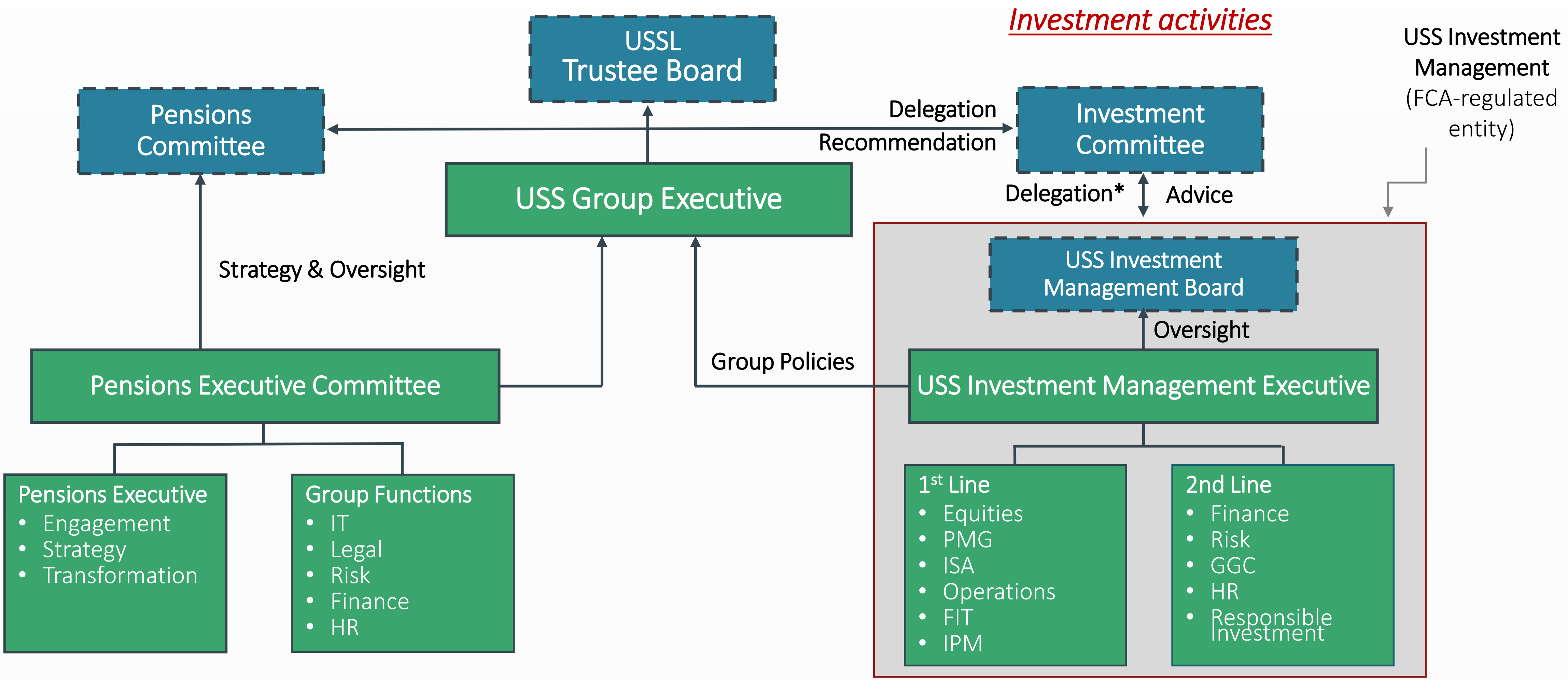
- Primary responsibility is to advise (and where delegated, decide) upon investment strategy and investment risk appetite matters for the USSL Board and oversee USSIM's execution of the investment strategy
- Also responsible for overseeing the delivery of services provided by USSIM under the IMAA*
- As part of this, the Investment Committee reviews USSIM's business plan, budget and other investment costs prior to final approval by the Trustee Board, as well as regular investment performance and risk reporting

## USS Investment Management ("USSIM") Board

- Primary responsibility is to run an FCA-regulated business to deliver investment management and advice services to its client, USSL
- It is responsible for overseeing the processes and controls to deliver those services

* *The IMAA is the Investment Management and Advisory Agreement between USSL and USSIM*

