USS For members, for the future.

The Universities Superannuation Scheme (USS)

Stewardship Code Report 2023

Contents

Foreword

Dame Kate Barker
Chair

Welcome to the third Stewardship Code Report from the Universities Superannuation Scheme (USS). This report continues our principle-by-principle approach from 2022, combined with details of new case studies and initiatives we have undertaken over the past year. Active stewardship remains a very important aspect of our investment approach.

The past year has seen a number of key developments. We introduced a new Investment Framework (IF) in 2022, which changed the way the trustee assesses the investment performance of our in-house investment manager, USSIM, and how well it has managed investment risk. The IF takes a holistic approach to both risk management and the assessment of USSIM's investment management performance and covers both the Retirement Income Builder, the defined benefit (DB) part of the scheme, and the Investment Builder, the defined contribution (DC) part of the scheme.

We also published our first mandatory Taskforce on Climate Related Financial Disclosures (TCFD) Report alongside our Report and Accounts last July, setting out how we are assessing and managing climate risk and reducing our exposure to carbon emitting businesses across almost all of our assets. The report includes details of our carbon footprint and scenario analysis and is another significant step in our journey to Net Zero. Many of the numbers in the TCFD Report, particularly the scenario analysis and carbon footprint data, are estimations, and will inevitably change as more and better climate data become available.

While climate change remains our priority focus area for stewardship, as an investor with a long-term view, we also consider how to identify and prioritise other risks. Through 2022 and into 2023, we have been looking at how in the future we can address a range of systemic risks that may have a financial impact, such as biodiversity loss or antimicrobial resistance. These are very challenging issues for individual pension funds to address so we are working with other asset owners to establish the best way forward on these issues.

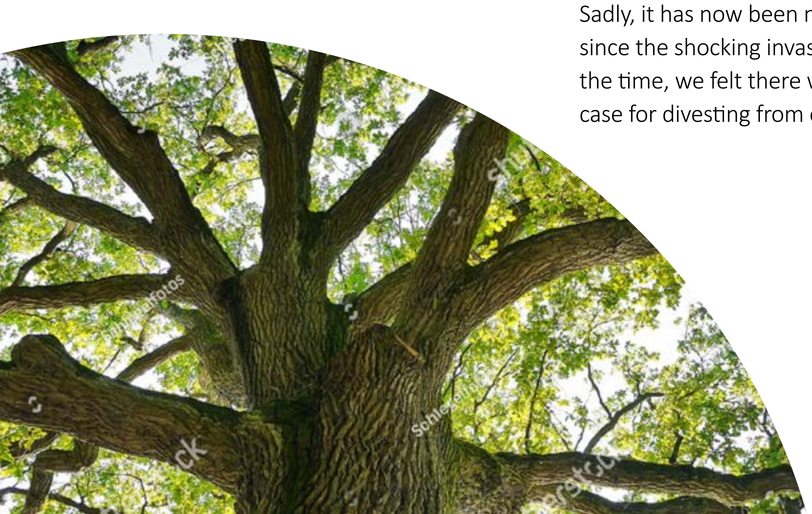
In the year ahead we aim to be more rigorous in our stewardship and will seek tangible outcomes from our engagement with the companies we invest in. To do this, we have implemented a new Stewardship and Voting Policy. This new approach may see us vote against the reappointment of responsible directors if we believe the company is failing to appropriately manage or address an issue. We would expect to do this where, among other things, a company has not disclosed its climate transition plan, does not meet our diversity expectations, or where executive pay does not align with company performance. This approach is a change from voting more generally against a company's Annual Report and Accounts and allows us to hold individual directors accountable.

Sadly, it has now been more than a year since the shocking invasion of Ukraine. At the time, we felt there was a clear financial case for divesting from our Russian holdings. Our position remains consistent with the statement we issued at the time, whereby we placed a moratorium on new long positions taken in all Russian assets, over and above full compliance with UK government sanctions. For the small remaining positions we continue to hold in Russian related investments, we are looking for opportunities to sell as markets reopen and when liquidity returns.

Of course, it is impossible to look back on 2022 without acknowledging the market turmoil of September, following the UK Government's 'mini-budget'. USS has been able to navigate this turbulence by virtue of the resilience of the scheme, the scenarios we have considered, and our ability to take a very long-term (and global) view. There are still adverse winds in the economy and the geopolitical environment remains stormy. However, I am confident that USS has investments which are well-diversified and we also continue to have the heft of the university sector behind us.

Finally, we were delighted to receive the International Corporate Governance Network's (ICGN) Global Stewardship Disclosure Award 2022 (for asset owners above £60bn) for our full range of disclosures, particularly our Stewardship Code Report, full and summary TCFD Reports and our web content. This recognises our commitment to Responsible Investment, our important work in this area, and our approach to transparency.

> *"In the year ahead we aim to be more rigorous in our stewardship and will seek tangible outcomes from our engagement with the companies we invest in."*



Introduction

The focus of this report is the scheme's response to the 12 Stewardship Principles developed by the Financial Reporting Council (FRC). As in previous years, we describe principle-by-principle how we implement our commitment to being an active steward of the scheme's assets and summarise our responsible investment (RI) activities and outcomes across all of our asset classes, with a particular focus on the financial year 2022-23.

Report oversight and approval

New content has been added, particularly case studies, to bring to life the scheme's approach to stewardship over the past year, and to report on progress made. We have also included information about our new Investment Framework, publication of our 2022 TCFD Report (in line with the globally-accepted framework of the Task Force on Climate-related Financial Disclosures and UK pension regulations), and updates on the progress we are making towards achieving our Net Zero ambition.

This Report has been through the following review process:

- Inputs from different investment and other teams across USSIM to cover asset class-specific issues
- Review by the Head of Responsible Investment
- Review by the scheme's Chief Legal Officer
- Review by the Investment Committee
- Final review by the CEO of USSIM and Chair of the USSL Board

The Report has been formally agreed for publication by the Investment Committee.

About us

Universities Superannuation Scheme (USS) was established in 1974 as the principal pension scheme for universities and higher education institutions in the UK. We work with around 330 employers to help build a secure financial future for more than 500,000 members and their families. We are one of the largest pension schemes in the UK, with total assets of around £73.5bn (at 31 December 2022).

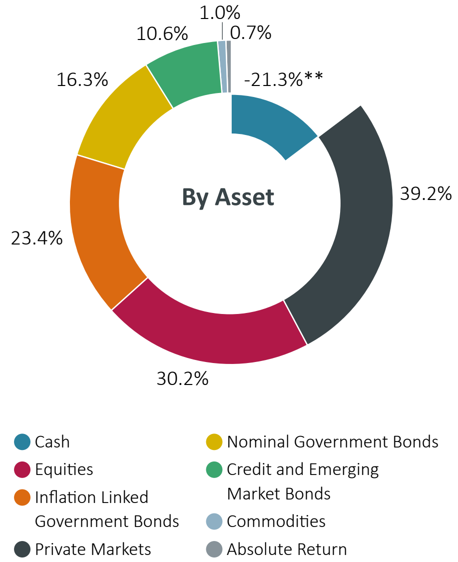
The trustee of USS is Universities Superannuation Scheme Limited. It has overall responsibility for scheme management and administration, led by a non-executive board of directors and employs a team of pension professionals in Liverpool and London. The trustee is regulated by The Pensions Regulator (TPR) and has a primary responsibility to ensure that benefits promised to members are paid in full and on time.

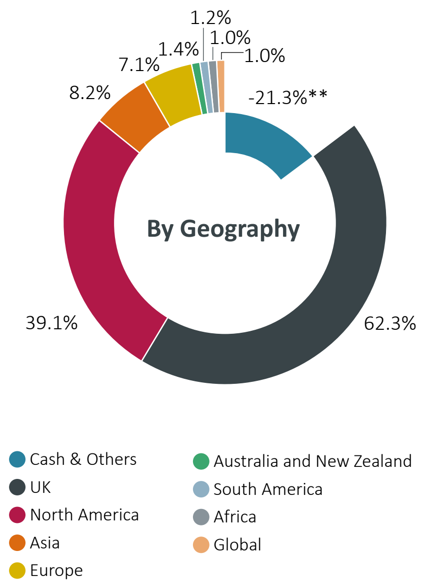
The trustee delegates implementation of its investment strategy to a wholly-owned subsidiary – USS Investment Management Limited (USSIM) – which provides in-house investment management and advisory services to the trustee. USSIM manages between 60% and 70% of the investments in-house and appoints and oversees external investment managers to manage the rest. USSIM is authorised and regulated by the Financial Conduct Authority.

USS is a hybrid pension scheme, which means we have both a defined benefit (DB) part – the Retirement Income Builder – and a defined contribution (DC) part – the Investment Builder.

"The pensions being promised to our members today will need to be paid decades into the future, so it is in USS's interests to encourage the companies, assets and markets in which we invest to focus on delivering sustainable investor value over the very long term."

Where we invest*





Source: USS, March 2022

*Figures shown may not sum to 100% due to rounding. These differences do not affect the conclusions shown or contained within the report.

Global assets includes commodities.

**Denotes leverage

Leverage measures the degree to which total investment exposure exceeds the value of scheme net assets. Leverage is created by repurchase agreements and derivatives, including futures and swaps.

2022-23: Activities and highlights

We continued to sustain and strengthen our stewardship activities in 2022-23. Key highlights include:

1 Making progress on our Net Zero ambition

We continued to make progress on our journey to Net Zero and published our first mandatory TCFD Report in July 2022. The report sets out how we are assessing climate risk and reducing carbon emissions in our portfolio. Read more in Principles 1 and 7.

2 Engaging with banks

We have been engaging with banks, including supporting the engagement initiative led by the Institutional Investors Group on Climate Change (IIGCC) and working with the University of Cambridge in its efforts to encourage four UK-listed banks to align with the Paris Agreement. Read more in Principles 2 and 4.

3 Stewardship and Voting Policy

We have implemented a new Stewardship and Voting Policy. This new approach may see us vote against the reappointment of responsible directors if we believe the company is failing to appropriately manage or address an issue. We would expect to do this where a company has not disclosed its climate transition plan, does not meet our diversity expectations, or where executive pay does not align with company performance. See Principle 12.

4 Systemic risks

We joined an initiative led by University of Cambridge on how asset owners can best collaborate to identify and address the systemic risks we all face. Read more in Principle 4.

> *We continued to make progress on our journey to Net Zero and published our first mandatory TCFD Report in July 2022.*

Our approach

Our activities as a responsible investor fall into three core areas:

1. **Integration:** we seek to include financially material ESG (Environment, Social, and Governance) considerations within investment decision-making processes and, as a pension fund with an in-house investment manager (USSIM), we have more direct control of such integration. By integrating material ESG considerations with a financial bearing into our investment methodology, USS seeks to identify mispriced assets and enable our portfolio managers to make better investment decisions to enhance long-term performance. We do this because we believe additional returns are available to investors who take a long-term view and are able to identify where the market is overlooking the role played by material ESG factors in corporate and asset performance. Systemic mishandling of ESG issues can also be an early indicator of wider mismanagement or financial problems.

2. **Engagement, voting and stewardship:** as a long-term investor, we believe we have an obligation to act as stewards of the assets in which we invest, and to behave as active owners, using our influence to promote good ESG practices. We believe that such stewardship can help prevent or avoid value destruction as well as reduce the negative impacts companies can have on the environment and society which may in turn be financially detrimental.

3. **Market transformation activities:** universal investors are those who, like USS, have holdings that are so diversified that their investment returns are impacted by the returns from the economy as a whole, as much as from any specific industries or companies. We believe that we have a role to play in promoting the proper functioning of markets and economies, which benefits us as a universal investor. This includes engaging with policymakers and regulators in markets in which we invest, in order to articulate the concerns of asset owners and long-term investors. We seek to ensure that externalities and systemic market failures such as pollution, climate change or weak corporate governance standards do not affect market-wide long-term economic performance.

Looking ahead

We can always improve our approach to responsible investment, and continually look for ways to improve our practices and policies. In 2023/24 we will focus on:

1. **Continuing to work toward achieving our ambition to be Net Zero by 2050 (see Principle 1).**

2. **Evolving RI due diligence and monitoring processes for our external fund managers (see Principle 8).**

3. **Addressing systemic risks by working with other investors (see Principle 4).**

4. **Supporting our investment teams in their integration of ESG factors into their investment decisions and stewardship of the assets in which they invest (see Principle 7).**

USS Stewardship Code Report 2023: a principle-by-principle account

Purpose and Governance

Principle 1: Purpose, strategy and culture

Principle 1

Signatories' purpose, investment beliefs, strategy, and culture enable stewardship that creates long-term value for clients and beneficiaries leading to sustainable benefits for the economy, the environment and society.

Our purpose

As the principal pension scheme for universities and other higher education institutions in the UK, our purpose is predicated on our unique position within the investment industry: working with employers to build a secure financial future for our members and their families. In pursuit of our purpose, it is our duty to invest in the best financial interests of all our members and beneficiaries.

Our beliefs

At the heart of our organisation is a long-held belief that promoting high standards of ESG, and allocating responsibly to companies and other assets, will protect and enhance the value of our investments by reducing the risks associated with investing. We also believe it enhances our ability to meet the pension promises due to members from the scheme. That is why active ownership and stewardship, as well as assessing investment risk in all its forms, are fundamental to our approach to managing the assets entrusted to us.

Our culture and values

Our organisational values underpin our approach to investing responsibly. They are clearly defined and built on three pillars of **integrity**, **collaboration** and **excellence**. These values guide what we do, including how we invest, and how we act as stewards of the assets in our portfolio.

Integrity

- We always do the right thing
- We put our members' interests first
- We take decisions for the long term

Collaboration

- We work towards a common goal
- We take responsibility for our own actions
- We are straight-talking and respectful in our dealings with each other

Excellence

- We set high standards for ourselves and our colleagues for the benefit of our members
- We adapt and innovate to achieve the best outcome
- We bring our best selves to work, every day

> *In pursuit of our purpose, it is our duty to invest in the best financial interests of all our members and beneficiaries.*

Stewardship: Putting our purpose, beliefs, culture and values into practice

We express our purpose and values through how we invest, how we manage the scheme's assets and how we meet our members' retirement needs (we discuss how our approach meets our members' needs under Principle 6). As active owners, we focus on sustainability and good corporate governance. We also ensure the investment managers who are selected and appointed to manage our assets consider financially material considerations including ESG factors related to the selection, retention and realisation of investments.

In practice, our responsible investment approach means we consider the potential financial impact of ESG factors on our investment decisions. We analyse and assess the impact of these factors in our investments, across all asset classes, regardless of market or structure both before we invest, and during the life of our investment.

Long-term stewardship is central to our fiduciary duty to our members. In line with our sponsors' covenant and liability profiles, we invest for the long-term and expect to own companies and investments for many years. This is particularly true of the direct investments the scheme makes.

At USS, we put responsible investment into practice by:

- Integrating ESG factors into our investment decisions across asset classes
- Using our influence as a major institutional investor to promote good ESG practices through engaging, voting and applying stewardship
- Working with policy makers and regulators to ensure the concerns of long- term asset owners and investors are clearly understood

Making progress on Net Zero

Taskforce on Climate Related Financial Disclosures (TCFD) Report

In July 2022, we published our first mandatory TCFD Report, alongside our Report and Accounts. The Report follows the approach outlined by the Financial Standards Board, as required by the UK Department for Work and Pensions and assessed by The Pensions Regulator. The TCFD framework requires us to report on:

- Governance
- Risk management
- Strategy for addressing climate change
- Metrics and targets

The TCFD Report includes our carbon footprint and scenario analysis. It is important to note that both the data used, and the processes used to assess it, are evolving and improving, and are likely to change as time passes, leading to volatility in both our carbon footprints and transition path.

Net Zero Steering Committee and asset class working groups

To ensure that we manage the delivery of the scheme's Net Zero targets, USSIM has established a Net Zero Steering Committee and Net Zero Working Groups (NZWG) for each asset class, as well as for specific support functions. Each Working Group makes sure that USSIM investment teams across assets classes have a specific focus on the steps they will take to achieve the scheme's targets, and that support functions also play their role. The NZWGs are accountable to the Net Zero Steering Committee, consisting of senior investment executives, to make sure USSIM helps the scheme deliver on our Net Zero ambition.

We are developing ways of integrating climate and carbon into investment decision making processes in each asset class (read more in Principle 7):

- **Global Emerging Market Equities (GEMs)** – our team is building carbon exposures and company responses to the challenges of transition into financial modelling. This includes assessing how a cost on carbon emissions could affect business models, even where a charge does not exist at the moment
- **Private Markets** – this is the team that invests in assets like property and infrastructure. They have developed a physical/transition risk dashboard so that they assess the exposure of potential assets to climate change before we buy them
- **Fixed Income** – our sovereign debt team have a process where they build the climate policy commitments made by countries into their emerging market debt model

This is all work in progress – building climate data into actual financial modelling is relatively new and we are learning all the time. We will publish our updated carbon data in our next TCFD Report in July 2023.

Case study: Moto: Electric vehicle charging

One of our portfolio companies is Moto, the UK's largest motorway services provider. Moto has continued to expand the number of electric vehicle (EV) chargers at their sites following the UK Government's commitment to ban the sale of new petrol and diesel cars by 2030. As a majority shareholder in Moto, we work closely with their senior management team to achieve the ambition of Moto becoming the UK's number one on-route charging destination.

Moto now has over 200 high power chargers (>150kW) across its motorway service stations. Moto Exeter is now the largest motorway services ultra-rapid charging hub in the UK. It has 33 chargers in total, including 28 ultra-rapid chargers (>250kW). Early in 2022, Moto and USS also partnered to complete a £835m refinancing of its existing debt facilities at an investment grade credit rating. The financing included margin-linked targets covering environmental and social objectives, such as the number of ultra-rapid chargers per site, diversity and inclusion targets on gender equality at senior management levels, and fundraising activities covering environmental causes and charities.

Moto has been awarded a silver medal in EcoVadis' sustainability rating and was placed in the top 25% of companies rated by EcoVadis in 2022. Moto was also above the industry average in all four marking criteria (environment, ethics, labour and human rights, and sustainable procurement). We continue to positively engage and monitor the growth in EV chargers and refinancing, among other items, and these steps will support both USS's and the UK's ambitions to transition towards a Net Zero world.

Principle 2: Governance, resources and incentives

Principle 2

Signatories' governance, resources and incentives support stewardship.

Our governance structure

We believe a strong organisational governance structure, paired with a commitment to investing responsibly for the long term, provides the basis to deliver effective stewardship today, and to build on and develop our approach for the future.

We are structured and governed in a way that supports our commitment to responsible investment and stewardship of our assets. Universities Superannuation Scheme Limited is the trustee that runs and manages USS in line with the trust deed and rules and legal duties, with a Group Executive Committee that looks after day-to-day operations.

The Trustee Board of USS is responsible for the overall leadership, strategy and oversight of USS, the scheme, and USS's subsidiary, USS Investment Management (USSIM). USSIM is a subsidiary of Universities Superannuation Scheme Limited, looking after the investment and management of the scheme's assets and the appointment and monitoring of a number of other external investment managers. USSIM has its own governance structure, which means that key stewardship and reporting issues are reviewed at least twice.

The USS Trustee Board comprises:

- Four directors appointed by Universities UK (UUK), which represents the scheme's participating employers. For more information about UUK, visit www.ussemployers.org.uk/background/why-are-we-here
- Three directors (one of whom is the pensioner member) appointed by the University and College Union (UCU), which represents the scheme's members. For more information about UCU, visit www.ucu.org.uk
- Between three and five independent directors

The Trustee Board agrees the responsible investment strategy and formally reviews the Responsible Investment (RI) team's activities annually, signing off key focus areas and policies. This includes reviewing the effectiveness of our stewardship processes and whether our resourcing, expertise and approach are appropriate to managing our assets. The board is supported in this assessment by both the scheme's Investment Committee, which reviews RI activities biannually, and by specialist external advisors. These external advisors review reports to the Investment Committee and Trustee Board, providing an additional level of assurance that the approach taken to Responsible Investment is at least in line with peer funds.

The Responsible Investment page on the USS website sets out detailed information on how we consider ESG factors when we invest, and how this is communicated and managed with our internal and external managers. Organising ourselves in this way enables the investment function to take the initiative in implementing the scheme's ESG polices. Having an in-house manager means that the trustee has greater visibility over the management of the scheme's assets and the implementation of the responsible strategy than is the case for the majority of UK pension funds.

"We are structured and governed in a way that supports our commitment to responsible investment and stewardship of the scheme's assets."

Climate change is financially material

The trustee reviewed its Statement of Investment Principles in May 2022. Within this document, the trustee acknowledges that climate change is 'financially material' and sets out its belief that addressing climate change is in the best financial interests of the scheme and its members. Read more in Principle 10.

A new approach to risk management

In 2022, we introduced the Investment Framework (IF), which changed the way the trustee assesses USSIM's investment performance and how well it has managed investment risk. The IF takes a holistic approach to both risk management and the assessment of USSIM's investment management performance and covers both the Retirement Income Builder, the defined benefit (DB) part of the scheme, and the Investment Builder, the defined contribution (DC) part of the scheme.[1]

The assessment takes place using a suite of DB and DC Key Risk Indicators (KRIs), which include qualitative KRIs for both climate and ESG stewardship risk. These support the assessment in the Responsible Investment (RI) section of a new investment balanced scorecard, produced for the Investment Committee. These qualitative DB and DC KRIs are focussed on the trustee's Net Zero ambition and USSIM's integration of financial ESG factors into its investment decision making and stewardship processes. The output of the assessment is also used by the board's Remuneration Committee when considering compensation outcomes for USSIM staff. Read more about our approach in Principle 5.

Our responsible investment and stewardship resourcing

We established a specialist in-house Responsible Investment (RI) team two decades ago, and today, with seven specialists, we have one of the largest RI teams of any UK pension scheme, comprising experienced ESG professionals. The team includes a CFA-qualified financial analyst to support our investment teams in their integration of ESG factors. Our RI team biographies can be found on page 68. The RI team works with the internal investment teams and monitors external managers and assets to ensure ESG factors are integrated into investment decisions across asset classes where they are considered financially material, ensuring that both the internal investment teams and external managers act as stewards of those assets. This activity is overseen by the Investment Committee, which provides assurance to the board that its policies are being implemented. The scheme also commits significant resource to its stewardship and RI activities, including:

- The provision of ESG data to our internal investment teams
- Specific data on climate change and carbon exposure for carbon footprinting and tracking our Net Zero progress
- Proxy voting data and platform access
- Sell side research to support integration

The team helps the trustee take a leadership position on a spectrum of financially relevant ESG issues. These include issues as diverse as climate change (USS helped to set up the IIGCC in 2001 and is a founding board member of the Transition Pathway Initiative), engaging with banks on their lending to fossil fuel companies and supporting engagement with technology companies on a range of social issues. We have included a range of case studies throughout this report to illustrate these points.

Clear responsibilities

Our RI team is organised into three groups. One focuses on the integration of financial ESG factors into investment decisions, the second on stewardship (including voting and engagement), while the third is responsible for external managers (in both public and private markets) and direct asset due diligence and monitoring.

Whilst the team leads much of the stewardship activity that encourages both listed companies and other portfolio assets to manage better climate change-related and other ESG risks, USS's internal fund managers also engage directly with companies and other portfolio assets on ESG issues both individually and in conjunction with the specialist team. For example, during this reporting period, there have been joint engagements on the exposure of companies to Chinese supply chain issues and with cement companies on how they are managing the transition to a low carbon world (read more under Principle 9). Formal and informal interactions promoted the collaboration and sharing of insights between our investment specialists and responsible investment team.

Engagement meeting notes and voting letters for publicly listed companies are shared systematically internally with portfolio managers via the Research Management Notes (RMN) function on Bloomberg thereby offering greater functionality and improved access to data. RMN provides USS's Equities, Credit and RI teams with a record of how we voted and our view of the specific company's ESG practices. RI notes, voting records and engagement notes are also included along with investment cases and decision notes. ESG has been integrated into the initial investment case, to enable material financial ESG factors to be considered, and any important questions are raised and addressed through engagement with the company.

[1] The Retirement Income Builder, the DB part, gives a guaranteed income in retirement. The Investment Builder, the DC part, gives a flexible savings pot for the future. Together these make USS a hybrid pension. See more at https://www.uss.co.uk/for-members/your-pension-explained/how-your-pension-works

In addition, in early 2023 the RI team began contacting the Private Equity managers (or General Partners – GPs) who participated in the inaugural ESG Data Convergence Initiative survey (see the box on page 15) to request they share portfolio company ESG data reported for our funds. Thirteen managers used by USS participated in the 2022 submission. However, we are awaiting data to determine the coverage of ESG disclosures for the underlying portfolio companies in the funds and strategies in which we are invested. It is hoped the data will raise the quality of our carbon footprinting data and inform engagement on Net Zero progress for our externally-managed private equity portfolios in due course. See Principle 8 for further details.

Case study: Engagement with banks

Banks are the largest providers of finance to new and expanding fossil fuel projects. This includes coal, oil and gas exploration and production, as well as the associated infrastructure such as pipelines. Although banks may only lend money for a short period of time, the infrastructure this money enables will last decades and will arguably generate a demand for fossil fuels into the future – well beyond the 2050 deadline for achieving global Net Zero.

USS is supporting the banking engagement initiative led by the Institutional Investors Group on Climate Change (IIGCC). It aims for banks to:

1. Align with the goals of the Paris Agreement through their 2050 Net Zero commitments and interim targets. It asks for clear commitments to reduce and phase out finance to the fossil fuel industry and scale up green financing.
2. Have suitable governance in place to address climate risk, including board accountability and requisite skill sets, remuneration committees to ensure remuneration is aligned with delivering commitments to Net Zero, and audit committees to consider material climate risks associated with the move to Net Zero.
3. Improve disclosure, including:
    - Climate governance, in line with the TCFD reporting recommendations
    - Greenhouse gas emissions associated with their financing activities
    - The ratios of green to non-green finance to show their alignment with the Paris Agreement
    - Auditors to alert investors where a company's accounts are not Paris-aligned

We are also actively supporting the University of Cambridge endowment fund in its efforts to encourage four UK-listed banks to align with the Paris Agreement by participating in joint engagements and to press banks on their climate change plans, ask how climate is taken account of in financing fossil fuel expansion, and explain how senior executive remuneration is aligned with climate objectives. These engagements build upon those being coordinated by Asia Research and Engagement, that address climate transition at several Asian-listed banks (see page 15 for more details).

In addition, IIGCC and the Transition Pathway Initiative (TPI) have published an investor-led framework of pilot indicators to assess banks on their transition to Net Zero. We welcomed the IIGCC's and TPI Centre's Net Zero Standard and Assessment Framework, which will help investors assess banks' climate commitments and activities and help us hold them to account. We will also independently engage with other banks where we have investments or commercial relationships, and/or they have a large emerging market presence and therefore could assist in climate transition strategies. We will also consider voting against individual directors where a bank has not publicly disclosed its climate transition plans.

To assist in the integration of ESG into the GEMs equity portfolio, the RI team's experienced Financial Analyst works with other team members to ensure consistency in the company level analysis provided by the team.

Votes against a company's position in our active portfolio are typically reviewed with the relevant USSIM portfolio manager prior to the vote being cast, along with other points of contention. Read more under Principle 12.

The Private Equity ESG Data Convergence Initiative

The ESG Data Convergence Initiative is a partnership of private equity stakeholders committed to streamlining the industry's approach to collecting and reporting ESG data. The collaboration helps managers benchmark their privately held portfolio companies on a core set of metrics covering greenhouse gas emissions, renewable energy, diversity, health and safety and employee engagement. In 2021, USS pledged support for the Initiative, alongside several of the scheme's private equity managers.

Additional resources

In addition to our RI team, we also use external service providers to support our stewardship activities. For example, Minerva provides our proxy voting platform.

We do not usually engage via service providers, as we have an in-house team that directly engages with companies in our portfolio. This means the engagement remains aligned with the investment analysis conducted by the internal portfolio manager. However, we have chosen two external providers where we feel there is benefit in utilising more local service providers to engage on our behalf due to language and cultural nuances in engagement:

- Governance for Owners (G4O) Japan Engagement Coalition who engage on our behalf with Japanese companies where disclosure and language can be a barrier (see the box to the right)
- We also utilise the services of Asia Research and Engagement (ARE) as with their specialist Asia focus, they add additional resources in what is an increasingly important market (see the case study below)

Both of these organisations provide collaborative engagement services. In selecting these, we looked at both ESG and local knowledge, and engagement experience in delivering stewardship and other RI-related services (including proxy voting support). While we find these third-party providers extremely valuable in supporting us, we are clear that the final responsibility for investment, stewardship and voting decisions remains with us.

> *Formal and informal interactions promoted the collaboration and sharing of insights between our investment specialists and responsible investment team.*

Governance for Owners Japan (G4O)

G4O provide USS with voting analysis and engagement on Japanese companies. Traditionally the engagements have focused on primarily governance issues, such as board composition and diversity, remuneration and increased disclosure. In 2022, we requested that the engagement focuses a little more on environmental and social issues, most importantly on USSIM's main material risk: climate. It should be noted that Asia Research and Engagement already collaborates with G4O in order to gain access to Japanese companies and boards for discussions on climate transition.

Case study: Asia Research and Engagement (ARE) - Climate transition engagement

Across Asia, ARE have been engaging on our behalf on climate transition planning. They have reached out to 57 companies (32 banks and 25 utilities) which has led to substantive engagement with 15 companies, including the Electric Power Development Company in Japan (J-Power), one of the larger power generators in Japan. It has historically been dependent on coal but is now building up its CO_2 free generation capability including nuclear, hydro, solar and wind. J-Power's transition strategy includes the planned phase-out of its older coal-fired assets, the use of carbon capture, utilisation and storage and co-firing technologies. It expects to capture 90% of its CO_2 emissions from pilot projects it is running. The company has set a Net Zero target, but its interim targets currently exclude its international operations. This engagement will continue to focus on the company's transition technologies.

Principle 3: Managing conflicts of interest

Principle 3

Signatories manage conflicts of interest to put the best interests of clients and beneficiaries first.

Our commitment

In line with our legal duties and stated value of integrity, our members' interests come first. This includes a pledge to meet high standards of openness and accountability and ensure that we conduct our business with honesty and transparency. We ensure legal and regulatory requirements are fully complied with, and we expect all employees to continually meet the high standards expected of them in their client and business activities. Any action in contradiction of this position is taken extremely seriously and we are committed to the full extent of internal and external sanctions being applied as appropriate.

Ensuring robust practice

USS Group maintains a Register of Conflicts of Interest. This includes an assessment of the inherent and residual risks of each actual or potential conflict we identify, along with the controls in place to manage or mitigate them. Our Code of Conduct also provides a clear statement of ethical standards, including a duty to act with reasonable care, skill and diligence in the best interests of scheme beneficiaries, and to avoid or manage conflicts of interest.

The USS Compliance team maintains a list of securities and other assets in which USS Group staff members have holdings, and there are processes in place to ensure conflicts of interest are avoided in any staff dealing in stocks held by the scheme. Our Compliance team also maintains a restricted list and personal account dealing policies to mitigate trading related conflicts. This includes restricting stocks held by the scheme if a potential conflict arises.

Group Conflicts of Interest Policy

USS has a Group Conflicts of Interest Policy, and we review its policies and processes on this aspect of our operations at least annually. This review involves an assessment of actual and potential conflicts, including in relation to responsible investment and stewardship activities. We monitor for potential conflicts of interest on an ongoing basis and conflicts in relation to stewardship will be treated in the same way as any other.

In addition, we have recently developed a Stewardship Conflicts of Interest Policy. This reflects the Group-wide policy but includes unique elements relating to stewardship. See the box to the right for a summary of the key points

Being prepared for when a conflict may arise

As an in-house investment manager serving only one client, the scheme, USSIM does not face many of the potential conflicts of interest that commercial fund managers may need to address. However, potential conflicts of interest arise from time to time, and an example of this was an individual working at USS who declared a connected person relationship at one of our stewardship-related service providers. In this instance, the individual followed our conflicts of interest policy and processes to mitigate the potential conflicts, and this would be recorded in the conflicts of interest register.

Stewardship Conflicts of Interest Policy

We are a responsible, active and engaged steward of a diverse mix of investment assets both in the UK and internationally. As it is possible that conflicts of interest will arise from time to time in relation to these stewardship activities, we have created this policy, which:

- Builds on the existing USS Group Conflicts of Interest Policy
- Provides examples of when conflicts may arise in relation to the stewardship of USS's assets
- Sets out USS's policy on how conflicts of interest should be managed in relation to stewardship

The policy outlines our approach to voting, including disclosure and summaries; whistleblowing; training; and registers and logs. It also sets out our expectations of external managers, suppliers and advisors in relation to stewardship. This and the USS Group Conflicts Policy are reviewed annually and any changes are approved by the board.

In this reporting period:

- USSIM has had no investment-related conflicts of interest
- No conflicts of interest were recorded in relation to the firm's stewardship activities

“In line with our legal duties and stated value of integrity, our members' interests come first.”

Principle 4: Promoting well-functioning markets

Principle 4

Signatories identify and respond to market-wide and systemic risks to promote a well-functioning financial system.

Fostering sustainable markets for a sustainable future

As a pension fund with in-house investment expertise and liabilities extending decades into the future, we are unequivocal that an active approach to responsible investment and stewardship is critical to cultivating well-functioning markets over the long term. With an investment horizon stretching many decades ahead, the scheme is not only exposed to current risks, but also to risks into the future. We recognise that certain issues pose macro, market-wide or systemic risks and these financial factors need to be addressed just as much as more immediate issues.

Universal ownership and systemic risks

As previously noted, with an investment horizon stretching over many decades, we view ourselves as a universal owner. The scheme is therefore exposed to certain market-wide or systemic issues which could impact the investment returns we seek. These include global issues such as climate change, antimicrobial resistance, biodiversity and bribery and corruption. We need strong markets that address systemic risks and will use both engagement and voting as tools to address these issues at a company level and, where applicable, at policy level.

Market-wide and systemic risks

The scheme assesses these major macro, market-wide or systemic risks in a number of ways. We recognise that certain issues could affect our asset allocation and to assess the implications of these, we have developed and investigated a set of plausible scenarios based on some of these issues. These scenarios are detailed below.

Identifying and responding to systemic risks

Baseline

- A challenging period of moderate growth and inflation above target on average
- Modest falls in bond yields and low excess returns from equities
- CO_2 emissions reduce but not in line with Paris Alignment

Iron Curtain

- Globalisation in reverse as West and China/Russia blocs increase tensions and reduce trade
- Persistently higher energy costs as West attempts to transition to other sources
- Weak growth, high inflation, poor equity returns and lower yields

Persistent Inflation

- Inflation and expectations rise but Central Banks do not tighten monetary policy sufficiently and fiscal policy remains loose
- Inflation structurally higher and more volatile
- Negligible impact on long term growth but equities hit by increased uncertainty

Fast Transition

- Sharp reduction in global CO_2 emissions, avoiding the worst of the climate physical risks
- More carbon regulation and taxes could result in higher inflation
- Additional investment increases real interest rates

Redistribution

- Increased tax rates and redistributive fiscal spending
- Economy allowed to “run hot” so strong growth and inflation
- Supports labour vs capital share of income so sees a big hit to corporate profit margins

Strong Productivity

- Strong recovery followed by sustained productivity growth
- Muted inflationary pressures as growth driven by innovation
- Real yields edge higher while corporate earnings grow strongly

Secular Stagnation

- As supply-side disruption subsides, fiscal tightening and shock to real wages could deliver persistent below-trend growth
- Interest rates remain close to zero for many years
- Profit margins and equity valuations remain elevated

On broader ESG systemic financial risks, we are currently engaged in a process to prioritise our RI and stewardship activities, and this includes looking at systemic issues. Environmental and social areas we have identified as potential future focus areas include, amongst others:

- Biodiversity
- Water resources
- Deforestation
- Soil degradation
- Antimicrobial resistance

As noted in Principle 7, this prioritisation review is ongoing, but we will have a focus on climate change and achieving Net Zero as the highest priority systemic financial ESG risk facing the scheme. We have also concluded that addressing these systemic risks will require collaboration with like-minded asset owners and others if we are to stand any chance of successfully addressing them (see box below).

"We recognise that certain issues pose macro, market-wide or systemic risks and these financial factors need to be addressed just as much as more immediate issues."

Asset owners collaborate to address systemic risks

Pension funds face a range of systemic risks – climate change, biodiversity, antimicrobial resistance, and more. Addressing these issues as individual funds is challenging, if not impossible, because:

- These issues are technically complex beyond the capacity of financial organisations; and
- The individual schemes may have insufficient leverage to address the issues

A number of large global pension funds and endowments have participated in discussions, facilitated by the University of Cambridge, which bring the necessary technical knowledge about how asset owners can best collaborate to identify and address the systemic risks we all face. This has developed into an asset owner led working partnership that will enable the funds to address a broad range of issues.

The initiative will provide both the coordination and academic rigour required to undertake ambitious, evidence-led, issue-specific engagements. The initial phase of the project in 2023 will include the following:

- Identifying high-impact systemic risks and developing an approach to prioritisation tailored to asset owners. This will take into account existing initiatives and will strive to complement efforts rather than replicate them
- Identifying the most high-impact drivers of change and the systemic interventions asset owners could make
- Agreeing on evidence-based interventions to test and trial. It is expected that the most appropriate fund(s) (based on location, holdings, knowledge of the issue etc.) would lead engagements on a particular systemic risk, supported by the other asset owners
- Applying learning to investment strategies
- Considering future plans, including membership, financing, governance and structure

The initiative is convened by asset owners and membership is restricted to them, with contributions from academic advisors and other non-commercial stakeholders. The work is supported by a Steering Committee of fund representatives who oversee the group's activities and provide feedback. The group is non-profit and has a commitment to transparency in its work to aid wide implementation of initiatives. Participating funds will join in the process outlined above, which included a face-to-face Summit in Cambridge in May 2023.

Our Taskforce on Climate-related Financial Disclosures (TCFD) Report 2022

We published our first mandatory TCFD Report (and accompanying summary) in July 2022, providing a comprehensive overview of how we are assessing climate risk and reducing emissions as we work towards achieving our Net Zero ambition. The Report includes findings of the detailed scenario analysis the scheme undertook to assess how a changing climate, and the policy response to it, could affect us in the coming years.

We are working to reduce the emissions our investments generate, to protect those investments from the risks of climate change, and to benefit from the opportunities.

Almost all the companies and assets we invest in have emissions today – whether from their manufacturing processes, vehicles or supply chains. And to achieve our ambition of Net Zero by 2050, we need to reduce the 'emissions intensity' of our investments by between 4.7% and 6.1% a year.

Delivering Net Zero is important not only for our investments but also for the planet. The TCFD Report was an important step on our journey, providing an important baseline of information on our climate risks. We will be publishing an updated report in July 2023.

> *Delivering Net Zero is important not only for our investments but also for the planet. The TCFD Report was an important step on our journey, providing an important baseline of information on our climate risks.*

1 The greenhouse gas emissions our investments are responsible for

Retirement Income Builder (defined benefit)	**4.2** million tonnes of CO_2e
Investment Builder (defined contribution)	**65,000** tonnes of CO_2e

2 Our emissions intensity: the amount of greenhouse gas emissions per £million we invest

Retirement Income Builder (defined benefit)	**89.5** tonnes of CO_2e per £million
Investment Builder (defined contribution)	**72** tonnes of CO_2e per £million

3 The proportion of our investments aligned with 2°C or below

Retirement Income Builder (defined benefit)	**24%** of our investments
Investment Builder (defined contribution)	**18%** of our investments

Engaging with policymakers

We are a long-term advocate of the need for an investor voice in policy development, because we believe engagement with policymakers and regulators on ESG and related factors improves how markets operate and addresses systemic risks. We also recognise that stronger markets lead to stronger economies, which strengthen the fiscal position of governments. Therefore, our engagements with policymakers also aim to protect or enhance our investments across asset classes, from public equities to sovereign debt.

For over 20 years, we have highlighted market-level engagement as a specific objective of USS's RI strategy. Our engagement with policymakers and governments internationally covers issues such as stewardship and accounting regulation. It also includes listing rules, shareholder protections, corporate governance, transparency and disclosure and climate change.

To strengthen our voice, we also engage on these matters alongside other investors through collaborations such as the Asian Corporate Governance Association (ACGA), Institutional Investors Group on Climate Change (IIGCC), International Corporate Governance Network (ICGN) and the Australian Council of Superannuation Investors (ACSI) (see Principle 10 for further details). Our approach to collaborative engagement is frequently associated with addressing systemic risk. For example, our long association with the ACGA has enabled us to support improved corporate governance – and increasingly environmental and social issue – regulation and practice in Asian markets. In addition, our involvement in the IIGCC Policy Working Group supports engagement with policymakers in the UK, EU and member states on improving climate change regulation.