# High-level executive and non-executive investment governance




Non-executive

Executive

Acronyms

PMG = Private Markets Group

ISA = Investment Strategy & Advice

FIT = Fixed Income and Treasury

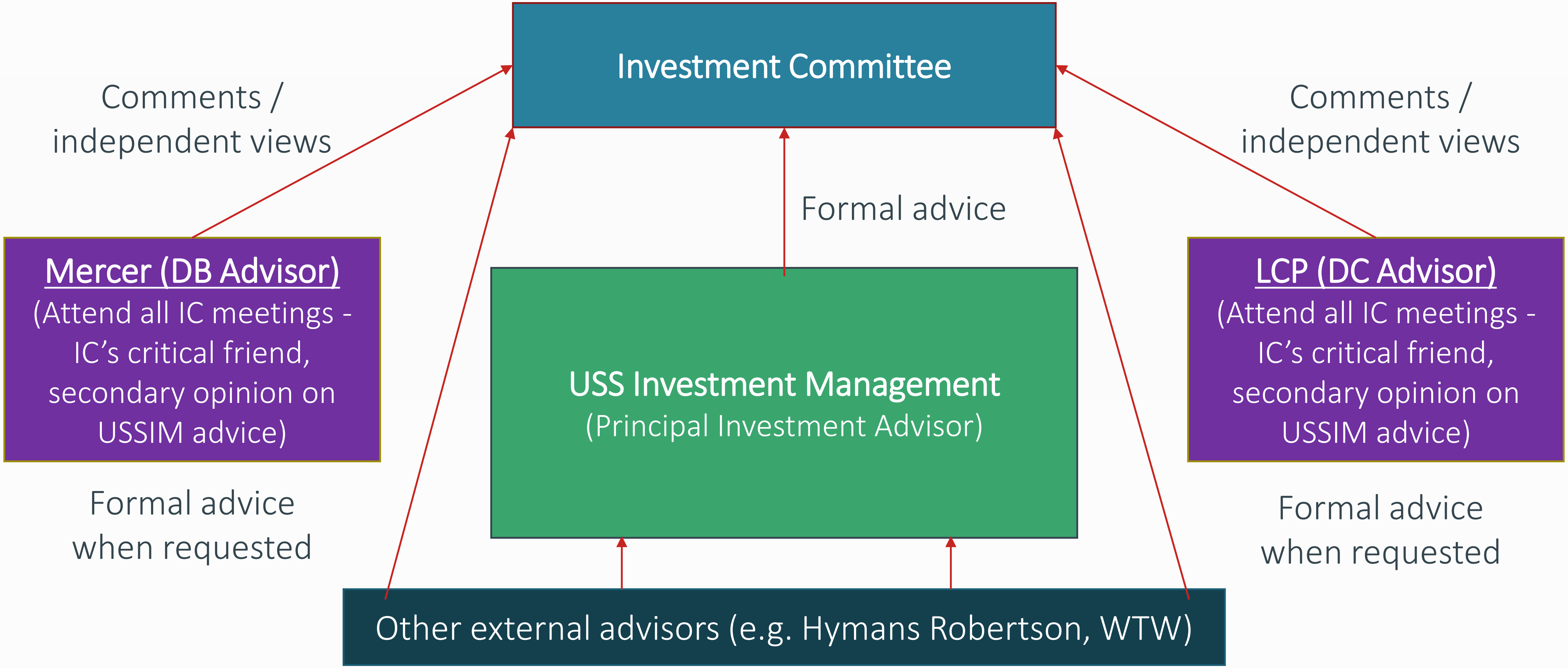
IPM = Investment Product Management

GGC = Group General Counsel

* *Delegation via the Investment Management and Advisory Agreement (IMAA) and Instruction letter*

# Advice to the Investment Committee

Generally investment advice is provided to the Investment Committee, and then the Investment Committee makes recommendations to the Trustee Board. However, investment advice (either from USSIM or an external provider) can be given directly to the Trustee Board as and when required.



# Part 2: Defined Benefit investment topics

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# Implementation of the investment strategy

# How does the Investment Framework Align with Risk Appetite?

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The Investment Framework ensures that:

1. USSIM is **aligned** with the risk appetites and investment objectives of the Trustee

2. USSIM is **aligned** to the interests of the Scheme's members

3. There is a **holistic** approach to risk management and the assessment of USSIM.

Risk Appetite Statements (RASs)

↓

Key Risk Indicators (KRIs)

↓

Asset Liability Management (ALM) Framework

↓

Valuation Investment Strategy (VIS)

↓

Investment Management and Advisory Agreement (IMAA)

↓

DB Implemented and Strategic Portfolio and the USSIM DB Investment Balanced Scorecard[1]

# Trustee Investment Risk Appetite

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- As part of the 2020 Valuation we worked with the Trustee to determine the investment risk appetite:

  1. This was carried out between the USSIM and USSL Executive, the IC and the Trustee via the joint consideration of the covenant assessment, stakeholder views and multiple risk and return measures across short and long-term horizons.
  2. The resulting Valuation Investment Strategy (“VIS”) represented a broad asset allocation for use within the valuation
  3. The process also contributed to the risk appetite framework within which USSIM is now mandated to operate

*The Trustee’s Risk Appetites shaped the DB Investment Key Risk Indicators and the Valuation Investment Strategy*

The DB Investment KRIs are specified in USSIM’s DB Investment framework[1]:

| Risk | DB Investment Key Risk Indicators | Purpose |
|---|---|---|
| Investment Risk | 1. a) A projection of the affordability metric from the IRMF in 3 years (which is the 95th percentile of the expected self-sufficiency deficit net of asset transition risk, expressed as a % of salary over 30 years)<br>b) Self-sufficiency deficit VaR95 | Creates a link between the downside risk associated with the scheme’s Self-Sufficiency funding position (the trustee’s benchmark for risk) and the sector’s affordable risk capacity (a measure of covenant strength) |
| | 2. a) Probability of TP full-funding by the end of deficit recovery period<br>b) Expected return of Implemented Portfolio (IP) vs VIS<br>c) Asset liability volatility (using gilts-flat liabilities, scaled to assets) | Ensures the scheme’s implemented portfolio remains within the risk and return characteristics associated with the VIS |
| | 3. a) Self-sufficiency hedge ratios (rates / inflation)<br>b) Divergence of % of Growth assets relative to the VIS<br>c) Number of breaches of active risk guidelines | Ensures the scheme’s rates / inflation risk exposure is appropriately managed, while maintaining the upside potential associated with growth assets and is managed within appropriate active risk limits |