Over the years, we have met with government representatives, regulators and state-owned enterprises in markets as diverse as South Korea, Australia, Hong Kong, India, Canada, the US, South Africa, the Netherlands, Japan, Brazil and the European Commission. We also regularly engage with the UK government and regulators (including The Pensions Regulator (TPR), the Financial Conduct Authority (FCA), and the Financial Reporting Council (FRC)) as our home market.

Throughout 2022-2023, we have continued to meet policymakers (both face to face and remotely) as well as submit responses to consultation papers and participate in roundtables and other policy discussions. Under Principle 7, we discuss how our approaches to stewardship – company engagement and policy engagement – and investment decision-making are integrated.

Other examples of our policy engagement work on ESG issues in 2022-2023 include:

- Signing up to a joint statement, led by the Church of England Pensions Board, and supported by the then-Pensions Minister, on collaboration in support of climate transition in emerging markets – see box on page 21
- Responding to a variety of consultations on climate and wider sustainability issues. These include:
  - Jointly with Railpen, responding to the *FCA's Sustainability Disclosure Requirements (SDRs) and Investment Labels* consultation
  - Providing input to the *BEIS Review of Net Zero: call for evidence* highlighting our belief that engagement is more appropriate than divestment in generating change and requesting that the UK Government is unequivocal and public in its support for the transition to a low carbon future as opposed to divestment from high carbon assets
  - Responding to the ISSB's *IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information* and *Exposure Draft IFRS S2 Climate-related Disclosures (see box below)* – making representations on reporting)
- Attending an Investment Association roundtable on ESG and investment issues with guest speaker Alexander Stafford MP, Chair of the All Party Parliamentary Group on ESG and member of the BEIS Select Committee
- Joining IIGCC's Sustainable Finance Group, a group which supports the IIGCC's response to and influencing of UK broader sustainable finance policy

Making representations on reporting

USS is a founding member of the Occupational Pensions Stewardship Council (OPSC). As part of our ongoing participation, during 2022-2023 we had presentations from TPR, FRC and the Department for Work and Pensions on reporting. We continue, through both the OPSC and individual engagement, to make representations to policymakers and regulators on reducing the reporting burden and the need for consolidation to make it more efficient.

In our response to the International Sustainability Standards Board (ISSB) consultation on Sustainability Standards Exposure Drafts, USS welcomed the consolidation of sustainability / ESG reporting initiatives (e.g., Sustainable Accounting Standards Board (SASB) and International Integrated Reporting Council (IIRC)) into the Value Reporting Foundation, and building on the structure of the TCFD recommendations. We also supported the recommendation that companies disclose transition plans as these are essential for investors in their assessments of how entities are planning to deal with the opportunities and challenges climate change poses.

In addition, we recommended that the International Sustainability Standards Board (ISSB):

- Broaden the scope of reporting beyond a simple focus on implications for enterprise value to create a broader more and holistic reporting framework, embracing the double materiality concept
- Require companies to explain how materiality determinations are made
- Set out that climate data are core data that should be disclosed by all companies
- Produce sector specific guidance to improve the quality of sustainability / climate related disclosure

USS signs Climate Action 100+ letter to Norway on Equinor

In January, as a member of Climate Action 100+ (see Principle 10) we joined fellow signatories in writing to the Norwegian Prime Minister to request a meeting with representatives of the Norwegian State regarding its role as the largest shareholder in Equinor ASA, a petroleum refining company. We were looking to explore how shareholders can best support Equinor to take further action to align its strategy with a 1.5 degree Celsius pathway in line with the Paris Agreement.

PRI Working Group on global standard for stewardship

PRI has commissioned the Thinking Ahead Institute to research and assess the appropriate level of resources that institutional investors should be prepared to dedicate to stewardship. This joint global project will include a benchmarking study to understand current stewardship practices and resourcing requirements, and a Resourcing Stewardship Working Group has been established. The group is comprised of 23 members, including USS's Head of Responsible Investment.

The aim of the working group is to help establish expectations of RI resourcing requirements at asset owners and investment managers and will enable us to engage with them on areas of under-resourcing or underperformance. This will be about more than just the number of people in RI teams – it will also include the experience and training of those teams and how stewardship and engagement is embedded across the wider business. The work, which will culminate in a report, is expected to be completed in the summer of 2023.

12 leading UK pension funds collaborate in support of climate transition in emerging markets

A group of 12 leading UK pension funds convened by the Church of England Pensions Board, representing £400bn assets under management and working on behalf of over 18 million members, will jointly consider how to support the climate transition in emerging markets. Supported by the then-UK Pensions Minister, Guy Opperman MP, the funds outlined their intentions at the opening of the two-day Net Zero Delivery Summit at Mansion House in London in May 2022. The 12 funds included not only USS, but also BT Pension Fund, Railpen, Brunel Pension Partnership, Border to Coast Pension Partnership, Nest and Legal & General Workplace Pension Plan and Stakeholder Pension Plan.

Recognising the urgency of supporting the climate transition in emerging economies, the 12 funds committed to explore how greater impact could be achieved through a shared understanding of the need, opportunity and mechanisms to provide such investments in these markets.

The intervention was agreed following an investor roundtable hosted by the Church of England Pensions Board with the UK Pensions Minister in the context of the UK's COP26 Presidency of the United Nations Climate Change Conference. The Funds issued a statement outlining their commitment, which was then put to other investors for consultation and input. The next steps in the project include agreeing a steering group and reviewing the statement in light of the feedback received to the consultation.

Global Commission on Mining 2030

Whilst mining has impacts across many ESG areas, it is essential for the carbon transition which cannot take place without metals. Given the sector's importance, it needs to be able to retain its social licence to operate by demonstrating that it can meet the needs of society and the low carbon transition, and does not cause harm to people, communities and the environment.

USSIM has joined the Global Commission on Mining 2030 which has been established by the Church of England Pension Board and is supported by the United Nations Environment Programme, the PRI and the ICMM. This investor-led Commission will aim to address a range of issues that have the potential to impact and be impacted by the mining sector. These include:

- Climate change
- Biodiversity
- Critical minerals and the transition
- Indigenous rights
- Tailings and Tailings Dams
- Future workforce / automation
- Deep sea Mining
- Artisanal and small-scale mining
- Child labour

The work will align with some of the systemic risks USSIM has already identified (see page 17), and some areas that we have already engaged on with the mining sector. The Commission will include companies, investors and representative bodies, and will identify the key issues and the best practice required to address them. USS is also a member of the core Steering Committee established to progress its work and provides one of the Commissioners of the project.

Participation in industry initiatives and conferences

Market engagement is not just about policymakers and regulators, it is also about engaging with other market participants. As such, USS participates in a number of industry bodies including the Pensions and Lifetime Savings Association (the trade association for workplace pensions), the Investment Association (the trade body for investment managers), the Investor Forum (a stewardship focussed collaboration group) and others where we have inputs into how ESG practices are progressing in the sector. We participate in events and conferences to learn, share experience and encourage other funds to be more involved in stewardship and RI activities. We believe this is in our members' best financial interests, as the more pension funds that are active on ESG issues, the more effective stewardship can be. Examples include:

- We joined a panel discussion on 'Providing a harmonised sustainability message across reporting' at the TCFD & Climate Risk Reporting Conference in March 2023
- Our Head of Responsible Investment spoke at a Pensions Funds & Climate Risk roundtable on *Academia meets industry*, hosted by Warwick Business School (February 2023), and took part in a panel discussion at #PRIinPerson to talk about the role of Private Markets in the energy transition
- Our Senior Investment Director spoke at the SEO London Alternatives Investment Conference in February 2023, where they spoke to a group of young professionals with diverse backgrounds in the financial sector about diversity and ESG topics
- Our Head of Quantitative Equities spoke on a Climate Financial Risk Forum webinar, where he discussed climate data (January 2023)

Case study: Investor Statement on Workforce Inclusion

USS signed an Investor Statement supporting Railpen's engagement, '*Workforce Inclusion and Voice; Investor Guidance on Workforce Directors*'. The Investor Statement's purpose is to encourage companies to consider seriously the possibility of having one or two workforce directors elected/appointed to the board as another mechanism to support current workforce engagement activities. For USS, this collaboration is helpful ahead of USS's planned voting policy change for 2024 on enhancing workforce engagement to increase long term value creation.

Global Investor Statement to Governments on the Climate Crisis

USS was again a supporter of the 2022 Global Investor Statement, which called for clear policy frameworks that encourage capital flows towards urgent climate action. We were one of 604 signatories representing almost US$ 42trn in AUM of a statement that was released in advance of the 27th United Nations Climate Change Conference (COP27) held in Egypt in November 2022.

The key asks of the Statement included:

- Ensure that the 2030 targets in their Nationally Determined Contributions align with the goal of limiting global temperature rise to 1.5°C. If their targets are not aligned, governments must enhance and strengthen their 2030 targets before COP27, considering different national circumstances
- Implement domestic policies and take early action to ensure that their 2030 greenhouse gas emissions are aligned with the goal of keeping global temperature rise to 1.5°C. This will require governments to accelerate the development, deployment and dissemination of technologies that enable the transition towards a Net Zero emissions economy, including:
  - Contributing to the reduction in non-carbon dioxide greenhouse gas emissions
  - Strengthening climate disclosures across the financial system through, for example, requiring mandatory TCFD-aligned reporting for the largest companies and financial institutions to report on climate-related risks and opportunities, backed by a robust global taxonomy

- Our Head of Responsible Investment spoke at the Professional Pensions 'ESG Focus' conference in December 2022 (by pre-recorded video) about USS's experience of producing our first mandatory TCFD Report in 2022
- Our Head of Investment Strategy & Advice attended the 2022 EMEA Investor Forum in November 2022, which, amongst other things covered ESG's role in the portfolio

We have also been members of the PRA-FCA Climate Financial Risk Forum since its inception in 2019. The Forum is developing best practice to enable the financial sector to better manage climate-related financial risks and to support the transition to Net Zero. USS contributed a case study to their 2023 Scenario Analysis Guide for Asset Managers.

Principle 5: Review and assurance

Principle 5

Signatories review their policies, assure their processes and assess the effectiveness of their activities.

We have a proactive and transparent approach to internal and external review and assurance and take appropriate action where and when necessary.

Our RI policies and statements are available on our public website (uss.co.uk). An updated Responsible Investment Policy will be developed this year.

We submit regular reporting and monitoring of the scheme's activities to the board and its Investment Committee. Data elements that appear in our Report and Accounts, for example on voting data, are also formally audited by the scheme's external auditors.

The RI team reports formally to the board annually, where the board agrees the scheme's RI approach and formally reviews the team's activities, signing off key focus areas and policies. The board also receives additional input on ESG management, where necessary, and undertakes training on RI-related issues. The RI team also reports formally to the Investment Committee twice a year. In 2022, the board also received training on how ESG is integrated into decision-taking by investment teams, the new Investment Framework and the risk systems updated to reflect this.

For additional monitoring and assurance, our Audit, Risk and Compliance, and Managers and Mandates Committees also receive regular reporting on ESG due diligence and monitoring, and track voting process implementation and performance. The scheme has also established detailed external manager monitoring programmes to assess and ensure its responsible investment policies are being implemented (see Principle 8).

We recognise the importance of external assurance processes and have previously responded to the UNPRI's Reporting and Assessment survey on an annual basis. The UNPRI named us as leaders for our approach to selecting, appointing and monitoring external managers (see Principle 8) in 2019, and for our approach to climate change in 2020.

USS Compliance carried out a focused review of the TCFD Reporting Control Environment. The outcome was rated good overall, with one low risk action around the creation of a document that lays out the process for the production of the report more clearly. We also documented our 2022 TCFD controls (see box on page 24).

"Our wider approach to risk management provides additional assurance to the Investment Committee and Trustee Board that ESG and climate risks have been integrated into USS's wider risk governance, monitoring and management processes."

Documenting our Taskforce on Climate Related Financial Disclosures (TCFD) controls

When producing our first mandatory TCFD Report in 2022, we took steps to ensure that all requirements (as set out in regulation by the UK Department for Work and Pensions) were tracked, evidence added against each where feasible, and marked 'complete' once satisfied.

In addition:

- We sought feedback from our investment desks to assess asset class-specific carbon data
- Our Finance team conducted an arm's-length review to assess whether the non-financial disclosures in the TCFD Report 2022 were reliable and fit for purpose. This included assessing the data sources used in the disclosures and the accuracy of manually collated data; the quality of modelling with reference to the externally provided model risk review; and the use and inclusion of appropriate data generated by the models within the TCFD Report and as summarised in the scheme's Report and Accounts

Given that our carbon data is disclosed publicly in the TCFD Report, the DB and DC data models fall into USS's 'high risk' category within USS's Model Risk Policy. As such, we engaged CRISIL as a third-party to assess the quality of both the DB and DC models (not the quality of the data itself). CRISIL's assessment concluded that the models' structure, input data, conceptual soundness, computational processes and linkages fall in the 'Appropriate' category (alternative outcomes were 'appropriate with recommendations' and 'material weaknesses').

Mock FCA Audit with ESG

During 2022 we appointed Optima Partners to conduct a Mock FCA Audit which included ESG. This is a voluntary activity which we undertake periodically to test our compliance controls and frameworks.

The purpose was to conduct a high-level review of USSIM's systems and controls arrangements against applicable FCA rules and requirements and industry best practice. The review involved a risk-based assessment of a range of themes, which included ESG, against relevant FCA rules and regulations, as well as industry best practice.

The mock FCA Audit identified two ESG areas where improvements could be made (how we define ESG factors and clarity around the scheme's net zero ambition) and we are using the finding to improve terminology in these areas.

ESG and Climate risk governance, assessment and reporting

The Risk team are responsible for the design of USS's Enterprise Risk Management Framework and the provision of independent oversight and challenge of the assessments made by the executive. Quarterly reporting on the scheme's climate and ESG risks is provided to the Group Executive Committee and Trustee Board using newly developed Investment Key Risk Indicators (KRIs) and Risk Appetite Statements. This process is reviewed annually alongside the strategic planning and budgeting process.

The USSIM CEO has been appointed as the executive owner for the scheme's climate and investment risks (which consider ESG implications), with the following responsibilities for these risks at the Group level:

- Identify, monitor and manage the risk on a day-to-day basis
- Understand the implications of the risk on USS strategy / operations
- Direct the appropriate risk response (avoid, mitigate, transfer, accept) and ensure it is applied effectively
- Implement and enforce risk management policy
- Ensure frameworks for managing the risk are available and applied across the organisation
- Perform a quarterly risk assessment of risk exposure versus risk appetite

Enterprise Risk Management Framework

Our wider approach to risk management provides additional assurance to the Investment Committee and Trustee Board that ESG and climate risks have been integrated into USS's wider risk governance, monitoring and management processes. Areas of the Enterprise Risk Management Framework where these risks are specifically considered are summarised below.

Top and Emerging Risks

Climate change risk features highly in the USSIM Top and Emerging Risks process currently underway at the time of writing. The Top and Emerging Risks process is a key part of the Enterprise Risk Management Framework. It is a top-down process facilitated by the Risk team and led by USSIM executives, to prioritise USSIM's most important risks at a high level (i.e., enterprise level). This allows a more focused and robust approach to identifying and managing our strategic and operational risks and complements both the risk appetite and KRI monitoring as well as the bottom-up approach using business level risk registers.

This process is conducted on an annual basis and refreshed as necessary, or if triggered by events. Mitigating action plans are owned at the executive level and tracked and reported at the various governing bodies on a quarterly basis.

Risk Appetite Framework and associated Key Risk Indicators

The Risk Appetite Framework is one of the key methods by which we manage and govern the risks associated with Responsible Investment.

USSIM's Risk Appetite Statements (RASs) and Key Risk Indicators (KRIs) are formally approved by the USSIM board on an annual basis and are set in relation to its strategic objectives. They have been designed to cascade through USSIM to guide decision making by its employees. The strategic objectives determine which risks the scheme is exposed to and the extent to which it wants to accept risk into the organisation.

Risk Appetite Statements have been approved by the Trustee Board for the scheme's ESG and climate risks (considered as part of USS's wider investment risks). These risks are subsequently monitored with appropriate indicators and reported to numerous governance bodies within the scheme to provide appropriate oversight.

The current RASs and KRIs are shown in Figure 1 below.

Executive level risk register reviews

As part of the process for managing risk and ensuring we stay within appetite, business areas are required to maintain risk registers which document the risks and controls associated with their processes. These risk registers incorporate ESG and climate risks, and evidence that investment desks and supporting functions are integrating climate and ESG considerations into their everyday processes and decision-making, where appropriate.

The business risk registers are reviewed periodically with input from the RI team, and oversight and challenge from the Group Risk team. The results of these assessments are reported to relevant governance forums on a quarterly basis (e.g., Risk Committees).

The Group Risk team's bottom-up assessment of these risks registers contributes to the qualitative assessment for the DB investment balanced scorecard assessment on Responsible Investment.

Figure 1: DB Risk Appetite Statements & Key Risk Indicators

Risk	Investment RAS	Investment KRI
DB Investment Risk	**"Cautious[2]"** for ESG risk (the potential for long term detrimental impact on financial performance arising from ESG factors, except climate change) within the DB implemented portfolio	Qualitative assessment by the Risk team of how USSIM is integrating ESG factors (including reporting and stewardship)
Climate	**"Cautious"** appetite for climate issues causing detriment to performance	Qualitative assessment by the Risk team of how USSIM is delivering vs its commitment to Net Zero

[2] The Trustee Board's risk appetite for these risks is "Cautious" which means there is preference for safe options that are low risk and have either moderate financial or opportunity cost, or only have the option for moderate reward. For more information see our 2022 TCFD Report.

How we assess our performance and risk management for Responsible Investment (RI)

The management of ESG and climate risks is assessed and reported via the Investment Frameworks (IFs). This process incorporates consideration of a suite of qualitative KRIs which are reported to various governance forums and form a key input into the Responsible Investment section of the DB and DC investment balanced scorecards – see Figure 2 below.

The objectives of the DB and DC IFs are to:

- Better enhance the alignment of Investment Committee and USSIM efforts to the trustee's wider objectives and investment policies
- Introduce a multi-faceted view of risk through DB & DC KRIs and RASs in line with the trustee's investment beliefs

USSIM's investment teams are motivated to achieve our responsible investment goals by the inclusion of Responsible Investment in their investment objectives as illustrated in the new DB and DC investment balanced scorecards. One of the purposes of the IF is to act as a mechanism for the Investment Committee to assess USSIM's investment performance and how well USSIM has managed investment risk. The DB and DC investment balanced scorecard assessments will be undertaken annually by the Investment Committee, and the output used by the board's Remuneration Committee when considering compensation outcomes for USSIM staff.

Category 5 (Responsible Investment) includes the qualitative DB and DC KRIs on the trustee's Net Zero ambition and USSIM's integration of ESG factors into its investment decision making process. See Figure 3 below.

USSIM's performance across the KRIs in the Responsible Investment (RI) category is qualitatively assessed on an annual basis by USS's Group Risk function. The Investment Committee will also take into account USSIM's other RI achievements over the period (for example, USS received the ICGN's Global Stewardship Disclosure Award 2022 for asset owners above £60bn, in relation to its full range of disclosures, TCFD and Stewardship Code Reports and web content). In 2023, we added *physical risk associated with climate change* as a new KRI. We are due to review the investment balanced scorecard with our Investment Committee later this year.

Figure 2: Investment balanced scorecard categories

Figure 3: Responsible Investment - qualitative Key Risk Indicator measures for ESG and Net Zero

5. Responsible Investment

a. Net zero ambition (KRI)

i. An assessment by the Risk team of how USSIM is delivering vs its commitment

b. ESG integration (KRI)

i. An assessment by the Risk team of how USSIM is integrating ESG factors (including reporting and stewardship)

Investment Approach

Principle 6: Client and beneficiary needs

Principle 6

Signatories take account of client and beneficiary needs and communicate the activities and outcomes of their stewardship and investment to them.

We have proudly served as a not-for-profit trustee since 1974 and employ more than 500 people in London and Liverpool, including those employed by USSIM. During the period to 31 March 2023, USS paid out approximately £1.8bn in benefits to 81,077 pensioner members. We also have 212,306 active members accruing benefits with us and 207,201 deferred members with preserved benefits.

We seek to engage directly with our members on many matters and responsible investment themes are a key part of that. We also seek to speak more broadly about our approach with both our stakeholders and to the industry, including via the media and conferences.

Helping our members stay engaged and informed

With such a large, unique, and engaged membership, appealing and effective communication is key in keeping our members informed. Our members are increasingly aware of Responsible Investment, and some are very interested in the interconnected ESG factors that impact the scheme's investments. In June 2022, we surveyed our active members about their awareness and interest in responsible investment issues, including USS actions on Net Zero, our approach to stewardship and the ethical investment options offered to members of our DC section. 1219 members responded and the findings from the survey have been fed back to our investment and communication teams to help identify opportunities to build member engagement and understanding. The survey revealed the following:

- 60% of members responded that they are 'somewhat or very familiar' with responsible investing
- 87% had heard of Net Zero
- 59% of members placed a high importance on ESG factors, when thinking about the investment choices USS makes on their behalf

Our communications professionals respond to this by regularly reviewing and enhancing our multichannel content.

This is done across our statutory communications and our website, and by creating educational and editorial articles related to Responsible Investment (RI), which are delivered to members by email where appropriate.

Our principal communications outlet for members is our website, www.uss.co.uk, which features a dedicated section on RI, providing details of the approach the scheme takes to addressing ESG issues and includes our RI reports. Here, we publish reports and information on topics such as:

- Our first mandatory TCFD Report 2022 and accompanying summary document
- Our new Stewardship and Voting Policy, which has been updated to reflect our new approach: that we may vote more against the reappointment of directors where we feel the company is failing its commitments

  For example when a company has not disclosed its climate transition plan, does not meet our diversity expectations, or where executive pay doesn't align with company performance. Read more in Principle 12.

- Our Statement of Investment Principles and Investment Beliefs which both incorporate the scheme positioning on RI and ESG issues

We have made a concerted effort to develop more dynamic content for members, including Facebook stories, website FAQs, videos, webinars, and podcasts, to build engagement with investments in general. Some key content includes:

- 'Where your money goes' video, which explains how and where we invest member contributions, and how we consider the impact of ESG issues when investing
- 'Our journey to Net Zero' webinar which provided members a 'back to basics' look at Net Zero, how we plan to achieve it, and why climate change matters for investments (see box to the right)
- A range of articles designed to engage members with their investments and ESG, including 'What is ESG?', 'Your positive impact on climate change', and 'How your contributions support the UK economy'
- We held a Member Day at Durham University in March 2023, which included a session on our ambition to be Net Zero by 2050, the progress we're making and next steps. This enabled the members and university representatives attending, both in-person and online, to ask questions as to how we were approaching climate change and Net Zero. This was the first in what will likely be a broader programme of such briefings across member institutions

Addressing the effectiveness of our communications

We use a number of different methods to assess the effectiveness of our communication. These include monitoring engagement rates across our email and digital channels, benchmarking against industry best practice, and obtaining member feedback from a variety of sources including operational channels, member surveys and our Member Voice Panel. We use all of these insights to improve our communications.

We recognise that effective communication is not a one-way process. While we invest on the basis of financial factors, our members' views are critical as we invest for their long term futures. To obtain their views, we regularly survey our members on a range of issues and, as previous noted, this includes ESG factors.

Member Webinar – Our journey to Net Zero

We hosted a webinar designed to engage members with our journey to Net Zero and give them an opportunity to ask our investment specialists some questions. This webinar was facilitated by pensions experts Mercer, and focussed on why climate change matters for investments, what Net Zero is and how we plan to achieve it, plus what it all means for members. You can watch the webinar here, and review some of the key questions and answers sent in by members.

Updating our Ethical Guidelines

People are more interested in how their investments are influencing the world around us than ever before, and USS believes it is important to give members the opportunity to invest in line with their values.

While our investments for the Retirement Income Builder, the DB part, can only take ethical factors into account where they do not pose a risk of significant financial detriment, and where we believe that members share each other's views, legally there is more flexibility when members can choose their own investment strategy preferences. That is why members with Investment Builder (DC) savings can choose to invest these ethically. We offer various ethical options: the USS Ethical Lifestyle Option, for members who want to manage their investments themselves; and USS Ethical Equity Fund and the Sharia Fund for members who what to manage their investments themselves.

To coincide with the update to the scheme's Ethical Guidelines (which apply to savings in the two ethical fund options available in the scheme's DC part, the Investment Builder), Dean Blower, Head of Strategy & Insight, and Aleck Johnston, Head of DC Investment Product, wrote about how USS provides its members with ethical investment options.

Investment Builder ethical investment microsite

In conjunction with Columbia Threadneedle Investments, one of the external investment managers used in our Investment Builder (DC) ethical investment options, we have created a microsite for members. This provides the most up-to-date information, including fund updates, impact reports, further detail on their screening criteria as well as the information contained in the Quarterly Investment Reports.

In 2022, we continued to engage with member and employer groups including DivestUSS, a USS member pressure group. We also continue to invite members to join our Member Voice panel. Member Voice is an online community just for USS members, where they can talk to their peers about how their pension is being managed and participate in surveys, discussions and previews of new initiatives.

We also meet regularly with University and College Union (UCU) a trade union and professional association that represents individuals working in further and higher education throughout the UK. UCU represents members of USS on the Joint Negotiating Committee (JNC) and appoints individuals to the Trustee Board and to the Advisory Committee. We meet for informal discussions on investment matters, including ESG. Recent topics discussed include Net Zero, our approach to divestment, and USS's TCFD and Stewardship Code reporting.

USS is responsive to media engagement and recent examples include:

- USS appeared in an article in the Financial Times which looked at our new Stewardship and Voting Policy (see Principle 12). The article explains that we may vote against directors at BP and Shell at their annual meetings unless both companies improve their commitments to tackling carbon emissions
- Our Head of Strategic Equities appeared in a Net Zero Investor article on alignment between asset owners on their approach to stewardship
- Responsible Investor discussed USS's involvement in Willis Towers Watson's Thinking Ahead Institute and the new Resourcing Stewardship working group – see also the case study in Principle 4
- We discussed 'What will 2023 hold for climate activism' in Sustainable Views, covering our relationship with Divest USS and our wider approach to ESG

We also write occasional thought leadership content and blogs on ESG and Responsible Investment, and, in addition to the Ethical Guidelines piece mentioned above, these include:

- USS's Head of Responsible Investment wrote about our new Stewardship and Voting Policy
- Our Public Affairs Manager wrote about USS winning the ICGN Global Stewardship Disclosure Award 2022 (for asset owners above £60bn) for our full range of disclosures, including our Stewardship Code and TCFD Reports
- We issued a public statement responding to the FRC's approval of our Stewardship Code Report 2022

Institutions Meeting 2022

USS held its annual Institutions' Meeting in November 2022. The purpose of the meeting is to give the scheme's sponsoring employers the opportunity to hear about the Trustee's performance and priorities, and to ask questions. As part of this event, Russell Picot (Deputy Chair of the Trustee Board and Chair of the Investment Committee) chaired a panel discussion on the trustee's Net Zero ambition with Innes McKeand (USSIM Head of Strategic Equities) and David Russell (USSIM Head of Responsible Investment). Sarah Bentley, Chief Executive of Thames Water – one of USS's biggest investments, was our special guest speaker. You can watch a recording of the full event here (the Net Zero panel discussion begins at 57:38): https://vimeo.com/774268597

Principle 7: Stewardship, Investment and ESG integration

Principle 7

Signatories systematically integrate stewardship and investment, including material environmental, social and governance issues, and climate change, to fulfil their responsibilities.

In this section we provide details of how the different asset class teams across USSIM integrate ESG factors into their investment decision making process, and the stewardship activities they undertake. We also provide an update on our Net Zero strategy and the governance structure that has now been established to guide progress in this critical area.

Our investments

Our asset class and geographic mix, along with the specific companies, entities and sectors in which we invest within these asset classes and geographies, means that we cannot have a one size fits all approach to prioritising the ESG issues upon which we focus our stewardship, voting and integration activities. Instead, our approach to prioritisation for our voting and engagement activities is based on the following criteria:

- The size of our holdings in the entity or the size of the asset, portfolio company and/or property
- Whether we hold the asset internally or externally, and actively or in a passive index tracking portfolio
- Specific ESG factors with systemic influence (e.g., climate or human rights) or systemically important sectors (mining, banking)
- The home market of the asset or portfolio company
- The materiality of ESG factors and their effect on financial and/or operational performance
- Their ESG scores, and their rankings in specific benchmarks, in particular the Transition Pathway Initiative and the Workforce Disclosure Initiative
- The adequacy of public disclosure on ESG factors/performance
- Bribery and corruption-related issues

We cannot have a one size fits all approach to prioritising the ESG issues upon which we focus our stewardship, voting and integration activities.

Potential ESG issues

The USS Statement on Responsible Investment provides the following non-exhaustive list of financial ESG issues which can be used when assessing investments and deciding on priorities for voting and engagement:

- Antimicrobial resistance
- Bribery and corruption risk management
- Climate change
- Consumer and public health
- Corporate governance
- Cyber security
- Deforestation
- Diversity, equity and inclusion
- Environmental performance management
- Executive remuneration
- Health and safety
- Capital practices
- Human rights
- Innovation, research and development (R&D)
- Intellectual capital management
- Reputational risk
- Succession planning
- The social impacts of corporate activity
- Supply chain management
- Transparency and disclosure
- Water related issues

Once we have prioritised assets, portfolio companies or other entities for voting and/or engagement, we define our objectives for engagement and determine whether we will conduct individual engagements, engage in collaboration with other investors or whether others will engage on our behalf (see Principle 2).

We also pay attention to controversies and incidents that could have a material impact on a company and have a specialist data provider to provide update on such controversies. Our Global Emerging Markets (GEMs) team, for example, have been engaging with the Uyghur Region Working Group, a collaboration of investors engaged on Uyghur forced labour rights organised by the Interfaith Council on Corporate Responsibility (ICCR). See the case study on page 35.

Further details on engagement and collaboration can be found in Principles 9 and 10.

Our approach to exclusions

In 2020, USSIM undertook a detailed review of a selection of sectors in which the scheme invests. It looked for differences between what industry financial models predicted on returns and what we could reasonably expect to happen over the long term. We concluded that, in several cases, the outcomes predicted by the market did not appropriately consider the potential impacts of certain specific risks, including ESG.

As a result, we excluded certain sectors from our investment universe as they were deemed to be financially unsuitable over the long term. These included: tobacco manufacturing; thermal coal mining (coal to be burned for electricity generation), specifically where they made up more than 25% of revenues; certain controversial weapons; and, most recently, investment in Russian assets.

In line with our Exclusions Policy, USSIM has now completed divestment from the sectors identified in 2020, and for the small remaining positions we hold in Russian related investments, we are looking for opportunities to sell as markets reopen and when liquidity returns. Internal processes were established to implement the exclusions list (updated every four months, this restricts the ability for internal managers to trade excluded companies). We have also been working with external managers and have established new mandates (for example, the LGIM Solactive climate tilt for developed markets equities includes the USSIM exclusions (see box on page 48 for details)) to ensure that all funds are now aligned.

This was a major development for us with the clear aim of keeping the financial promises made to hundreds of thousands of members in the higher education sector, while fostering well-functioning markets for the long term. These exclusions will be kept under review and may be changed or added to (as we did in early 2022 with Russia – see the Foreword) and will be made across both the DB and DC parts of USS.

“*This was a major development for us with the clear aim of keeping the financial promises made to hundreds of thousands of members in the higher education sector, while fostering well-functioning markets for the long term.*”

Prioritisation

Given the breadth of ESG issues, to focus our resources on those that matter most, the scheme is also discussing proposals that we should establish a smaller number of priority issues. Whilst climate change / Net Zero will be a core focus, we are also examining the complex area of systemic risks (see page 17) to prioritise our activities in those areas.

In addition, one of the outputs of our carbon footprinting across all our asset classes has been to enable us to identify which assets have the greatest individual footprint or the greatest contribution to the scheme’s footprint, and you can read more about this in the Metrics and Targets section of our TCFD Report 2022. We are using these data to prioritise our stewardship and integration activities. For example, the RI Team is working with our GEMs team to undertake research and focussed engagement with the small number of companies that contribute 75 to 80% of the emissions of their portfolio.

For our Private Markets funds, we have identified the top 100 contributors to the carbon footprint for our externally managed private markets investments. To obtain these data, emissions were estimated based on average emissions intensity for the sector and location using data provided by S&P Trucost. We then aggregated the data by by fund manager or general partner (GP) to help prioritise our engagement strategy, enabling us to focus our engagements on those managers contributing the most to our carbon exposure. As a result, we will focus on the top six GPs who represent more than 80% of emissions of the top 100 assets (the remaining 20% being split across more than dozen other managers). Additionally, as previously noted we contacted all GPs within our Private Equity portfolio, as part of the ESG Data Convergence Initiative and plan to use the results and analysis to inform our private equity engagement programme and TCFD reporting in the future.

Encouraging Eskom to transition

Although our exposure to the company is via debt rather than equity, through much of 2022 Eskom remained one of the highest carbon footprints in our externally held mandates (see page 33 of our TCFD Report 2022 for more details). Eskom is the South African state-owned power utility, which is primarily reliant on coal-fired generators. We are supporting Ninety One, the CA100+ engagement lead investor, in its efforts to engage and bring about climate transition with the company.

This will be no easy matter. Over a number of years, the company experienced large scale corruption, a bloating of its staff (with non-existent ghost workers on its books) and a regular turnover of its senior management. The country regularly suffers from load shedding (blackouts), which is having a significant impact on industry and South Africa's productivity. This is exacerbated by systemic corruption and a sabotage of its facilities.

In 2022, Ninety One co-authored a CA100+ letter to the South African government to encourage their support of Eskom's transition through critical financing and policy measures. Engagement has now stalled while we await the replacement of the CEO, COO and Head of Just Transition Planning. Once engagement recommences, we need to initially address the measures being taken to root out corruption and then the measures it will implement to meet South Africa's 2050 Net Zero pledge. Doing this through Ninety One and the wider CA100+ initiative will ensure we have the right weight behind our engagement.

How we're implementing our Net Zero strategy

As set out under Principle 1, in May 2021 we announced our ambition to be Net Zero for greenhouse gases by 2050, if not before. To ensure that we better manage our delivery of our Net Zero targets, we have established a Net Zero Steering Committee and Net Zero Working Groups (NZWG) for each asset class, as well as for specific support functions. Each Working Group makes sure that USSIM investment teams across assets classes have a specific focus on the steps they will take to achieve the scheme's targets, and that support functions also play their role. The NZWGs are accountable to the Net Zero Steering Committee, consisting of senior investment executives, to make sure we deliver on our Net Zero ambition. The structure is set out below.

Net Zero governance structure

Project Sponsor
USSIM CEO

Steering Committee
Chair: Head of Strategic Equities

Working Groups

- **Equities:** Chair: Head of Developed Markets
- **Data, Measures & Benchmarking:** Chair: Head of Quantitative Equities
- **Fixed Income & Treasury:** Chair: Senior Credit Analyst
- **Reporting & Comms:** Chair: Head of Quantitative Equities
- **Investment Product Management:** Chair: Head of Manager Selection & Monitoring
- **Private Markets Group:** Chair: Head of Strategy
- **Investment Strategy & Advice:** Chair: Head of Strategy Delivery

Our Net Zero strategy includes:

- Developing individual asset class transition plans, so that the different investment teams can plan how they are going to contribute to our targets. Individual investment teams also have their own targets
- Continuing to increase integration of climate data into investment decisions
- Continuing to engage with our high emitting assets (see Cemex case study on page 50), as well as banks (as they play a crucial role in lending to the fossil fuel sector)
- If, following our engagement, it becomes clear that a sector or company still cannot transition to Net Zero, then we may consider divesting
- Continuing to engage with policymakers on climate change (see Principle 4) which we see as critical in getting the world to transition to Net Zero

The transition will require continued focus by USSIM's internal investment teams in terms of where and how we invest, along with requiring us to work with peer funds, our external asset managers and others in the investment value chain in order to deliver against this ambition. This will complement the scheme's existing renewable energy strategy, which will continue to develop and invest in wind and solar generation capacity. As at 31 March 2023, USS had approximately £2bn of renewable energy and green technologies exposure.

Case study: TPG Rise Climate: pursuing climate-related opportunities

Our new £500m Sustainable Growth mandate, managed by the Private Markets Group (PMG) within USSIM, will be invested globally – either directly or through funds – in high growth, privately-owned businesses that are developing technologies and services that will help companies and the broader economy to decarbonise. It currently applies to the defined benefit part, and over time, will also contribute to the defined contribution part. The first asset in this mandate is our investment in TPG Rise Climate, whereby we joined a number of other large institutional investors in subscribing to the climate investing strategy of alternative asset firm TPG's private markets impact investing platform. The strategy focuses on five climate sub-sectors: clean energy, enabling solutions, decarbonised transport, greening industrials, and agriculture and natural solutions. Carbon yield (CO2 per $ invested) and carbon aversion are reviewed before TPG invest and are monitored throughout the investment. Examples of the types of innovative technologies the fund supports include electric powered aviation (BETA Technologies) and improved carbon capture and storage (Summit Climate Solutions). Further examples and details of the TPG Rise Climate fund can be found on their website.

Our approach to ESG integration by asset class

Listed equity: Global Emerging Markets

USS's Global Emerging Markets Equities (GEMs) team has enhanced its ESG integration and reporting during 2022 with a particular focus on carbon by developing new tools and processes to support the scheme's ESG mission. Historically, the team's ESG focus had been principally on governance. This has been to ensure the team's investments are financially sound by management following governance best practices and USS voting assertively to encourage positive change. In 2022, this was broadened out with the in-house development of several key tools:

- A new Investment Case template (with a full ESG report) encompassing a firm's current position and goals for future development
- A new Company Meeting template including comments on ESG allowing the team to record a firm's progress against our goals and to share this with other teams internally, such as the RI and other investment teams
- A Carbon Model which allows the team to quantify its research and assumptions about a firm's future carbon emissions, their spending on emissions abatement and our views on the future price of carbon. This means they can better understand the sensitivity of each stock's target price to our key assumptions and focus our research efforts on the most carbon sensitive names

Using these new tools, the team identified the 12 most intensive carbon emitters in our portfolio which are mainly involved in energy-intensive industries such as cement, chemicals and energy. These 12 firms accounted for 75% of the GHG emissions from the portfolio by intensity. We engaged directly with many of these companies to clarify our assumptions about their emissions and then used this information to quantify better the key variables in our carbon models. A set of customised questions have been developed for each firm which will be used to continue our engagement with them to set goals on emissions reduction and measure their progress.

In addition to the most intensive emitters, GEMs have completed have completed the initial ESG and carbon work across all of our portfolio companies and will continue to focus our attention on the most intense emitters.

As well as deepening our understanding of carbon-related issues, we have also made progress on social issues as they relate to our companies. These include engaging with relevant holdings on avoiding the use of conflict minerals as well as developing a framework to engage with Chinese holdings on issues relating to the Uyghur group. See the case study on page 35.

Our work on ESG now forms an integrated part of our investment research process and this work is also central to our analysis of future investments for the portfolio. However, our progress in 2022 is an early step in an ongoing journey, and one which we believe will continue to add value to our portfolio. We note that our GEMs portfolio currently has a carbon intensity below the benchmark (MSCI Emerging Markets).

Looking ahead, our goals to evolve our ESG integration include:

- Working to develop a new version of the Carbon Model which will be fully integrated into the Discounted Cashflow valuation model which we use to inform our target prices for our investments. This will allow us to reach the next level of detail in terms of how the emissions outlook for a company affects its earnings and cashflow generation outlook and thereby its intrinsic value
- Building on the work of engagement with the most carbon-intensive firms, using our new tools to track their progress to ensure they reach their stated goals, and to take further action if they do not
- Identifying and engaging with at-risk companies in the Greater China region on the Uyghur group issue
- Working closely with the Responsible Investment Team to develop more common ESG goals and to engage with our holdings to implement these ideas into our portfolio. This includes further joint engagements with external investors to work multilaterally to encourage positive action towards our ESG goals

Listed equity: Developed Markets

We are establishing a new internal actively-managed Developed Markets Equities process. This investment process considers the assessment of financial ESG factors as integral to our fundamental analysis with, given the scheme's ambition, a specific focus on Net Zero. As such, standardised Net Zero and broader ESG frameworks are used to ensure the analysis is both consistent and comprehensive.

Our fundamental analysis of individual companies is anchored in an assessment of quality through four lenses with Net Zero and ESG assessments embedded in the resultant Quality Score. Company valuations incorporate the Quality Score and thus the resultant portfolio directly reflects our Net Zero and ESG analysis. The output of these review processes is used to ensure that the team are fully aware of ESG factors relevant to company and, where they are financially material, integrated into the investment decision-making and stewardship process.