[1] The USSIM DB KRIs reflecting the Trustee’s Liquidity and Counterparty risk appetite statements are given in the liquidity management section

The VIS was specified using the ALM Framework:

| | VIS (30/09/2021)[1] | VIS (Estimated 30/06/2022) |
|---|---|---|
| Growth | 60% | 60% |
| Credit | 25% | 25% |
| LDI (Hedging)[2] | 52% | 37% |
| *Funded LDI* | *25%* | 25% |
| *Levered LDI* | *27%* | 12% |
| Leverage | -37% | -22% |

[1]Allocation as quoted at the 2021 Away Day.
[2]% LDI allocation is sized to ensure a 40% hedge ratio

# What is the Valuation Investment Strategy (the "VIS")?

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- The Valuation Investment Strategy:
  - Is aligned with the valuation methodology/assumptions & Trustee risk appetite
  - Is similar to the old Reference Portfolio in formulation/composition
  - Helps guide the development of the implemented investment portfolio, but is not the implemented portfolio

## Key components of the VIS

- Growth: Maintains a high allocation to growth assets over time
  - Maintains a **growth asset allocation of c. 60%**
  - **Higher allocation to growth assets over time than the 2018 valuation** (which reduced growth assets by c.7.5% every 3 years)

- Credit: Provides a diversified asset allocation over time
  - Provides a **credit asset allocation of c. 25%**

- Hedging: Has increased hedging of liability-related risks (inflation risk and interest rate risk)
  - **Reduces the total risk** (relative to the liabilities) and **reduces the imbalance between different risks**
  - **Hedge Ratio** (relative to self-sufficiency liability) **increased to 40% for both interest rate and inflation**

- Leverage: Has increased leverage
  - The additional leverage allows increased liability hedging **without** reducing the allocation to growth assets

# What is the DB Investment Framework?

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The DB Investment Framework is:

1. A replacement for the DB **Reference Portfolio framework**
2. An arrangement for DB **investment risk management**
3. An approach for the Trustee to **assess USSIM's DB investment achievements**.

The rationale of the Investment Framework is to:

1. Remove the **disproportionate focus** on the single DB Reference Portfolio (for risk and return purposes)
2. Better **align** USSIM efforts to the Trustee's wider DB objectives and investment policies
3. Introduce a **multi-faceted view of risk** through Key Risk Indicators (in line with the Trustee's investment beliefs)
4. Make USSIM **more accountable** for the Trustee wider DB funding goals (via the USSIM DB Investment Balanced Scorecard).

*The Investment Framework includes Investment Key Risk Indicators for risk management and a scorecard for assessing USSIMs investment achievements*

# What does the balanced scorecard look like?

1 INVESTMENT RETURN

2 INVESTMENT RISK

3 ACTIVE MANAGEMENT

4 PORTFOLIO RESILIENCE

5 RESPONSIBLE INVESTMENT

6 INVESTMENT ADVICE

# What is the USSIM Strategic Portfolio?

The USSIM Strategic Portfolio is delegated to USSIM's Asset Allocation Committee (AAC) and provides the **direction of travel** for the asset allocation of the DB fund. It is:

1. A **high-level capital asset allocation**, alongside liability hedge ratio and foreign currency targets

2. An allocation to both **public** and **private** markets

3. The AAC's desired 'neutral position' over a **2-3 year time horizon.** A series of ranges are agreed with the AAC within which the **Implemented Portfolio** is expected to operate.

The AAC also sets **statements of intent** for providing guidance to USSIM's investment desks on the desired asset characteristics and other factors (for example, ESG and operational efficiency).

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# The Approach to (and recent impact of) Hedging and Leverage

# Hedging liability-related risks helps us to manage the overall level of risk

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- **The return impact of liability hedging depends on potential changes to UK real interest rates**[1]
    - All else equal, if UK real interest rates:
        - *FALL*, the hedging would be 'profitable', but the funding level would deteriorate and future service costs rise
        - *RISE*, the hedging would not be 'profitable', but the funding level would improve and future service costs fall

- **There are benefits from hedging liability-related interest rate and inflation risks**
    - Hedging a proportion of the liability rates and inflation exposure **reduces the total risk** (volatility, relative to liabilities).
    - We believe that growth asset risks are more likely to be rewarded over the long term, and so we look to balance our exposure to return seeking and risk reducing assets.
    - **Leverage** enables us manage these exposures; however, leverage must be applied within risk appetite.
    - **Hedging does not remove all the liability-related risks**, but it does reduce them.