Update on collaborative engagement on the Uyghur group

As we set out in our 2022 report, the treatment of the Uyghurs and other ethnic Muslim groups in China is an important issue and we are working on a suitable treatment of our Chinese equity investments in response. We have participated in multilateral engagements on the topic and in 2022 we did our own internal research to help us understand how we should integrate the topic into our investment research and decision making.

The study assessed the available research and traced the evidence back to original sources wherever possible, including Chinese police reports and government data that is/was available online. It also considered the official responses from the Chinese Government. We concluded that the issue required deeper integration into our investment decision making on individual Chinese stocks. This was because there was evidence that the allegations of mistreatment against the Uyghur group were not just restricted to Xinjiang Province and could put other parts of the Chinese manufacturing supply chain at risk of Forced Labour violations.

We decided to take a risk-based approach, initially considering industries such as Textiles, Solar and Automotive, which can be relatively labour-intensive, and where there is a known risk of Forced Labour violations based on public reports.

Given the political sensitivity of the issue in China, it can be difficult to gain meaningful insights from management teams, so engagement is not always effective. However, in June 2022, China ratified the International Labour Organisation Conventions 29 (Forced Labour Convention) and 105 (Abolition of Forced Labour Convention), which will form part of Chinese domestic law from June 2023. Companies in violation of Chinese domestic law by mid-2023 would represent a clear material risk to any investment case.

Our GEMs team have since engaged with their Chinese holdings to discuss the potential for forced labour either within their own operations or their supply chains. For example, in October 2022, a specific call was held with NIO (the electric vehicle manufacturer), where there was an identified risk of forced labour in its supply chain and in particular, the mining of rare earth elements for batteries. NIO stated that they had a code of conduct for suppliers which referenced ILO guidance and the UN Declaration on Human Rights, and that they were working on mapping its raw materials supply chain.

We will continue engaging with companies to understand if they have the appropriate systems to ensure compliance and what actions they will take, and have taken, if violations occur. We will also consider the following evidence:

- Supply chain mapping
- Third party auditing
- ILO Conventions
- The US Uyghur Forced Labour Prevention Act (UFLPA)
- How the company audits its supply chain regarding the ethnicity of workforce and potential infringements of international norms, such as the ILO Conventions on Forced Labour
- Whether the company is feeling pressure from overseas clients

Over the course of 2023 we plan to:

- Identify the most at-risk holdings in our China equity portfolio
- Develop a standard set of questions we can adapt on a case-by-case basis
- Engage directly on an ongoing basis

Case study: Monitoring identifies poor ESG performance

In 2022, USS divested from an externally run actively managed US equity fund. This was in part due to concerns around a lack of alignment on Responsible Investment practices, particularly the manager's progress on active ownership. For example, we believed their voting policy, market collaboration, and RI reporting fell short of market good practice. This led us to believe that the gap between our policies would unlikely bridge in the short or medium term, contributing to our decision to exit the fund.

Fixed Income: Credit

Given the breadth of issuers in the bond market (more than 3000 issuers in the main benchmark alone), the Credit Team adopts a screening-based approach using ESG risk scores from external rating providers, including the three major credit rating agencies. The screening for any ESG red flags is automated by the team and run at the start of each month, so that it captures the latest available data. It considers each of the group of risks (environmental, social or governance) separately and highlights any pockets of risk to the respective sector analysts.

Where ESG issues are financially relevant to investment cases, this is flagged as part of the research to aid subsequent reviews and to help prepare for meetings. When the company scores poorly on the environmental factors and climate risks, we undertake further analysis and assess implications for its creditworthiness. We also assess to what extent these risks are already priced in by investors.

This single-issuer ESG analysis is supported by the internally developed ESG Credit Template that aims to capture and map all available ESG data for our investment universe. The template also allows the team to compare portfolios ESG scores to their benchmarks and quickly identify excessive exposures and unintended ESG risks by sectors.

Additional fundamental ESG research is also undertaken for those companies with weak scores, those that lack ESG scores and companies where we have a large credit exposure (>£50m). For large exposures, an additional quarterly forum exists to discuss ESG issues at both an industry and company level. ESG factors are also a standard topic of discussion during company meetings.

Whilst ESG issues have become a standard topic of discussion during investor calls with increasing disclosure expected as standard, compared to public equity investors, credit investors are somewhat limited in their ability to engage with issuers on ESG matters. That said, our Credit Team engaged with water utility Severn Trent on how the company assesses its green investments. We also always engage on ESG topics as part of any social housing investments made. As social housing providers are normally set up as charitable institutions and do not have equity investors, credit investors play a significant role in providing the capital for developments in the sector (for example, retrofitting for improved energy efficiency). As a result, credit providers can play a more significant role in engaging with the sector.

Case study: Autostrade per l'Italia SpA: increased focus on ESG

Autostrade per l'Italia SpA (ASPI) is the largest operator of tolled motorways in Italy, operating around 61% of Italian tolled motorway traffic. Our credit investment in the toll road sector carries environmental risks from potential restrictions on traffic and combustion engine cars, as their effect on air pollution is gaining increasing attention. These environmental factors are an important consideration in our overall credit analysis of ASPI.

In 2022, we analysed ASPI's ESG risks by looking into the measures taken by the company to mitigate these risks. We found that ASPI:

- Had taken a serious approach to its ESG profile and had adopted a Net Zero strategy. This included a commitment to electrify its network and a decarbonisation path, according to the standards set and validated by the Science Based Targets Initiative (SBTI). ASPI now has 112 ultrafast charging points and 43 multi-standard fast charging points in operation at 56 service areas, which should reach over 600 by the end of 2025
- Aim to achieve an absolute reduction of 68% in Scope 1 and 2 emissions and an economic intensity reduction of over 50% in Scope 3 emissions by 2030
- Had ESG scores and reports, provided by the rating agencies, that were all below our internal threshold for ESG red flags
- Had increased their usage of recycled steel and are working with their cement suppliers to improve its green contents

We met with management in November 2022 and discussed their plans for linking their Net Zero strategy targets with the company's debt structure. We see ASPI's increased focus on ESG and overall improvement on the governance front as a positive development driven by the new shareholder structure. Following our deep-dive ESG analysis we were comfortable with our position in ASPI, which held out throughout a turbulent 2022. We will continue to follow ASPI's developments and commitments on the ESG front and to discuss the topic at our meetings with management.

Case study: Housing Associations: prepared for the climate challenge?

As providers of debt finance to support investment into social housing provided by housing associations (HAs), our Credit team closely monitor environmental and social risks apparent in their housing stock. Retrofitting social housing (which involves making changes so energy consumption and emissions are reduced) is crucial to achieving Net Zero. Maintaining quality houses that meet fire safety standards, are energy efficient, and prevent damp and mould are important social objectives.

The team recently investigated the quality of housing stock provided by HAs, which included costs to retrofit the properties to upgrade their EPC ratings, fire safety compliance and their Net Zero transition plans. The results showed that the sector as a whole was not well prepared to face the climate challenge and we therefore reduced their exposure to HAs.

The team still closely monitor the sector and engage with companies as we believe it is an important sector for the long-term. The sector also allows for meaningful engagement on ESG issues, and ESG agendas and retrofitting plans are discussed at all management meetings. However, the Credit Team will only invest in HAs that can present a cohesive plan for both retrofitting their buildings and the climate transition.

Fixed Income: Sovereign debt

USS utilises a proprietary tool, first developed in 2008, which ranks countries based on ESG factors. For the Emerging Market Debt (local currencies) portfolio, the composite index ranking is one of the core tools used in portfolio construction. The results of the composite country score are combined with a fundamental credit assessment and integrated with two other factors to formulate the investment strategy. The data sets that form the basis of USS's country ranking are:

- Transparency International's Corruption Perceptions Index (CPI)
- The UNDP Human Development Index (HDI)
- The Yale / Columbia Universities' Environmental Performance Index (EPI)
- The Heritage Foundation/Wall Street Journal Index of Economic Freedom

Improving ESG country scores are viewed as an indicator of an improving outlook for a country, whilst deteriorating ESG scores are viewed as being a reason to increase our caution towards a Country. Our investment approach attempts to avoid countries where the risk of default is increasing, to improve the quality of the portfolio and better match the risk appetite (in sovereign debt) to the scheme. ESG country rankings contribute to this analysis but are not the only input. This ESG country analysis is also built into our emerging markets (hard currency and local currency) decision making processes.

We also build climate and carbon exposure into our modelling by allocating towards countries showing the best improvement and allocating away from countries with larger increases in coal production. We also use data on countries' percentage change in CO2 emissions from *Our World in Data* and reduce our exposure to countries with the largest increases in these. Finally, we reviewed the signatories to the Paris Agreement and allocate away from countries that either conditionally signed, or did not sign up, as we view signing up to the Agreement as an indicator of willingness to transition.

Fixed Income: Asset Backed Securities - a new asset class

This is a relatively new asset class for USSIM, and whilst there is both a lack of external ESG scoring data and ESG factors frequently have limited impact on current deals, the Asset Backed Securities (ABS) and Responsible Investment teams continue to review internal ESG scoring options, monitor the creation of relevant third-party data services and are engaging on regulatory developments. Where ESG factors are financially material to the ABS analysis process (for example, the impact of diesel bans on vehicle residual values, or the governance of embedded counterparties such as mortgage servicers) they are built into investment research.

Private Markets: Direct assets

We have significant direct investments in a range of assets. This includes core infrastructure, such as Heathrow Airport and Thames Water, and a broad range of other companies: Moto (motorway service stations), Westerleigh (crematoria), and PECO Pallet (pallet distributor) are just a few examples.

We factor climate-related issues into the ESG due diligence we undertake for all direct investments. This will be asset specific but can include assessments of both regulatory/transition and physical climate risk, and how the asset is managing them. USSIM's Private Markets Group (PMG) have developed a Climate Risk Framework (see page 39) to capture both physical and transition climate risks across new PMG deals and existing assets. The Framework is used in due diligence for new deals. These high-level assessments will inform additional due diligence to be conducted including the use of external environmental advisers/consultants. In 2022, as the focus on improving data and portfolio visibility continues, PMG launched its first annual ESG survey to portfolio companies and put practices in place to provide alignment with third party managers on a recurring basis. For direct investments, ESG considerations are being rolled out into portfolio companies asset management plans across credit and direct equity assets.

Figure 4: Climate Risk Framework

Physical Risk (Low Risk - 10/10)	Transition Risk (Medium - Low Risk - 8/10)
• Global warming, rising sea levels and extreme weather may pose a degree of flood, landslide and/or wildfire risk to Company XYZ • We would note that their sites are at lower risk of flooding/rising sea levels vs. other leisure opportunities we have reviewed, albeit we will diligence this further in the next round	**Direct Emissions:** • **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, although we have to diligence this and any associated 'minimum standard' costs • **Carbon off-setting:** Company XYZ has planted over 25,000 tress and often develops new sites that have been otherwise allocated for tree felling thereby preserving forested land; sources of the companies' power for operations are to be explored **Indirect Emissions:** • **Carbon emissions related to travel/risk of change in consumer preferences:** Staycation thematic and 'back to nature' focus of Company XYZ has inherent environmental positives versus international alternatives reliant on air travel

Physical Risk Assessment	**1-2 (High risk)** • High exposure to assets located in areas with high physical risk incidence • Limited mitigation and adaptation plans are in place	**3-5 (Medium – High Risk)** • High exposure to assets located in areas with high physical risk incidence • Some mitigation and adaptation plans are in place but require enhancements	**6-8 (Medium – Low Risk)** • Some exposure to assets sensitive to physical climate risk • Some mitigation and adaptation plans are in place but require enhancements.	**9-10 (Low Risk)** • Low exposure to physical assets OR • The physical assets are located in areas where some physical risks from climate change can occur but do not impact the specific business under due diligence
Climate Risk Assessment	**1-2 (High risk)** • The company has significant direct and/or indirect exposure to the net zero transition, facing significant loss of revenue, increased costs and risk of stranded assets • The business lacks a robust decarbonisation plan and is reliant on status quo.	**3-5 (Medium – High Risk)** • The company has some exposure to direct and indirect transition risks, facing some cost increase, loss of revenue • Mitigations plans are in place but require further development to ensure competitiveness	**6-8 (Medium – Low Risk)** • The company has some exposure to direct and indirect transition risks, however a robust decarbonisation plan is in place to ensure competitiveness	**9-10 (Low Risk)** • The company's direct and indirect exposure to the net zero transition is limited

Investing in low carbon alternatives

There is a strong focus in the TCFD around how climate change risk is managed. However, climate change, and the steps that governments around the world are putting in place to support the transition to a low carbon future, also provide opportunities for pension funds like ours to invest in the transition to a low carbon future. We have been investing in renewable energy and clean technologies for over 20 years. These assets provide both appropriate returns for us and offer some resilience against the impacts of a changing climate.

We are financing renewables in the UK and internationally, including on- and offshore wind and solar (or photo-voltaic- PV) energy. Our investments include L1 Renewables. This is our wholly-owned renewable lending (debt) platform, which we established in 2014. It supports onshore wind projects and project finance loans to operational wind farms. We also own direct equity interests in a number of offshore wind farms acquired when the UK government sold the Green Investment Bank and its assets.

Bruc Energy

In 2021 we took a 50% stake in Bruc Energy, a Spanish renewables-focused investment vehicle. We have invested €225M (c.£200m) in return for the stake in a major pipeline of 4000 MW of solar photovoltaic (PV) farms. Bruc Energy has an ambitious growth plan that goes beyond this to invest in other green energies, such as wind power. Spain's long days of sunshine and its national target to reach 100% renewable-based generation by 2050 make it an attractive place to invest in solar energy. Plus, the decades-long lifespan of solar PV panels makes them well-suited s in helping pay our members' pensions long into the future.

Stewardship of assets

During the acquisition process and once we have invested, we work on an asset management plan for each portfolio company. Where we have identified material ESG and climate issues in our due diligence, these issues are integral to this asset management plan. A USS appointee typically sits on the board of the company, which allows for regular oversight of climate and other risks. In addition, USSIM undertakes post-investment visits to the companies and infrastructure assets we own directly. Among other things, these visits look at how well these companies and assets are managing environmental, social and governance factors.

For co-investments, the due diligence process is largely similar to our direct asset investments. But then, after we have invested, our control is limited by the Limited Partner (LP) / General Partner (GP)[3] relationship. In this case the GP (or fund manager) has complete responsibility for management and oversight of the investment, including climate issues. We will, however, challenge the manager on how they manage climate issues as part of our external manager monitoring programme.

Finally, a number of our direct assets already provide public Net Zero commitments including Heathrow, Thames Water and Moto.

Case study: Heathrow: advocating for Net Zero aviation

Heathrow is an advocate for Net Zero aviation and has been making progress for several years, with strong support from the board, which USSIM sit on, and its shareholders. Heathrow published a new Net Zero Plan in February 2022 as part of an update to its Heathrow 2.0 sustainability strategy. For carbon in the air (emissions related to planes and the whole flight) the goal is to reduce absolute carbon by 15% by 2030, from 2019 levels. For carbon on the ground (access to the airport by passengers and colleagues, supply chain, airport vehicles and buildings) the goal is to reduce absolute carbon by at least 45% by 2030, from 2019 levels. We saw significant progress in 2022 both at a global and national level, including:

- The Sustainable Markets Initiative's Aviation Taskforce, chaired by Heathrow's CEO, published a pocket-guide at COP27 for corporates buying sustainable aviation fuel (SAF) and set a goal for leading corporates to use this for 30% of their air travel by 2030
- Along with key airlines, fuel producers and airports, Heathrow was involved in the founding of Rise – the Coalition for a British SAF Industry, which aims to build political support across parties and UK nations and regions
- Heathrow launched an airport incentive programme, which aimed to cover up to 50% of the extra cost of SAF, making the fuel more affordable for airlines. Heathrow estimates that up to 20% of global SAF production in 2022 went through Heathrow as a result. Following consultation, in 2023 it will target 1.5% of fuel bought at the airport to be SAF, an increase from 0.5% in 2022
- The Civil Aviation Authority, Heathrow's economic regulator, backed the airport's proposals for £200m of capital investment in a decarbonisation programme over the next five-year regulatory period. Investment will include airspace modernisation, plug-in electric air conditioning for planes parked on stands, a significant increase in EV charging across the airport, improved cycle infrastructure, and preliminary work towards a solution to heat the airport without gas

[3] LP (limited partner) is the investor, for example, the pension fund. GP (General Partner) is the fund manager.

Private Markets: Property

The vast majority of our property assets are UK-based directly held assets, although we do have some exposure internationally via funds. For the directly held buildings, given the potential physical risks that a changing climate can pose (for example, flood risk, storm damage), we always assess this risk before we invest. In addition, regulation also requires that Energy Performance Certificates (EPCs) are available for UK properties. This helps us assess a building's energy efficiency and therefore its potential exposure to higher energy and/or carbon costs.

We have had an active Responsible Property Investment (RPI) programme in place for over a decade. The RPI programme has focused on reducing energy consumption, and therefore potential carbon exposure, in some of our major property assets.

Case study: Property: Witan Gate House's ESG credentials

Witan Gate House is a dominant office building in central Milton Keynes. In July 2019, the first floor became vacant, presenting an opportunity for us to create modern Grade A office accommodation with strong ESG credentials. The project included upgrading the first floor accommodation together with a building-wide initiative to enhance its ESG factors and well-being amenities. The works included:

- New LED lighting, including Passive Infra-Red control sensors and dimming of perimeter luminaires to maximise the use of natural daylight
- A new shower block, changing rooms and secure cycle store to facilitate less carbon intensive modes of transport
- The installation of electric vehicle charging points
- A remodelled central courtyard to promote wellness and a space to socialise
- Replacing the existing Variable Air Volume air conditioning system with a new significantly more energy efficient Variable Refrigerant Flow system

Once completed, various assessments were undertaken with the following certifications secured:

- A Building Research Establishment Environmental Assessment Method (BREEAM) UK Refurbishment and Fit-out 2014 – the office was graded as Very Good
- A new Energy Performance Certificate – graded as B, up from the expired E certification

The floor was subsequently let in December 2021 to Allianz Management Services Ltd who wanted Grade A office accommodation with strong ESG and sustainability credentials. Since then, we have worked with the tenant to help them achieve their ESG and Net Zero objectives.

Case study: Partnering with Nuffield Health

In 2022, USS partnered with Nuffield Health, a longstanding UK charity that operate hospitals, wellbeing clubs and medical centres across the UK, in an investment in commercial ground rent freeholds for 10 of their hospital sites across England. Before we acquired Nuffield Health assets, we considered how their ESG strategy aligned with USS's ambition to be Net Zero by 2050. Nuffield aims to achieve Net Zero for their direct emissions by 2030 and indirect emissions by 2040. The company is also undertaking numerous sustainability initiatives, such as introducing greener surgery programmes, improving their clinical waste systems, reducing their reliance on less carbon intensive gases and moving away from single use products.

Nuffield is also working on the sustainability of their supply chain to ensure their social, environmental, and economic practices are aligned. For example, they have invested in LED lighting, insulation and building management systems to improve energy efficiency across their property portfolio.

Case study: Shared Ownership: supporting our wider ESG strategy

USS's investment into the Shared Ownership sector has helped to deliver essential affordable housing solutions for new homeowners. By investing in Shared Ownership, we aim to support the UK housing shortage by:

- Helping registered providers of affordable housing meet the demand from housing developers
- Providing long-term investment
- Accelerating the development of socially and economically beneficial affordable housing

Alongside the social aspect, we recognise the positive impact of investing in newer homes that are built to modern specifications and are less carbon intensive, which supports our wider ESG strategy.

Principle 8: Monitoring managers and service providers

Principle 8

Signatories monitor and hold to account managers and/or service providers.

USS's RI strategy applies to all the assets in which the scheme invests, whether this is via portfolios run by USSIM or by external managers. Approximately 35% of our assets are managed externally, and we have processes in place to assess and monitor how potential or existing managers are addressing ESG-related factors. We consider our oversight of external managers as stewardship activities, as we are engaging with them to improve their ESG practices. We assess ESG issues prior to appointment and then on a regular and ongoing basis post-investment. This involves both Responsible Investment (RI) and other teams reviewing external managers' RI-related policies, processes, resources, reporting and stewardship activities. External managers are rated against in-house assessment frameworks, with a score of red, amber, green (RAG) status allocated to each external fund under review. The frequency and type of monitoring is tailored to the RAG status, mandate and asset class.

As noted in Principle 2, the scheme allocates resource specifically to ESG related external manager and asset assessments and oversight, with a Senior RI Analyst and an RI Analyst dedicated to this task (see the RI team biographies on page 68) All new fund managers are subject to comprehensive due diligence to evaluate the managers' approach and commitment to responsible investment and stewardship, and to ensure that they meet our needs and align with the scheme's Statement of Investment Principles.

Our due diligence questionnaires

We typically use RI due diligence and monitoring questionnaires to establish a baseline view of the manager's approach to RI which forms the basis for the scheme's monitoring programme. We also use published reports, such as a firm's Stewardship Reports, PRI submissions and Impact Reports to

Figure 5: Extract from USS PE Manager Monitoring Framework

Rating/ KPIs	RI Policy & Process	Capacity/Governance	ESG Due Diligence	Stewardship & portfolio management
3 - Outstanding, exemplary **USS likely to note & commend some aspect of RI practices**	• Comprehensive ESG and RI related Policies and statements- no gaps • Applicability to USS assets clearly defined • Accountabilities within the firm clearly articulated • Policy(ies) updated within last 24 months • Evidence and references to ESG included in fund DDQs and data rooms and LP communications – offered as core to GP proposition.	• Evidence of commitments to capacity building for market e.g. - Commitment to TCFD - Leadership role in diversity & inclusion • Material references to ESG in LP reporting and deal documentation • ESG KPIs for firm and/ or portfolio companies set by GP & reflecting materiality • Use of climate change scenario tools & ESG research providers • GP sustainability/ CSR/ ESG policies / reporting public on web • Candid detailed PRI report • Public profile, leadership on ESG shared at events	• Evidence via case studies of ESG considerations in due diligence • Detailed disclosures in response to RI questioning • Likely use of expert consultants • Comfortable talking off-cuff, open and confident answers • PMs involved in ESG discussions • Possible sharing of information from PMIC packs • Evidence that DD findings link to inclusion of ESG in value creation plans and valuations.	• Evidence that ESG is systemically included in portfolio reviews and monitoring processes • Material information obtained / used by fund managers • ESG shortfalls addressed at portfolio companies/progress tracked by GP • Asset managers involved- often alongside ESG expertise Clear governance processes in place (links to policy above) and record keeping • Ability to identify- and share with LPs- awareness of key ESG risks within fund portfolios • Processes in place to prioritise engagement/stewardship activities. • Firm and/or investee asset / KPIs identified /targets set • Likely systems in place to evidence and track ESG performance data

inform our views. We have developed a scoring system- outlined above – to enable the benchmarking of the ESG performance of the external managers and prioritise our engagement activities. Figure 5 presents an extract from our monitoring framework (which mirrors our due diligence questionnaire) showing the issues on which we assess managers and how they might then be scored. Our private equity framework is available online here. These scores enable us to produce an RI rating for individual funds.

In public markets, our reviews rate the funds across the following key areas:

- RI policies and processes
- ESG integration
- Stewardship (or asset management practices for private markets)
- Voting (for listed equities)
- Collaboration
- Market wide /public policy activities
- Reporting

In 2022, we introduced a set of Gateway RI Indicators for USSIM's manager selection teams to consider early in the shortlisting or due diligence process. The metrics reflect USSIM's experience of commonplace key performance indicators that illustrate manager adoption of RI and alignment to USS. The gateway indicators (outlined in Figure 6) are considered by manager selection teams to provide a high level early indication of likely RI capabilities and alignment on ESG and Net Zero. The exercise is undertaken ahead of the more comprehensive, work-intensive RI due diligence and fulsome RI ratings process. The indicators do not constitute a minimum entry hurdle but are used to inform focus areas for RI due diligence and discussion, and to provide an initial view of RI maturity early in the shortlisting or selection process.

Figure 6: Gateway RI Indicators

Gateway RI Indicators

The indicators below should be applicable to the proposed mandate's strategy / assets (answer Yes / No):

1. RI / ESG Policy available
2. Annual ESG report available
3. ESG Lead named
4. Participation in RI Initiatives / Benchmarks e.g., PRI, GRESB, ESG Data Convergence initiative, UK Stewardship Code.
5. Net Zero commitment
6. Low risk of USSIM Exclusions (for pooled and blind-pool funds)
7. Mercer score ESG 3 and under (for public markets, where covered)

In addition to our rating and due diligence process, we also reference RI and stewardship in our contractual terms with managers. For example, we cite our commitment to the TCFD, the UNPRI and UK Stewardship Code in our template Investment Management Agreements (IMAs) for public markets and private equity fund side-letters. We request RI reporting and ask our managers to commit to responding to ad hoc data requests on ESG or stewardship to support USS analysis or reporting. In 2022, we strengthened our request for underlying-portfolio-company ESG and climate related data within our private market funds' side letters, pointing to the ESG Data Convergence Initiative (see Principle 2) for suggested ESG metrics, plus additional climate related disclosure aligned with TCFD and USS's Net Zero ambition. We also encouraged the use of standardised data platforms and participation in industry initiatives. Furthermore, we added a clause requesting excuse rights in private market funds (page 45). Whilst we have not always been successful in achieving the proposed template wording, our negotiations and starting position sends a strong signal to managers, emphasising the importance placed on RI considerations by the scheme.

> *"Approximately 35% of our assets are managed externally, and we have processes in place to assess and monitor how potential or existing managers are addressing ESG-related factors."*

Tailoring due diligence to specific asset classes

Our due diligence questions vary across asset classes in line with the specific attributes of those asset classes or fund strategy. For example, in public equity mandates, we consider the consistency of the manager's voting policy with USS's approach. We review the manager's voting records to gain insights into alignment of their voting decisions with their engagement activities or investment decisions and to ensure that the manager meets our expectations on stewardship. We also seek to consider the consistency of voting records between different markets and the manager's public policy statements or review the handling of a specific vote compared to USS's position on the same resolution where we have a corresponding in-house holding. We also consider the manager's involvement in collaborative initiatives and how ESG-related activities are communicated to investors and other stakeholders.

In private markets (for example, private equity funds), we are making a commitment to a fund where the assets have not yet been acquired – so-called blind pools. In these situations, our due diligence will focus on the manager's policy and processes and, where possible, case studies from previous funds on which we base ESG-related questions. All new private equity managers – General Partners (GPs) – and external fund managers are asked to complete a USS RI GP Due Diligence Questionnaire regarding their approach to ESG matters.

The questionnaire closely aligns to ESG matters raised in the PRI's Limited Partner (LP) or investor questionnaire which USS helped to develop. We ask for information on how ESG risks and opportunities are assessed in the due diligence process and how they are managed across the portfolio. We encourage the provision of case studies to evidence the GPs existing approach and, where materials are available, will ask about ESG matters relating to previous or current investments. This focus on previous funds enables us to assess how well ESG factors have been incorporated in previous investments and whether we can expect that the new fund will meet our expectations.

If available, we also review Global Real Estate Sustainability Benchmark (GRESB) reports, which provide detailed ESG assessments and benchmarks for property or infrastructure funds (and assets). For new funds, or where GPs have yet to adopt GRESB benchmarks as standard, we have encouraged participation in GRESB as part of our due diligence and on-boarding.

In 2022, one of our US-based real estate managers extended their GRESB participation, which resulted in one of our fund investments reporting against the framework for the first time. The manager plans to use data collected through GRESB to establish portfolio company baselines to deliver their long-term goals to reduce energy, GHG emissions, water and waste consumptions by 2030.

Case study – Our process for private markets

In private markets, we assess General Partners responsible investment practices on a regular and ongoing basis, irrespective of the type of investment (for example, special situations, debt funds or buy-outs) and provide feedback to USSIM's internal Private Markets Group (PMG) managers on our views. The assessments are conducted within the context of the Limited Partners (LP) / General Partners (GP) relationship, where the GP has ultimate responsibility for investment decisions and portfolio assets. We monitor the GPs to ensure that ESG issues are being properly managed and to encourage improvements in ESG performance. Our monitoring assesses GP responsible investment-related policies, activities and resources.

The RI Team:

- Undertakes research into the portfolio companies or other assets in which a GP has invested, including any co-investments, to identify ESG risks or opportunities that can be interrogated further with the GP
- Undertakes research to understand how GPs engage with portfolio companies on these issues
- Meets with representatives of the GP to discuss the processes, actions and outcomes associated with the management of ESG issues within the portfolio. We request the participation of the investment and asset-management teams in our monitoring and due diligence meetings, as well as ESG leads, investor relations, legal and compliance personnel

The information collected during monitoring feeds into the scores in our fund rating process (as outlined on page 43). It also helps inform USS's future allocations to a private equity manager, as information collected is used in the due diligence process for new funds. To improve ESG data provision, we have also supported the ESG Data Convergence Project (see Principle 2).

We monitor the General Partners to ensure that ESG issues are being properly managed and to encourage improvements in ESG performance.

Ongoing monitoring and review

Our monitoring of external managers does not stop post-investment. We regularly follow up to assess if a manager's approach has changed and whether they are delivering on commitments made in the initial due diligence. The frequency and type of monitoring is tailored to the mandate, asset class and our RI rating for the fund. For example, for funds investing in public markets, we review Stewardship and Impact publications, voting records and stakeholder reviews, company engagement case studies or progress updated on ESG integration.

If a fund receives a red-flag rating we will typically escalate our engagement, with additional research and meetings, often including senior management, to discuss our concerns and steps that might be taken to improve RI performance.

For public markets managers we also include RI-related questions within USS's quarterly monitoring questionnaires to ensure material changes to RI policies, activities or concerns arising with portfolio assets are tracked and managed.

Fund monitoring for both public and private asset managers and meetings with managers are coordinated with the relevant internal teams. In addition, the outcomes of the monitoring assessment are shared with our PMG and the Investment Product Management (IPM) (responsible for public markets manager appointment) teams as well as with the scheme's Managers and Mandates Committee.

While the RI Team plays a key role in monitoring our external managers on ESG, our colleagues in the IPM team and PMG, who manage these relationships day-to-day, are also heavily involved in the oversight and addressing any RI concerns. For example, in 2022, alongside our routine manager monitoring on RI, the IPM team undertook a short pulse survey to confirm our managers' approach to Net Zero, the application of targets to our mandate and the availability of emissions data for the portfolio. The results will help inform the scheme's strategy on Net Zero for our externally managed public markets mandates.

PMG investment team members typically sit on the Limited Partners' Advisory Committees (LPACs) of the private market funds in which USS invests. These committees usually meet once or twice a year and will often include ESG topics and updates on the meeting agendas, providing an additional forum for USS to monitor and challenge our private markets fund managers on RI-related matters.

Whilst many of our General Partners (GPs) demonstrate leadership on ESG, USSIM's manager selection, RI and investment teams coordinate engagement with those exhibiting less mature ESG programmes, with positive outcomes. For example, following periods of sustained and focused engagement, we witnessed material improvements in ESG reporting, capacity, and accountability from several of our GPs in 2022, including:

- Two private equity GPs appointed dedicated RI professionals to implement ESG strategies where we had raised concerns about weak ESG policy implementation
- One multi-asset class firm is introducing asset-class specific ESG policies where we have raised concerns that their generic policy was insufficiently detailed on RI good practices specific to the different strategies we hold with them
- One of our GPs published its first ESG Annual Report. This followed on-going engagement which challenged the materiality of their ESG programme and the lack of reporting and accountability to Limited Partners (LPs)

Our monitoring process also entails a more detailed, deep-dive review of funds and assets, and meetings with representatives from the investment management firm for a more thorough face-to-face discussion on ESG. Ahead of these meetings, we research the portfolio companies or other assets in which a fund has invested to identify relevant ESG risks or opportunities that can be interrogated further with the fund manager. This process, which we have adapted for both public and private market managers, is designed to identify areas of strength and weakness in RI, divergence between their stated approach and actual implementation, and to allow comparisons to be made across USS's different external managers, especially when they are working within a similar asset class.

Information collected through the monitoring process and our proprietary RI ratings can also help to inform USS's future allocations to a manager, and in some cases, we may work collaboratively with our managers to develop bespoke products to meet an investment need. For example, we worked with one of our managers to launch a climate-tilted mandate in global developed markets equities during 2022. The manager's collaborative approach to stewardship and engagement, particularly on climate-related matters, were key considerations in the appointment.

In situations where we find that the manager has not met our expectations or is 'red rated', we may decide not to make future allocations or to reduce or remove existing allocations (typically after a period of engagement).

Case study: Red flag rating

We downgraded an amber-rated fund to red, as the manager failed to evidence implementation of their ESG programme for our strategy. We escalated our concerns and met with the Global Head of ESG for Private Equity, following which, refreshed process documentation and further context on materiality and ESG in value creation was provided. The GP agreed to an annual ESG update and carbon emissions data for the new fund, leading to a reinstatement of the strategy's amber rating.

Co-investments with private equity GPs

We have also sought to integrate co-investment due diligence into our private markets' manager monitoring, as such deals offer real-time case studies to evidence ESG Policy implementation and ESG integration.

Whilst many of our managers have been open to ESG-focused due diligence calls in the past – deal timeframes permitting – we noted improved sharing of ESG reports and written materials for co-investments in 2022.

To complement this progress, we worked internally to strengthen ESG capabilities within our PMG deal teams, introducing use of the SASB standards to inform ESG analysis and S&P Trucost data to estimate carbon intensity for proposed investments. We have also developed checklists to consider physical and transition risks in our due diligence. See, for example, the Climate Risk Framework in Principle 7.

Whilst we will continue to place strong reliance on the General Partner to identify and manage ESG risks and opportunities for co-investments, alignment to Net Zero and ESG risk management form an important component of all our co-investments.

Recognition of USS's approach

The introduction of RI Gateways, Side Letter enhancements and integration of ESG into our co-investment process during the year – alongside the launch of our Sustainable Growth mandate – attracted a special recognition commendation from the British Venture Capital Association's Excellence in ESG Award panel in October 2022.

bvca
Excellence in ESG 2022
SPECIAL RECOGNITION

ESG data for Private Equity Funds

This year, we are contacting General Partners who participated in the inaugural ESG Data Convergence Initiative survey to request they share portfolio company ESG data reported for our funds (see box below). Thirteen USS managers participated in the 2022 submission, but we have yet to determine the coverage for our portfolio. Carbon emissions data and renewable energy sources were included in the request, so it is hoped the data will raise the quality of our carbon footprinting and inform engagement on Net Zero for our externally-managed private equity portfolios in due course.

Case study: Embedding ESG factors into ongoing asset management

The Private Markets Group (PMG) are committed to embedding financially relevant ESG factors into the ongoing asset management of privately held investments. In 2022, PMG launched the first annual ESG survey to direct equity and debt investments in portfolio companies. The survey included metrics across the following areas:

- Environmental (current emissions, reduction targets, percentage of energy from renewable sources)
- Social (attrition rate, work related injuries, employee survey engagement)
- Governance (diversity and independence of board, compensation linked to non-financial metrics, clawback provisions)

This allows us to improve the availability, quality and consistency of ESG data across the portfolio and gives us an understanding of progress on each area. We can then make more informed decisions on key actions going forward. To increase the use of the data we also integrated it into our existing systems. Given the successful launch of the ESG survey and to build on the momentum of the ESG Data Convergence Initiative, we will be contacting participating General Partners in early 2023 to collect reported portfolio company ESG data in a more automated and routine manner. The responses and returned data will be reviewed in Q2 2023.

Service provider reviews

During the year, our Private Markets Group worked with two data service providers to establish new protocols and data fields to capture ESG KPIs disclosed in our ESG Survey and General Partner's fund reporting. The data will be used to inform stewardship strategies, scheme reporting and to help track the progress of RI programmes at our managers.

Proxy voting platform

As noted under Principle 2, USSIM uses Minerva's proxy research and voting services. We also receive research reports on global companies from other voting data providers. USSIM uses this analysis to supplement its own research and ESG assessments as well as data from other sources. Following USS' annual voting policy review in 2022, the Responsible Investment Team regularly meets with dedicated voting analysts at Minerva during off-season to prepare and ensure the accurate implementation of any new voting guidelines in the coming proxy voting season. As part of its ongoing monitoring activities, USSIM conducts regular reviews of votes submitted for USS by Minerva (see Principle 12) in order to determine the quality and timeliness of services offered as well as to ensure that the approach to key issues is aligned with USS's voting policy. USSIM also periodically reviews any unvoted ballots (if they occur) including root cause analysis to minimise the risk of missed voting rights. In addition to regular dialogue and feedback, USSIM engages with an extended team at Minerva through an annual service review on a range of issues, including the quality of research and vote execution, any issues experienced when voting during the year, personnel changes, business continuity, management of potential conflicts and planned product or process improvements. These reviews are reported to our Operational Due Diligence Team as additional assurance.

Solactive Developed Markets Climate Transition Benchmark

We worked with index provider Solactive to develop the Solactive USS Developed Markets Climate Transition Benchmark. As well as barring companies that rank poorly on the four UN Sustainable Development Goals (SDGs) relating to environmental sustainability and climate impact, the index is required to overweight companies that are successfully hitting adequate decarbonisation targets and must also not be underweight in high-impact sectors (deemed critical to the successful transition to a low-carbon economy such as manufacturing and construction). The index also avoids including in companies that fall foul of the UN Global Compact. The Climate Tilt passive mandate is implemented by one of the scheme's long-standing managers, LGIM, who will engage on ESG matters with companies in the portfolio, whilst USS controls voting rights for the fund.

Process oversight

Our Responsible Investment oversight of external managers is monitored at a number of levels by the scheme. Due diligence and monitoring activities are reported to the internal USSIM Managers and Mandates Committee and the Audit Risk & Compliance Committee on a quarterly basis, where committee members can provide challenge on the outcomes of assessments. We also provide reporting on our external manager oversight to the Investment Committee bi-annually, and it is included in an annual update for the Trustee Board. USSIM's approaches to external manager due diligence and monitoring are reported as case studies in our PRI Reporting and Assessment submissions.

Since March 2023, we have included our private markets' manager ratings and monitoring highlights to the Private Markets Group Portfolio Review Committee for Funds. Whilst our manager monitoring has always been discussed with the teams responsible for the investments in the past, reporting into this group-level committee will enable better coordination of stewardship and ESG activities across the different private asset classes, strategies and USSIM departments.

Principle 9: Engagement

Principle 9

Signatories engage with issuers to maintain or enhance the value of assets.

Taking an active approach to engagement

We believe that appropriate engagement can help to prevent, or avoid, value destruction and reduce the negative impacts companies can have on the environment and society. This is why we seek to be active and engaged stewards and encourage companies to make positive changes.

As discussed under Principle 7, we select and prioritise engagement based on a variety of factors including: the size of our holdings in the entity or the size of the asset, portfolio company and/or property; the materiality of ESG factors on financial and/or operational performance; their ESG scores and rankings in specific benchmarks and the adequacy of public disclosure on ESG factors and performance.

We enter into engagements with companies in our portfolio for a variety of reasons. All engagement will have some purpose or goal, either to clarify a company's approach to managing an ESG-related issue or to get comfort that the company is allocating sufficient resources to managing an ESG risk. On some engagements there will be a specific objective; examples include our engagement with Asian Utilities and the banking sector on climate transition strategies. Read more on page 51 and in Principle 9.

> *We have a responsibility as an engaged owner to encourage the companies we invest in to transition towards a lower carbon future.*

Case study: Engaging with Cemex

We are one of the lead investors engaging with Cemex as part of the CA100+ collaborative project. The cement sector is a very carbon intensive industry, with 60 to 70% of the sector's CO2 emissions coming from the chemical processes associated with producing cement. To decarbonise, it needs to not only look at alternative fuel sources, but also alternative technologies for its processes.

Building on our discussions with Cemex in 2021, in 2022 the company submitted its carbon reduction targets to the Science Based Target Initiative (SBTI) and in December 2022 it reported that the SBTI had validated its 2050 roadmap to Net Zero across its supply chain. The company expects to reach its 2030 interim target five years earlier than scheduled.

Other developments include:

- Five plants that are operating below the required Scope 1 SBTI level to meet a 1.5 degree scenario
- The company is one of 65 members of the First Movers Coalition, with a combined market value of approximately $8 trillion. As such it is committed to purchasing green technologies to help decarbonise the sector. Cemex is purchasing heavy duty electric trucks as well as introducing new lower carbon products such as its Vertua Net Zero CO2 concrete
- The company joined the Race to Zero challenge and signed the Business Ambition for a 1.5 degree program led by the We Mean Business Coalition, in partnership with the UN Global Pact and SBTI

Cemex is dependent upon several breakthrough technologies throughout its value chain to reach its Net Zero target and have therefore set up several pilot projects to test these technologies. In 2023, the CA100+ engagement is hoping to discuss the results of the pilot projects and whether the new technologies can be scaled up to production level. If not, the collaboration will be asking for the company's backup plan for reaching its 2050 target.