[1] We provide a stylised example of this process in the appendix

# Leverage is an important tool in investment management

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- **What do we mean by leverage and collateral?**
  - Leverage involves a **collateralised form of "borrowing"** using various financial instruments
  - **We "post" and "receive" collateral** when managing leverage. This protects both the lender and the Scheme in the event of default.
  - We therefore have to closely control our ability to manage collateral when considering the level of supportable leverage

- **What is the purpose of leverage?**
  - The primary purpose of leverage is to facilitate efficient risk management and capital deployment
  - Like many UK DB schemes, leverage is an important building block of the USS investment strategy and has been for many years
  - We are deploying increased leverage to
    - fund the increased hedge ratios, and
    - maintain a similar expected return (via retraining a high level of growth assets)
  - In combination this approach reduces the impact of adverse changes in interest rates and inflation on the funding position while maintain exposure to potential upside from return seeking assets.

- **How does leverage interact with the wider portfolio?**

  All else being equal, the higher the allocation to growth assets, the higher the leverage required to support the same hedge ratio.

  The level of supportable leverage is constrained by collateral requirements and operational/regulatory limits (see next page)

# Leverage is an important tool in investment management

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- **Leverage improves asset-liability risk management, but introduces other risks**
  - Because of the requirement to post collateral and the risks associated with leverage, it needs to be monitored and managed carefully
  - Some of our leverage controls include:
    - **Leverage monitor** – are we staying within allowed bands?
    - **Liquidity monitor** – could we run out cash?
    - **Counterparty risk monitor** – are we diversifying across counterparties? Is counterparty creditworthiness acceptable? Is the counterparty exposure within the specified limits?
    - **Limits on repo processes** – reduce risk associated with rolling repos
    - **Stress testing collateral demand** – could we run out of collateral?
    - The associated **DB Investment Framework KRIs** are given below

| USS leverage (June 30th 2022) | |
|---|---|
| Source of Leverage[1] | Amount in £ |
| Bond and Equity Swaps/Futures | £8.6bn |
| Repo/Gilt TRS | £7.4bn |
| Interest Rate & Inflation Swaps | £10.2bn |
| Commodity Swaps | £1.2bn |
| Cash assets (negative leverage) | -£1.9bn |
| Total (net of cash assets) | £25.5bn (32.8%) |

[1] *Prevailing funding costs are a key determinant with respect to the source of capital for the purposes of hedge ratio management.*

| Risk | DB Investment Key Risk Indicators | Purpose |
|---|---|---|
| Liquidity | The probability of running out of cash in 1 week<br>The probability of running out of collateral in 12 months | Ensures the portfolio maintains an adequate level of liquidity at all times. The underlying metrics are monitored on a dynamic basis, ensuring the liquidity position is maintained across all market conditions |
| Counterparty | The probability of losing 0.5% of Scheme NAV from any single counterparty default in a 12 month period | Ensures the scheme's counterparty exposure is appropriately diversified |