We use a variety of engagement methods, including meeting individually with the company or entity (either just the Responsible Investment team or with fund managers), collaboratively engaging alongside other investors (see Principle 10), filing, co-filing, or submitting shareholder resolutions or proposals (which we do very rarely), publicly engaging the entity (e.g., open letters), voting, and divesting or implementing an exit strategy. The specific strategies we use, and the sequence in which we use them (see further details in Principle 11) depend on the issues in question, the mechanisms of influence (formal and informal) available to us, and the characteristics of the investment made (e.g., lock-in periods, liquidity).

With our holdings in passive funds, which tend to have larger and therefore more diverse portfolios, it makes sense for us to participate in a broad range of collaborations and to support more collaborative engagements (see Principle 10 and the 'Engagement examples and outcomes' on page 51). This also supports our proposed increased engagement on systemic risk issues.

Notwithstanding this, over the past year, there has been a greater emphasis on USS's internal fund managers and analysts to engage with the companies and other assets in which they invest. For example, and as described earlier, our GEMs team have been engaging actively with the heaviest carbon emitters in their portfolio, and with companies which may have exposure to supply chains involving the Uyghur group.

Historically, we have mainly engaged with those credit issuers who also issue shares, and it is fair to say that most of our engagement has emphasised those issues that are of concern to equity investors.

While the discussion in this section has highlighted listed equity and credit, we engage across all of our asset classes (see the examples presented in other sections of this report). In addition, as noted in Principle 8, we have a detailed process for due diligence and monitoring of our external managers across asset classes (we view our monitoring programmes as engagements with our managers) and we also engage with policymakers on key issues (see Principle 4). Finally, and as noted earlier, our board membership of direct assets gives us greater access to information on management issues including ESG risks and more direct influence on a company's strategy and priorities. We expect each board to monitor progress over time, including reducing its environmental impact, lowering its operational costs and improving its financial performance.

Engagement examples and outcomes

Asian Utilities

Several Asian countries (primarily China, India and Japan but also Indonesia, Malaysia, Taiwan and Thailand) are heavily reliant on the use of thermal coal to power their industrial development, with detrimental impacts on society, the environment and the climate.

We continue to participate in a collaborative engagement facilitated by Asia Research and Engagement (ARE), which has targeted several Chinese and Japanese utilities to encourage disclosure of their climate transition plans and a transition away from thermal coal.

In 2022, ARE reached out to 25 power companies and had substantive discussions with four of them, including calls with the larger investor group. The engagement focused initially on disclosure and, as disclosure improves, is encouraging companies to set realistic targets for their transition plans.

Successful engagement is dependent on the government policy of each country and a lack of clarity in some markets may be one reason why there is reluctance for some companies to engage. Chinese companies have been the most willing to engage, where government policy is arguably clearer.

Efforts to engage with all the selected Asian utilities are continuing in 2023, to encourage the poorer performing companies to make greater efforts to address the climate challenge, and the better performing companies to become role models in their respective countries.

Mining as a systemic risk

To achieve Net Zero by 2050 there needs to be a significant shift to cleaner technologies, many of which depend upon the availability of metals in ever increasing quantities. For this to occur, the exploration and extraction of existing and new mineral resources by mining companies is critical.

In many cases this will involve extracting ore bodies, a natural rock that contains minerals or metals, with low amounts of metal contained per weight of rock. This will in turn result in more waste rock, otherwise known as tailings. These are often stored in tailings storage facilities (TSF), which are meant to retain them forever. Following numerous TSF collapses, we joined a coalition of likeminded investors led by the Church of England Pensions Board and the Swedish Council on Ethics (see Principle 10) to persuade mining companies to disclose their TSF inventories. This resulted in 44 of the 50 largest mining companies disclosing details of their TSFs.

We also supported an investor-led initiative to develop a Global Industry Standard for Tailings Management (GISTM) together with the International Council on Mining and Metals (ICMM) and the UN Environment Programme. Engagement continues to encourage those who have not yet formally disclosed their tailings inventory to do so and adopt the GISTM.

Mining can also impact local communities and indigenous people. Often the outcomes of a project are not realised by the local communities, which include the environment being permanently altered, waste resources being impacted, and social issues arising with the influx of immigrant workers. In May 2020, one incident gave weight to the concerns of indigenous people around the world when Rio Tinto destroyed a 46,000 year old aboriginal site in Western Australia, leading to national and international uproar. Although Rio Tinto had known about the site, the importance to the local indigenous people had been overlooked.

As a result, we collaborated with a group of 66 investors and sent letters to the top international mining companies and all other major companies that operate in Australia. The letter sought assurances on the issue of indigenous community rights and social license.

In addition, we have since amended our voting policy to consider a vote against management where the company has not publicly disclosed its TSF inventory, not publicly stated its intention to comply with the GISTM, or does not publicly disclose that it engages with, and protects the cultural heritage of, indigenous people. This will be followed up with letters to the offending companies to initiate further discussion.

Finally, in early 2023, we supported The Global Investor Commission on Mining, an investor-led initiative to consider the development of global standards on key systemic risks that can affect a mining company's social licence to operate. Read more in Principle 10.

Principle 10: Collaboration

Principle 10

Signatories, where necessary, participate in collaborative engagement to influence issuers.

Collaboration adds weight to individual company engagements and to addressing market wide systemic failures.

Collaboration is key

We firmly believe that focussed engagement and meaningful investor collaborations are key to stewardship success. It is clear that our interests can be furthered by collaboration with like-minded investors and engagement with government, industry and regulators (read more in Principle 4). Whilst USS is a relatively large pension fund, we are small compared to international financial markets, and our holdings in companies tend to be correspondingly small. Collaboration adds weight to individual company engagements and to addressing market wide systemic failures. The additional influence, the shared learning and the greater efficiency associated with collaboration means that it is a central and critical part of our approach to stewardship.

Our commitment to collaboration

We were early leaders in collaborative engagement and involved in establishing several initiatives which support stewardship activities and collective engagement both in the UK and globally. Since 2000, the scheme has dedicated considerable effort to founding and ensuring the ongoing success of collaborative responsible investment initiatives, and to addressing systemic barriers to incorporating ESG issues in investment. This commitment to collaboration is reflected in the market wide transformation work and collective initiatives that USS has been and is associated with. For example, we were founders of the IIGCC (2001) and GRESB (2009), and were founder signatories to the UNPRI in 2006, and the TPI in 2017. More generally, we are active in a wide range of responsible investment, stewardship and ESG-related collaborations. See page 54 for a list of our main collaborative partnerships and affiliations.

Update to our Statement of Investment Principles

Our Statement of Investment Principles (SIP) and Investment Beliefs were reviewed and updated by the trustee in May 2022. As a long-term investor, the trustee expects its managers, either individually or in collaboration with other investors, to behave as active owners on its behalf and use their influence to promote good practices concerning financially material considerations (see more in Principle 5). This includes using the scheme's voting rights and voting in accordance with the trustee's Stewardship and Voting Policy (see Principle 12). The scheme's interests are further protected from adverse impacts by collaboration with like-minded investors and engagement with government, industry and regulators.

INVESTOR ALLIANCE FOR HUMAN RIGHTS
AN INITIATIVE OF ICCR

Case study: Continuing to engage on Myanmar

As noted in our 2022 Stewardship Code Report, following the February 2021 military coup in Myanmar, we joined an investors' collaboration organised by the Investor Alliance for Human Rights to identify and engage with companies with a reported link to the military junta.

Almost 100 companies were identified and USSIM held 25 of them at the time. Our initial discussions with these companies focused on how they were protecting and assisting their local workers in Myanmar while requesting they withhold money from the military junta.

In 2022, and following discussions with local NGOs, the emphasis of the engagement changed, and we started asking companies to withdraw entirely from Myanmar as the country spiralled into civil war. Our main area of concern has been the Yadana Gas Field project, which provides one of the main sources of income for the military junta. It was run by Shell, Chevron and PTTEP (of Thailand) with the Myanmar Oil and Gas Enterprise (MOGE). In January 2022, both Shell and Chevron announced their exit from the project, passing the bulk of ownership to PTTEP, where possible. Both companies have now exited Myanmar.

As the last remaining partner, we will continue to engage with PTTEP to gain a better understanding of its human rights due diligence process regarding Myanmar, why the company does not appear to identify this as an ongoing issue, and to assess the impact of the monies paid from the project to MOGE and hence the Junta.

Collaboration in focus

As noted previously, in 2020, a shift in equity allocation to more passive funds (which tend to have larger and therefore more diverse portfolios) led to a significant increase in the breadth of our portfolio, resulting in us becoming even more of a universal owner with exposure to an extremely wide spectrum of assets. It therefore makes sense for us to participate in a broad range of collaborations and to support more collaborative engagements (see Principle 10 and the 'Engagement examples and outcomes' on page 51). This also supports our proposed increased engagement on systemic risk issues. We have also placed more emphasis on collaboration as part of our questioning of investment managers in our monitoring and due diligence processes.

Specific examples of our company and issues-based collaborative engagements are set out on the next page. Other examples can be found elsewhere in this report, particularly under Principle 7.

Votes Against Slavery

Over 2022, we continued to be part of a Rathbones-led collaboration focussing on the FTSE 350 companies to ensure they are complying with the legislation to adopt a Modern Slavery Policy. Following engagement, by the end of 2022, 41 out of 44 companies were 100% compliant. With such successful outcomes, we have signed up to the Votes Against Slavery 2023 campaign. USS have also signed a multi-stakeholder letter outlining ways to strengthen new principles being included in the revised Modern Slavery Bill, currently being considered by the UK Government, which aims to reduce the prevalence of modern slavery in supply chains.

FAIRR Initiative on Antimicrobial Resistance

USS has been supporting the Farm Animal Investment Risk Return (FAIRR) initiative that raises awareness of the ESG risks and opportunities brought about by intensive livestock production. One of the systemic risks identified by USS is antimicrobial resistance (AMR), whereby microbes evolve mechanisms that protect them from the effects of antimicrobials such as fungicides, pesticides, antibiotics, and antivirals. We supported FAIRR in March 2023 through co-signing a letter to four animal pharmaceutical companies requesting the companies to improve disclosure on their AMR – the first step in understanding how the companies assess the issue. To date, the animal pharmaceutical companies have been unresponsive to the letter. We shall therefore seek to engage directly with these companies during 2023.

Collaborative engagements:

Examples of collaborative engagements include:

Tech sector engagement on human rights risks and impacts:

The Council on Ethics of the Swedish national pension funds has organised a group of institutional investors with EUR 6.5 trillion in combined assets under management to collaboratively engage with focus companies Alibaba, Alphabet, Amazon, Apple, Meta, Microsoft and Tencent. The three-year initiative aligns with the UN Guiding Principles for Business and Human Rights, with the primary goal of ensuring that the tech giants take concrete measures to address operational and human rights risks pertaining to their products and business model, and to encourage more transparent reporting on the related impacts and efforts.

Microfibres engagement:

A collaborative engagement seeking companies to address ways of reducing microplastics in the environment. Organised by First Sentier Investors in collaboration with the Marine Conservation Society.

Conflict Minerals:

A Stewart Investors-led initiative to address conflict minerals (including gold, cobalt and tin) in the supply chain. A number of users state they have policies in place but, in reality, they source from smelters which allegedly do not differentiate between minerals sourced from conflict zones and those that are more conventionally sourced. We are requesting companies undertake supply chain auditing to assess whether they could be at risk. Some have stated that they only use Responsible Minerals Initiative accredited smelters for tungsten, tin, tantalum and gold.

Cybersecurity:

An investor initiative led by Royal London Asset Management, which started in 2020 and initially engaged with some 35 companies. Previous efforts were directed on uncovering the leadership and resources that underpin governance and risk management, corporate culture and systems, with an emphasis on supply chains and corporate action mergers and acquisitions as areas of enhanced risk. In 2022, the investor group expanded the scope of Phase 3 to include policy advocacy, assessed and engaged twelve companies against the investor group's expectations and discovered examples of best practice.

Global Industry Tailings Management Standards:

A Church of England-led initiative in cooperation with the International Council of Mining and Metals (ICMM) to establish a global standard for the safe management of tailings storage facilities. See the case study on page 51.

Global Investor Commission on Mining 2030:

An investor-led initiative that recognises the mining industry's important role in the transition to a low carbon economy, and considers key systemic issues faced by the mining sector and the sector's social licence to operate. USS is a member of the Commission and sits on its steering committee.

Investor Alliance for Human Rights:

The Xinjiang Uyghur Autonomous Region collaboration – addressing the forced use of Uyghur labour in the Chinese supply chain. We have discussed with a number of companies held in our GEMs portfolio and are encouraging supply chain auditing to take place, which should prove easier now that Covid restrictions have been lifted in China.

Myanmar – the emphasis changed a year after the coup and focussed on encouraging companies to exit the country and not provide any support whatsoever to the military authorities (see case study on page 53).

Votes against Slavery:

A Rathbones-led collaboration focussing on the FTSE 350 companies to ensure they are complying with the legislation to adopt a Modern Slavery Policy (see page 53).

Workplace Disclosure Initiative (WDI)

A ShareAction-led initiative with investors that aims to improve corporate transparency and accountability on workforce issues, provide companies and investors with comprehensive and comparable data and help increase the provision of good jobs worldwide.

Memberships:

Examples of our memberships include:

Australian Council of Superannuation Investors (ACSI): a forum addressing corporate ESG and related government policy issues in Australia.

Asia Research and Engagement: currently involved in climate initiatives with selected Asian banks and utilities, and their net zero transition plans (or lack thereof).

Asia Corporate Governance Association (ACGA): a forum of investors and companies which provides background and engagement opportunities with companies and policy makers on corporate governance issues. USSIM has recently joined the China and Korean Working Groups.

Corporate Governance Forum: a UK-based forum for discussing corporate governance issues both broadly and at individual companies, bringing members up to date with individual company developments.

Climate Action 100+ (CA100+): a global investor collaboration focussing engagement on the 100+ highest emitting companies. USS are co-leads or supporters to a number of CA100+ engagements including Shell, BHP and Cemex and more recently Eskom.

The Farm Animal Investment Risk and Return (FAIRR) Initiative: an investor initiative looking at issues in the global food supply chain, including sustainable protein, antimicrobial resistance (AMR) and meat sourcing.

Global ESG Benchmark for Real Assets (GRESB): USSIM was a founder of this mission-driven and investor-led organisation that provides actionable and transparent ESG data to financial markets on property and infrastructure assets. GRESB collects, validates, scores and benchmarks ESG data on funds and assets.

Investor Forum: a group established by institutional investors in UK equities that helps investors to work collectively to escalate material ESG issues with the boards of UK-listed companies.

International Corporate Governance Network (ICGN): a body of investors which seeks to advance the highest standards of corporate governance and investor stewardship worldwide.

The Institutional Investors Group on Climate Change (IIGCC): the European membership body for investor collaboration on climate change and the voice of investors taking action for a prosperous, low carbon future, USSIM was the founder of the IIGCC in 2001.

The United Nations Principles of Responsible Investment (UNPRI or PRI): a United Nations-supported international network of investors that work together to implement six aspirational principles. USS were a founding signatory in 2006.

The Taskforce on Nature Related Financial Disclosures (TNFD) Forum: the TNFD's aim is to develop and deliver a risk management and disclosure framework for organisations to report and act on evolving nature-related risks, with the ultimate aim of supporting a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes. It is supported by the TNFD Forum, a global multi-disciplinary consultative group of institutions, of which USS is a member.

Transition Pathway Initiative (TPI): a global, asset-owner led initiative which assesses companies' preparedness for the transition to a low carbon economy. USSIM is on the board of the TPI.

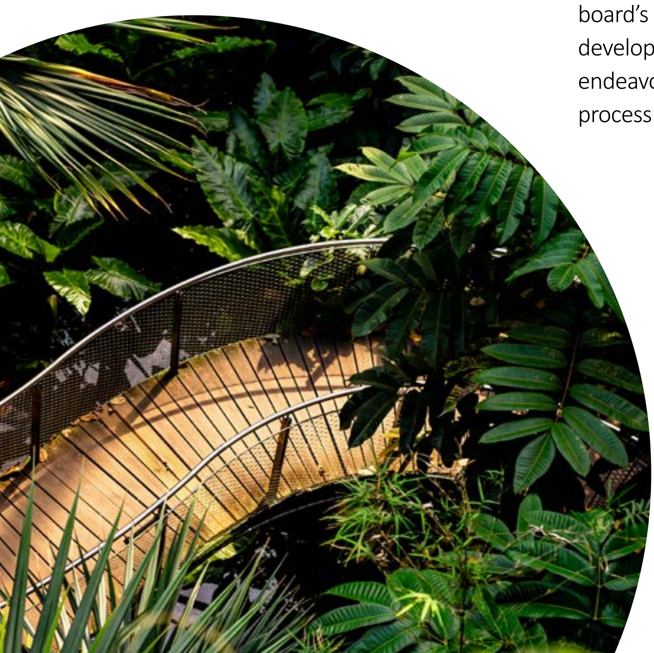
For more on collaboration, in our description of how we implement Principle 7 we explain how we select issues for engagement. In Principles 7 and 11 we discuss how we select strategies for engagement (including escalation strategies where appropriate).

Principle 11: Escalation

Principle 11

Signatories, where necessary, escalate stewardship activities to influence issuers.

We prefer to engage proactively and constructively with companies.



A preference for proactivity and constructive discussion

We prefer to engage proactively and constructively with companies. This may be in writing, or in individual or collective meetings. We generally expect companies to advise shareholders when there are material changes and issues which impact long term shareholders, such as strategy, capital structure, sustainability and governance. We strongly encourage companies to inform us early about issues relevant to the business so that we maximise the time available to discuss and, if appropriate, resolve the issue.

USS's default position is to be supportive of the board and management. We assume discretionary changes will be applied to board and executive arrangements, when necessary, on the basis that the rationale will be disclosed to investors. When appropriate, and where we have concerns, we may put forward proposals to companies for the executive's and/or board's consideration. In order to establish, develop and maintain relationships we endeavour to have a regular and consistent process of engagement with companies.

Escalating should the need arise

We recognise, however, that this is not always the case. In certain situations, this may be because there are legitimate differences of opinion about the correct course of action. In such situations, and if we are satisfied that management has appropriately listened to and reflected on our concerns, we will support management, although we may continue to engage with management on the issue or to monitor performance on the issue in question.

If we decide to escalate, we will use the strategies or approaches that are most likely to deliver the outcomes that we desire or, at least, clearly signal our views to management on the issue in question. In broad terms, we have a variety of escalation strategies that we can and have deployed. These – depending of course on the specific assets and asset class – include:

- Writing to the company to highlight our concerns
  - When we vote against management, we usually write to explain our concerns. This is an important way of providing feedback and encouraging change – it is a form of engagement. See the Meta example in the box below

- Voting against appropriate proposals at shareholder meetings
  - In 2022, we voted 'For' Shell's shareholder resolution 21, which was a proposal that pushed for them to adopt quantifiable medium-term targets for the company's Scope 3 emissions. See Principle 12 for more information on voting
- Meeting with management specifically to discuss concerns
  - Following our support of the historic vote on article amendments to address climate change concerns at Japanese bank, Mizuho in 2021, we continued our long-term engagement with company management throughout 2022, to discuss progress against the Banks' transition strategy. One improvement over the year was the tightening of their coal policy and Mizuho is the first Japanese bank to prohibit transactions with new clients of coal power companies. This is an ongoing engagement
- Meeting with the Chairman, senior independent director, or independent directors
  - Following a defeated vote on Wynn Resorts' 2022 remuneration report (51% voted against), USS met with a board director and CFO to discuss our remuneration concerns which included performance conditions and ESG metrics for incentive schemes. There was also a fruitful conversation on the company's approach to health and safety of employees and decarbonisation strategy
  - In May 2022, USS met with some of the independent directors and executives of Shell to discuss ESG issues, in particular the feasibility of its climate transition plans and lack of disclosure on Scope 3 emissions
- Expressing concerns through the company's advisers. There were no instances where we chose this approach in this reporting period
- Collaborating with other investors regarding our concerns, subject to applicable regulations
  - See Principle 10 for further details
- Speaking to market regulators regarding our concerns
  - In 2022, following a collaborative investor letter to Japanese regulators, USS participated in calls organised by the Asian Corporate Government Association (ACGA) with the Japanese Exchange/Tokyo Stock Exchange, Japanese Financial Services Agency and Ministry of Economy Trade and Industry, regarding corporate governance, in particular concerns around board composition and encouraging faster and higher levels of board gender diversity
- Releasing a press statement, either singly or jointly with other issues relating to the issue
  - USS commented on the changing position on climate change and transition planning by Shell and BP in an article in the Financial Times in March 2023
  - As discussed under Principle 4, USS joined a group of leading UK pension funds convened by the Church of England Pensions Board, representing £400bn assets under management and working on behalf of over 18 million members, to jointly consider how to support the climate transition in emerging markets

> *"If we decide to escalate, we will use the strategies or approaches that are most likely to deliver the outcomes that we desire or, at least, clearly signal our views to management on the issue in question."*

Meta: voting against management

USS is part of a global investor coalition, led by the New Zealand Super Fund, requesting the board of Meta to improve and strengthen controls to prevent the livestreaming and dissemination of objectionable content but without success. Following the tragic events in Buffalo, New York in 2022, where another mass shooting was livestreamed, in May 2022 we withheld support for the entire board. USSIM followed up the vote with an engagement letter to the Chairman outlining our vote rationale. This is an integral communication tool for USS, as a minority shareholder, to share governance priorities with the Directors who represent us. For more details see the significant vote case study in Principle 12.