# Part 3: Other topics

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# The Investment Builder

# What is Investment Builder?

£40,000

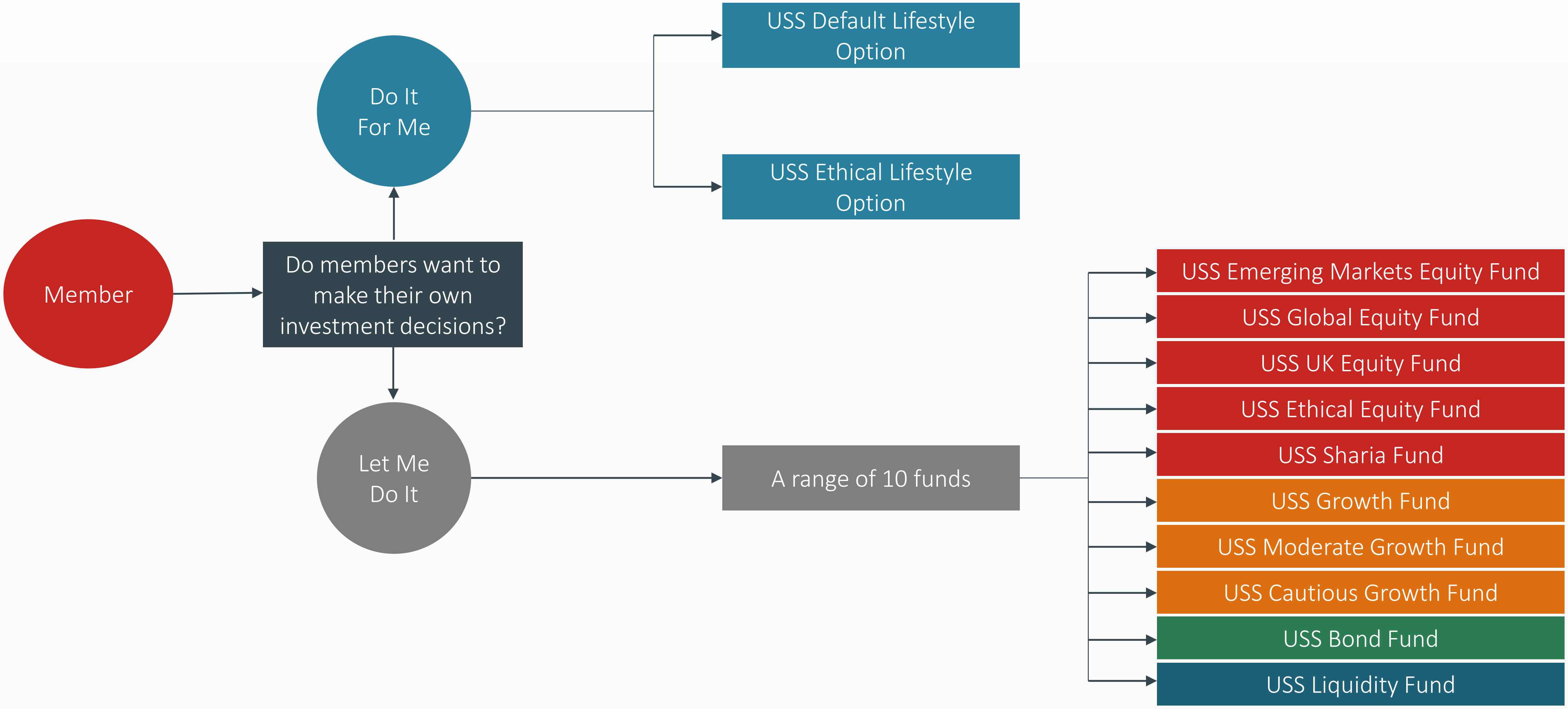
Salary

DB
(Retirement Income Builder)
1/75ths + 3/75ths lump sum

DC
(Investment Builder)
20% total contribution

Death in Service Benefits

# Members have control over how their pot is invested

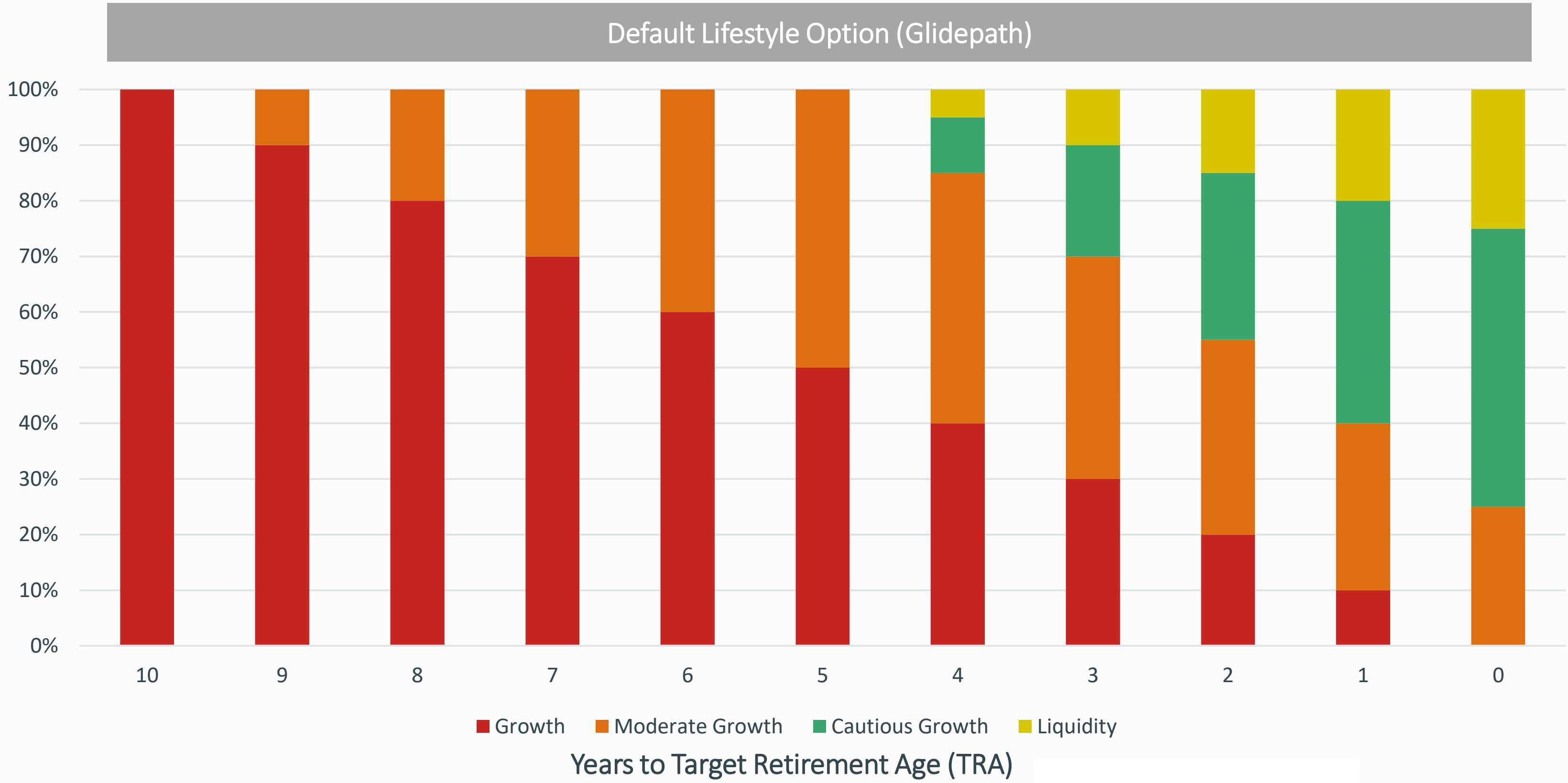


# The majority are invested in the Default Lifestyle Option

**89%**
of members are entirely invested in the USS Default Lifestyle Option

**+6.9% p.a.**
return of the USS Growth Fund since inception to 30 June 2022

**£1.4bn**
invested in the USS Growth, Moderate Growth, Cautious Growth and Liquidity Funds



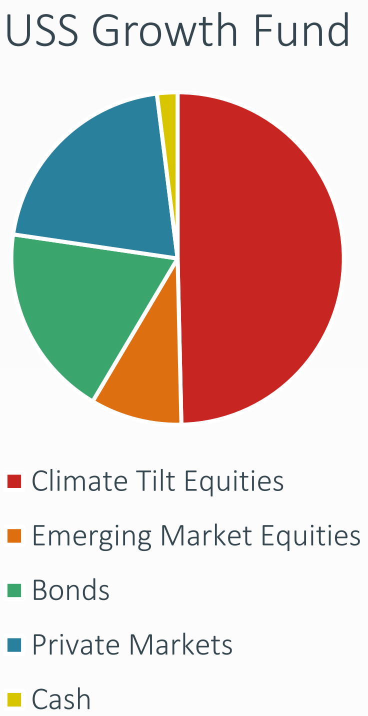

Earlier this year, the Investment Committee and Pensions Committee reviewed the USS Default Lifestyle Option and confirmed it remains appropriate given the changes to the Scheme

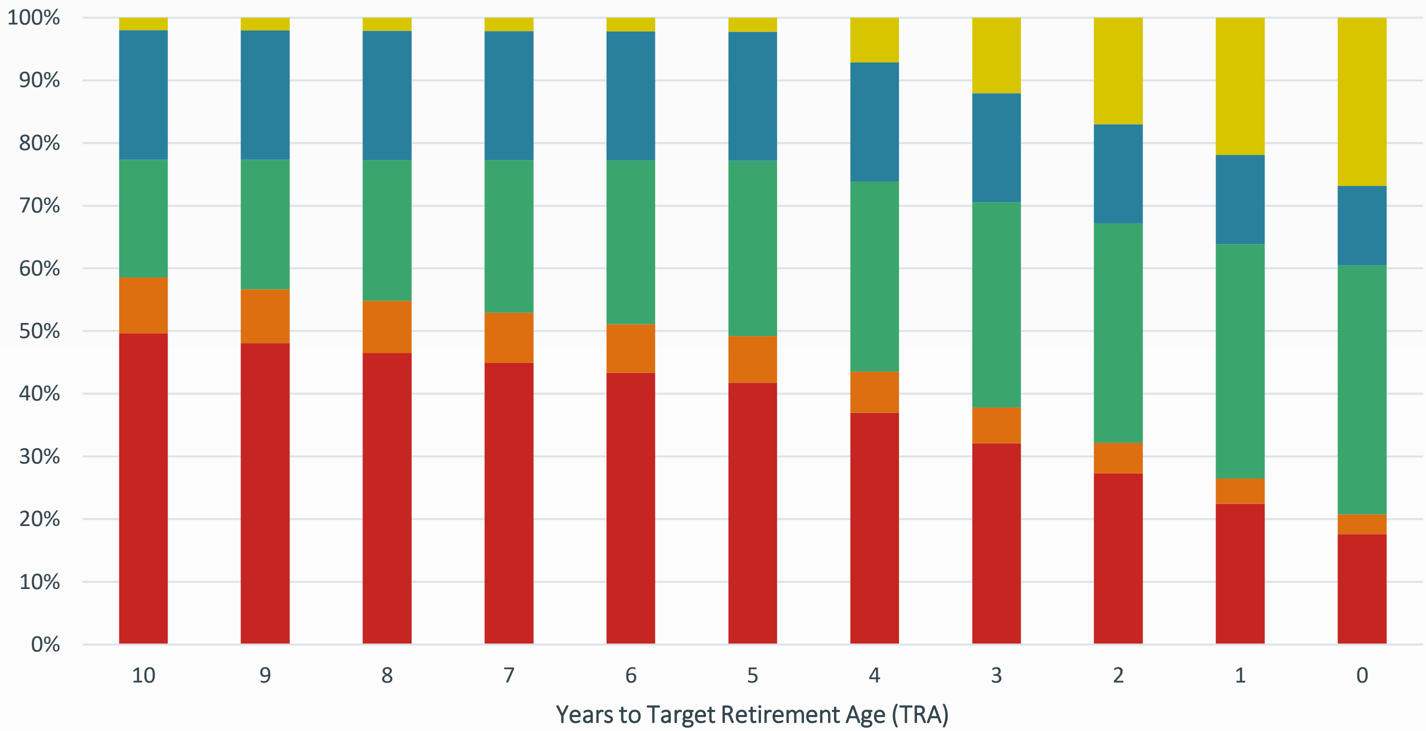
# DC investments are diversified and benefit from the scale of the overall Scheme

**over £650m**
invested in a specially designed Climate Tilt equity strategy

**over £250m**
invested in private market strategies

**30bps IMC**
subsidised for the majority of DC saving pots



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# Responsible Investment and Net Zero

# What we do - Responsible Investment at USS

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Large in-house team supporting internal investment teams

Multi strategy RI approach:

1. Integration: we include material Environmental, Social and Governance (ESG) factors within our investment decision-making processes
2. Engagement, voting and stewardship: using our influence as owners to promote good ESG practices
3. Market transformation activities: engagement with policy makers & regulators to articulate the concerns of asset owners and long-term investors.

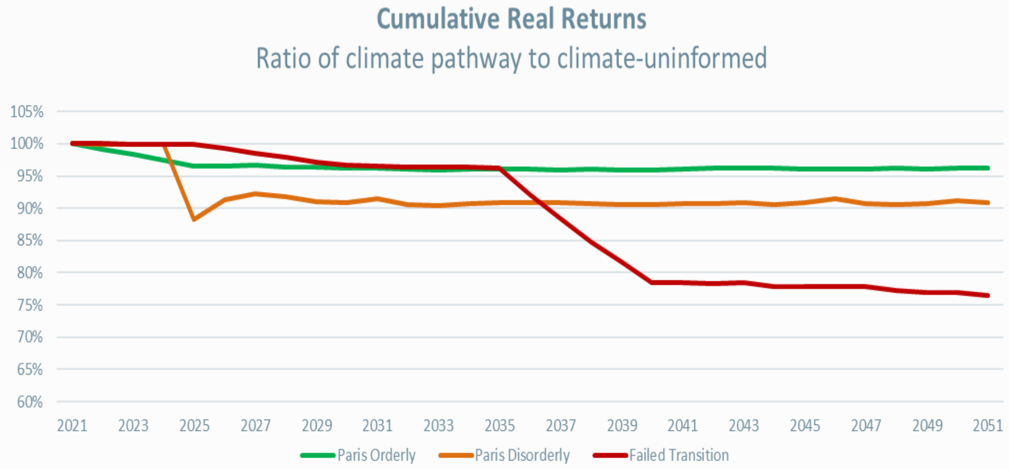
Taking action on human rights

We joined two collaborative investor engagements (led by the International Association on Human Rights) with companies invested in Myanmar, to understand how they were protecting their workforce and contributing to the potential reintroduction of democracy to the country. In addition, our portfolio managers raised the issue of Uyghur Muslims in the supply chains of both their Chinese holdings and international companies with China-based suppliers. We will continue to engage companies on these issues. See Principle 9 for more information.

# Net Zero – what have we done?

- Set an ambition to be Net Zero by 2050 if not before
- Chosen interim targets - we are seeking intensity reductions for corporate assets of:
  - By 2025 – 25% reduction
  - By 2030 – 50% reduction
- Chosen a carbon / climate data provider to work with to
  - Enable us to calculate our baseline carbon footprint
  - Enable our portfolio managers to track their progress
- Chosen metrics for measurement and reporting of our carbon footprint
- Undertaken climate scenario analysis

| Metric | Example |
|---|---|
| Absolute emissions | Total portfolio emissions tCO2e |
| Emissions intensity | Carbon footprint – tCO2e/£ invested |
| Alignment | % portfolio emissions attributable to assets aligned with a well below-2 degree pathway |



# Recent Net Zero focussed activities

- USSIM Net Zero Steering Committee and Asset Class Working Groups
  - Each asset class to deliver its share of USS's overall targets and ambition
  - Establishing asset class specific transition plans
- Allocated £5.5b to climate tilted mandate
  - The transition is complex and we cannot divest ourselves to reaching the target
  - Climate Transition Benchmark overweighs companies that are decarbonising
- £500m in a new Sustainable Growth Mandate
  - Will invest in businesses that will help companies and the broader economy to decarbonise

# Carbon Footprints - Anhui Conch Cement Company

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- One of the largest emitters in GEMs portfolio and significant at Scheme level
- Chinese cement company
- Cement intrinsically high carbon – process emissions and high energy use

What have we been doing?

- Engaged with the company on its transition plans
- Requested better data
- Build cost of carbon into investment model

CONCH 海螺水泥

| Company | Company Scope 1 + 2 Emissions (tCO2e) | Company Scope 1 + 2 Intensity (tCO2e / £m) | Contribution to USS Scope 1 + 2 Emissions (tCO2e) |
|---|---|---|---|
| Eskom Holdings SOC Limited | 221,777,071 | 7,152 | 235,096 |
| Anhui Conch Cement Company | 202,860,801 | 9,222 | 186,068 |
| CEMEX, S.A.B. de C.V. | 40,977,871 | 2,839 | 133,234 |
| Shell plc | 74,048,404 | 379 | 111,785 |
| China Petroleum & Chemical Corporation | 170,940,000 | 1,742 | 88,766 |
| PJSC LUKOIL | 43,651,492 | 951 | 80,436 |
| POSCO | 75,649,882 | 2,518 | 79,921 |
| Tata Steel Limited | 62,895,845 | 2,952 | 76,976 |
| UltraTech Cement Limited | 49,623,550 | 2,196 | 74,512 |
| Glencore plc | 24,344,000 | 337 | 54,268 |

# Integrating Climate into Investment Decisions

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Integrating climate and carbon into investment  decision making  processes, for example:

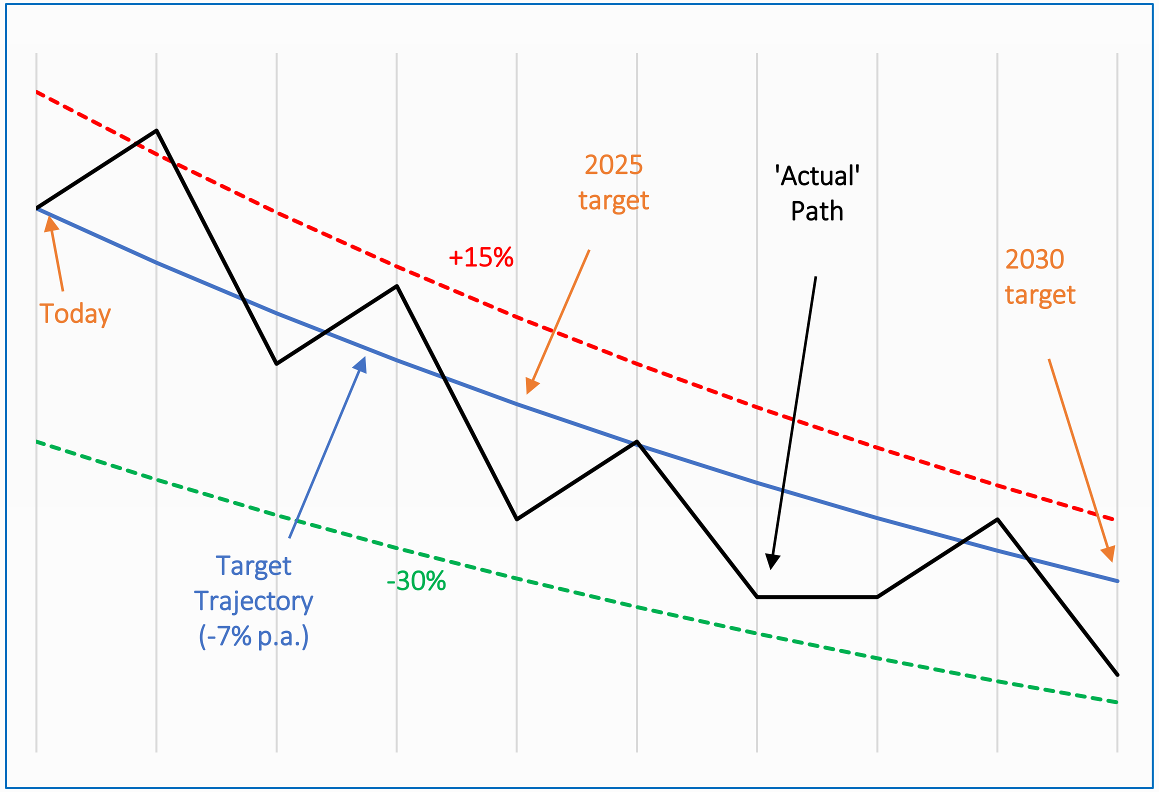
- Global Emerging Markets - climate financial modelling
- Fixed Income Team - coal exposure / policy commitments into Emerging Market debt model
- Private Markets Group - Physical and Transition Risk Dashboard - see below

| Physical Risk (Low Risk – 10/10) | Transition Risk (Medium – Low Risk – 9/10) |
|---|---|
| ▪ Global warming, rising sea levels and extreme weather may pose a degree of flood, landslide and/or wildfire risk;<br><br>▪ We would note that their sites are at lower risk of flooding / rising sea levels vs. other sector opportunities we have reviewed, albeit we will diligence this further in the next round. | **Direct Emissions:**<br>**Carbon emissions related to energy efficiency**: As a premium operator, we are not aware of any particular energy efficiency concerns within the Company XYZ estate.<br>▪ **Carbon off-setting**: Company XYZ has planted over 25,000 trees and often develops new sites that have been otherwise allocated for tree felling thereby preserving forested land<br><br>**Indirect Emissions:**<br>• Carbon emissions related to travel / risk of change in consumer preferences.. |

# Next steps on Net zero

- Asset class specific transition plans
- Pushing for better data – corporate and scenarios
- Increasing integration into investment decisions
- Engagement with high emitting assets
- Beginning to look at exposure to physical climate risk
- Publishing Taskforce on Climate related Financial Disclosures (TCFD) report

Net Zero trajectory won't be linear; we should expect variation around the target pathway



# Future Plans

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- Prioritise stewardship onto key areas
  - 1000’s of holdings and many ESG issues - we cant address them all
- Considering how we can address systemic risks in collaboration with other pension funds
  - Climate will remain the key focus but there are other systemic risks
- Focus on increasing the impact of our engagement
- Increased information and reporting for members


*Signatory of:*
**UK STEWARDSHIP CODE | 2021**