- Filing shareholder resolutions
  - USS continues to be part of the Investment Association (IA) working group developing a UK investor guidance document on how to requisition resolutions. The guidance, which aims to be published in Q2 2023, will provide institutional investors with an overview of the key steps required to successfully file a resolution at a UK listed company. The IA hopes that the guidance will encourage institutional investors who have not succeeded in bringing about behavioural change from companies following standard engagement and escalation activities to consider filing a requisitioned resolution with the company. We have also in the past co-filed shareholder resolution
- Requisitioning a General Meeting: there were no instances where we chose this approach in this reporting period
- Other legal remedies, for example, in the past we were the lead plaintiff in the successful Petrobras class action following significant corruption at the company leading to loss of shareholder value
- When necessary, selling our shares in the company
  - As previously noted, we will also exclude from our investment universe those companies or sectors where we believe they face significant ESG issues that will affect their long-term value
  - In 2022, we exercised this approach with holdings in Russian companies and debt

Setting clear expectations for managers

For our investment managers, we define our expectations of stewardship in mandates. As noted in Principle 8, we monitor their stewardship performance as a standard part of our monitoring processes. We challenge them if we feel that they are not delivering on the stewardship commitments they have made to us (e.g., the issues they are active on, the resources they are devoting to stewardship or the intensity of their stewardship efforts). If we are concerned about an investment manager's performance, and if the investment manager has not improved following feedback from us, we have a range of options.

These can include:

- Notifying the external manager about their placement on a watch list
- Engaging the external manager's board or investment committee
- Reducing our exposure to the external manager until any non-conformances have been rectified
- Terminating the contract with the external manager (or not reappointing them) if failings persist over a period of time

Principle 12: Exercising rights and responsibilities

Principle 12

Signatories actively exercise their rights and responsibilities.

Exercising our voting rights: A global perspective

Having the right to vote on decisions made by the boards of the companies in which we invest is one of the most effective tools we have for holding them to account, encouraging good governance and driving improvements. We therefore regard exercising our right to vote as fundamental to our role as investment stewards. This means that as part of the scheme's commitment to being a long-term, active and responsible shareowner, our base intention is to vote globally on all the companies in which we invest.

> *We have updated the scheme's Voting Policy and Guidance to highlight that we will consider voting against individual directors where we feel the company has not addressed specific systemic risks.*

An updated voting policy

USS's Stewardship and Voting Policy is reviewed each year to ensure continued alignment to USS's beliefs about good practice in line with USS's fiduciary duties. In January 2023, USS introduced an updated Stewardship and Voting Policy which is supported by the USS Voting Guidance document. These documents can be found at https://www.uss.co.uk/how-we-invest/responsible-investment/how-we-vote. The Stewardship and Voting Policy outlines USS's position on a range of ESG issues and why we believe ESG factors should be well managed by companies. These are put in the context of universal ownership and systemic risk. The documents also outline USS' expectations for investee companies.

Whilst our Voting Guidance is built around good practice for UK companies, we believe that these standards represent achievable good practice in all markets and as such this guidance applies to both our UK and international public equity holdings. Some leniency may be used when voting (in particular) emerging market issuers, to allow for local codes of practice and cultural differences.

USS may vote against or abstain on the reappointment of individual directors or the resolution to receive the report and accounts (or equivalent) if we believe the company is failing to appropriately manage or address an issue. There is academic evidence that an effective use of voting to generate change is to vote against individual directors so this will be the primary approach the scheme adopts. Therefore, we have updated the scheme's Voting Policy and Guidance to highlight that we will consider voting against individual directors where we feel the company has not addressed specific systemic risks. These include, for example when:

- a bank has not publicly disclosed their climate transition plans
- an oil and gas company has not disclosed a breakdown of money spent on new, or expanding, projects that will add to their carbon footprint
- a UK company does not comply with Section 54 of the Modern Slavery Act reporting requirements

In 2020, the annual review of our voting policy resulted in the integration of data from the Transition Pathway Initiative (TPI), and the readiness for a transition to a low carbon economy, into voting decisions. The TPI ranks companies on management quality in relation to its greenhouse gas emissions and of risks and opportunities related to the low carbon transition. USS may vote against or abstain on the resolution for the (re) election of relevant board members where a company's management quality score fails to achieve a Level 3 score or higher in the TPI's assessment (see graphic on page 60). Where climate change is identified as a material risk, USS expects clear identification of the principal director(s) assigned responsibility for the development and implementation of the company's climate change or net zero alignment strategy and corresponding disclosures.

TPI's management quality rating system

Level 0
Unaware
- Company does not recognise climate change as a significant issue for the business

Level 1
Awareness
- Company recognises climate change as a relevant risk/opportunity for the business
- Company has a policy (or equivalent) commitment to action on climate change

Level 2
Building capacity
- Company has set GHG emission reduction targets
- Company has published info. on its operational GHG emissions

Level 3
Integrating into operational decision making
- Company has nominated a board member/committee with explicit responsibility for oversight of the climate change policy
- Company has set quantitative targets for reducing its GHG emissions
- Company reports on its Scope 3 GHG emissions
- Company has had its operational GHG emissions data verified
- Company supports domestic & international efforts to mitigate climate change
- Company has a process to manage climate-related risks
- Company discloses Scope 3 GHG emissions from use of sold products (selected sectors only)

Level 4
Strategic assessment
- Company discloses membership and involvement in organisations or coalitions dedicated specifically to climate issues
- Company has set long term quantitative targets (>5 years) for reducing its GHG emissions
- Company has incorporated climate change performance into executive remuneration
- Company has incorporated climate change risks and opportunities in its strategy
- Company undertakes climate scenario planning
- Company discloses an internal carbon price
- Company ensures consistency between its climate change policy and position of trade associations of which it is a member

Abstaining or voting against management

These are not decisions we take lightly. As previously noted, USS's default position is to be supportive of the board and management. That said, we have a robust approach to applying our voting policy and do consistently vote against management where we feel it is not serving our best interests as a shareholder: we vote against management (either a direct vote against or an abstention) on at least one resolution at significantly greater than 50% of our holdings. For the 2022/2023 proxy season, we voted at least once against management at 73.4% of meetings.

It is also worth noting that we are also increasingly bringing the voting of externally managed assets in-house. Whereas previously some of our externally managed equities were voted by the relevant external manager to their own voting policies rather than USS's, we are changing both managers and / or changing the legal structure of our relationships to ensure that USS gets to vote the holdings rather than the manager. As a result, more of USS's assets are voted in alignment with the Trustees' Voting Policy.

Our voting process

USSIM uses a number of proxy advisory firms to provide a summary of the proxy information released to the market. We use the information provided by these proxy advisory firms alongside other sources, including outcomes from engagement meetings, discussions with our industry peers, and our portfolio managers' perspectives to reach a final voting decision. Individual votes and recommendations aim to improve the overall corporate governance of the company and through that their performance. Our voting decisions are, therefore, tailored to the circumstances of the company, and focused on the

Climate resolutions

From April 2022 to March 2023, we prioritised climate votes to ensure in-house assessment of both management and shareholder climate-related resolutions. In the case of management-proposed resolutions, many were annual climate progress votes. Where we had previously voted on the management's strategy, we supported progress where they were on target. Overall, we supported 24 of the 34 (ca. 71%) management Say on Climate resolutions.

We also supported 72 of the 100 shareholder resolutions related to climate issues, where the requests were deemed not to be overly restrictive on company management and where it supported our requests of companies (for example, a request for Scope 3 emissions data being included in a company's disclosures).

In some instances, for example Shell, this meant supporting both management's Say on Climate progress resolution and a shareholder resolution to include Scope 3 data. A letter explaining our voting was sent to Shell explaining our reasons for these votes.

overall improvement of the company's corporate governance and management of environmental and social issues as we believe that this will protect or enhance the value of our investments. Individual vote decisions for priority holdings[4] (see Principle 7) are reviewed and confirmed by the in-house Responsible Investment team, working closely with USSIM's portfolio managers.

Non-priority stocks, for example stocks held in our passive or factor funds, are voted by a dedicated voting analyst at our main proxy research and platform provider in accordance with the USS Stewardship and Voting Policy. Internal USS staff closely monitor the voting of our external platform to ensure alignment with our policies; the outcomes of this monitoring are in turn reported to the Audit, Risk and Compliance Committee.

When we vote against management in one of our priority holdings, we will usually write to the company to explain our concerns. We see this as an important way of providing feedback and encouraging change – that is, it is a form of engagement. For non-priority holdings we will write to the company after voting season informing it that we voted against it, and that the reasons are available on the dedicated Voting Disclosure tool on our website.

We may escalate the vote by voting against additional relevant resolutions or against individual directors, who we identify to have responsibility for the area in question, if concerns raised in previous years have not been addressed in the current year. We believe using voting rights in this way is one of the most effective stewardship tools for achieving positive change as it allows us to effectively voice our concerns with the company's response to issues raised in a public way. For example, when voting against the remuneration report for a second consecutive year, USS will also vote against the chair of the remuneration committee and consider a vote against other members of the committee. When voting against the remuneration report for a third consecutive year, USS may vote against the chairman of the board.

In accordance with best practice, we publish a list of our global equity holdings and our voting records, and we have done so for almost 20 years. Where we have voted against management or abstained on a resolution, we include a brief comment to explain why. As with writing letters, we see this as an important way of providing feedback and encouraging change.

For our external investment managers, we have a section dedicated to voting in our responsible investment Due Diligence Questionnaire (see Principle 8). We seek to understand the voting chain and to document this within new Investment Management Agreements (IMAs) to ensure clarity about each party's responsibilities.

Reviewing managers' voting policy, voting records and decisions on specific cases is a standard part of our monitoring process, as is a review of the voting case studies. Where there are inconsistencies with our voting decisions, we seek to understand these inconsistencies as part of our discussions with the managers.

[4] Prioritisation for voting and engagement activities is based on the following criteria. For further details see Principle 7:
- The size of our holdings in the entity or the size of the asset, portfolio company and/or property.
- Where we hold the asset internally and actively or in a passive index tracking portfolio.
- Specific ESG factors with systemic influence (e.g., climate or human rights) or systemically important sectors (mining, banking).
- The home market of the asset or portfolio company.
- The materiality of ESG factors and their effect on financial and/or operational performance.
- Their ESG scores, and their rankings in specific benchmarks, in particular the Transition Pathway Initiative and the Workforce Disclosure Initiative.
- The adequacy of public disclosure on ESG factors/performance.
- Bribery and corruption-related issues.

Stock lending

USS has an active stock lending programme. To ensure that the scheme is able to vote all its shares at important meetings or where USS is a significant shareholder, USS has worked with service providers to establish procedures to restrict lending for certain stocks and recall shares in advance of shareholder votes.

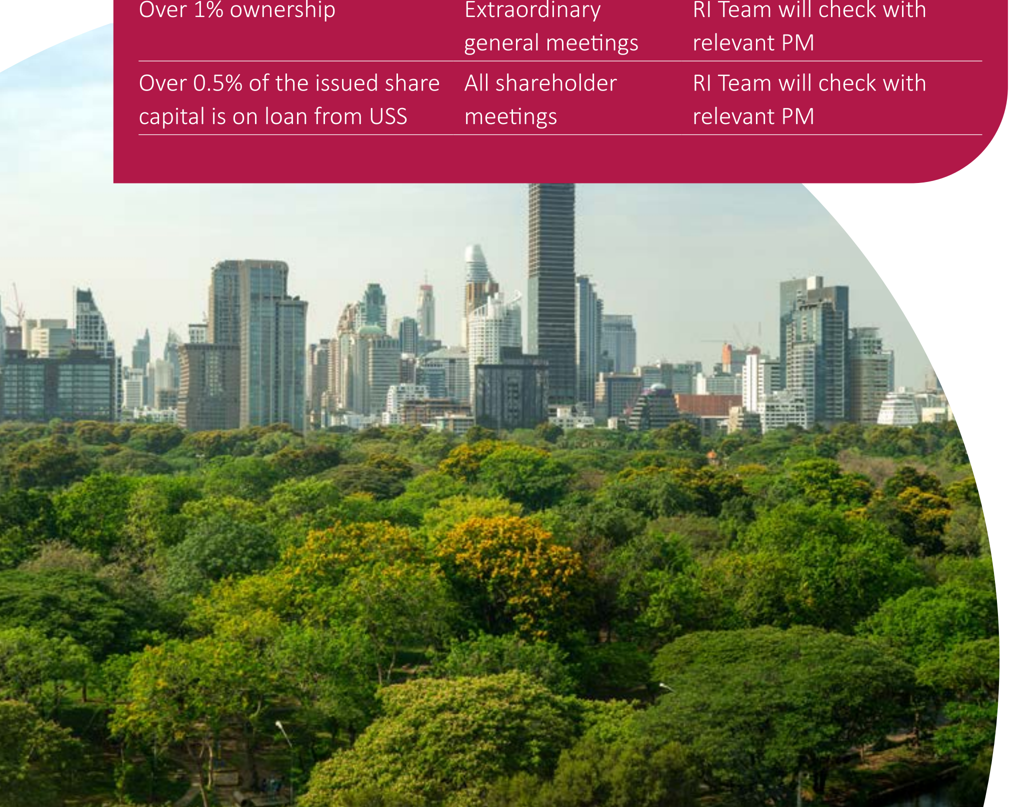
The Responsible Investment (RI) Team routinely recall stock from loan and/or restrict stock to ensure shares are available in-house for voting at shareholder meetings. On occasion, the portfolio manager or RI Team may suspend a stock or market from the lending programme, for example in order to support engagement activities.

For example, for the 2023-24 voting season we continue recalling or restricting all stocks facing a climate change-related resolution.

As the table below shows, where we hold 3% or more of the issued share capital of a company, stock is recalled systematically. In other circumstances we monitor the meetings and proportion of stock on loan and will restrict and/or recall lent stock on a case-by-case basis, for example in the event of a contentious vote or in relation to engagement activities, further to discussion with the portfolio manager. We will also always hold

Lent stock recall criteria

Ownership/on loan thresholds	Meetings impacted	Recall and restriction from stock lending program
Over 3% ownership	All shareholder meetings	Automatic recall and restriction from stock lending program
Over 1% ownership	Extraordinary general meetings	RI Team will check with relevant PM
Over 0.5% of the issued share capital is on loan from USS	All shareholder meetings	RI Team will check with relevant PM



Board diversity

USS has also updated its Voting Policy on diversity. The changes are as follows:

- Diversity – we have strengthened our gender diversity for Japan by extending the existing minority gender requirement of at least two women (or those self-identifying as a woman) for large boards to boards of all size
- We have also amended our Voting Guidance. To highlight future gender and racial diversity targets we will require boards to meet with the inclusion of this paragraph relating to the FCA Listing Rules:

  From 2024 onwards, in line with UK regulatory (FCA) requirements, USS will vote against the Chair / a member of the nomination committee (we will escalate by voting against or abstaining on the Chair of the board) if there is less than 40% minority gender representation (including those self-identifying as women) on the board and the company has not disclosed a timeframe / credible plan for appointment

- Less than one of the senior board positions (Chair, Chief Executive Officer (CEO), Senior Independent Director (SID) or Chief Financial Officer (CFO)) is a woman (including those self-identifying as a woman) and the company has not disclosed a timeframe / credible plan for appointment
- For the UK initially, where there is less than one member of the board from a non-white ethnic minority background (as referenced in categories recommended by the Office for National Statistics (ONS)) and the company has not disclosed a timeframe / credible plan for appointment

Strengthening our approach to voting on environmental and social issues

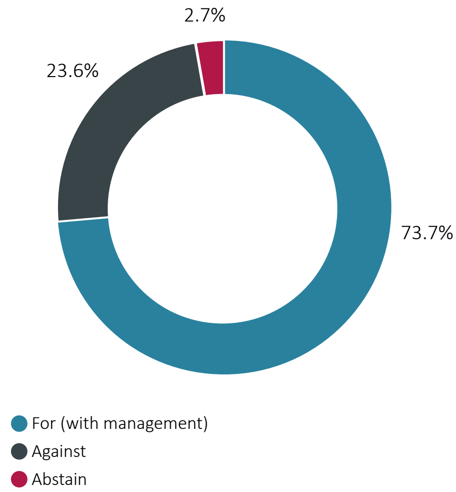
Poor management of environmental issues can have significant implications for companies, both financially and reputationally. Pollution incidents, poor management of natural resources, and deforestation are examples of the types of issue that could impact corporate value and reputation. The most challenging environmental issue is climate change, both in terms of transitioning to a low carbon future, and in adapting to the physical risks that climate change poses. If left unaddressed the scientific evidence points to a world where a changed climate will impact the scheme's ability to achieve the returns it requires and will impact the quality of retirement for our members.

Our voting activity 2022-23

Voting statistics April 2022 – March 2023	Response
How many meetings were USS eligible to vote at?	2,148
How many resolutions were USS eligible to vote on?	28,573
What percentage of resolutions did we vote on for which USS were eligible?	99.9%
Of the resolutions on which USS voted, what percentage did we vote with management?	73.7%
Of the resolutions on which USS voted, what percentage did we vote against management?	23.6%
What percentage of resolutions, for which USS were eligible to vote, did we abstain from?	2.7%
In what percentage of meetings, for which USS were eligible to attend, did we vote at least once against management?	73.4%
What percentage of resolutions, on which USS did vote, did we vote contrary to the recommendation of your proxy adviser?	N/A

USS global votes on resolutions

April 2022 - March 2023



Reviewing managers' voting policy, voting records and decisions on specific cases is a standard part of our monitoring process, as is a review of the voting case studies.

Significant votes – examples for period from April 2022 – March 2023

Shell plc

Date of AGM	Summary of Resolution	Vote	Rationale for Vote	Vote Outcome	Implications of the outcome	Criteria selected for this vote to be significant
24/05/2022	Resolution 20- Approve the Shell Energy Transition Progress Update Resolution 21- Request Shell to Set and Publish Targets for Greenhouse Gas (GHG) Emissions	Resolution 20 – For Resolution 21 - For	USS voted in favour of Shell's Energy Transition progress update (Resolution 20) in light of the overall progress made against the company's Energy Transition Strategy, the strengthening of targets, and the progress made through engagement with CA100+ investors on achieving alignment to the CA100+ Net Zero Company Benchmark. USS welcomed Shell's decision to put a review of its Energy Transition Strategy up for an advisory vote every three years and to give shareholders an annual advisory vote on the progress made. We see this as an implicit recognition by management that the company's Energy Transition Strategy is expected to continue to evolve as a result of the experience of implementing it, continued engagement with investor groups like CA100+, and evolving international regulations and policies. After careful consideration, USS decided a vote in favour of the Follow This proposal (Resolution 21), which was in the best interests of shareholders. While Shell already met some requests of the shareholder resolution, it underlined USS's wish for adoption of quantifiable medium-term targets for the company's Scope 3 emissions in line with peers and a review and strengthening of Shell's 2030 net carbon intensity goal to ensure robust alignment with the goals of the Paris Agreement and real-world emissions reduction impact.	Resolution 20 passed - For 77.4%, Against 19.4% (Abstain 3.2%) Resolution 21 defeated - For 19.9%, Against 78.1% (Abstain 2.0%)	In 2022, Follow This filed resolutions at nine companies in the oil and gas industry asking them to draw up carbon reduction plans in line with the Paris Agreement. Shareholder support ranged from 42% at Valero to 15% at BP. USS has set an ambition to be Net Zero by 2050. To achieve this, we will require the assets and companies in which we invest to collectively achieve Net Zero. Over the next decades, Shell will aim to transition from an oil & gas producer to a diversified energy company. USS will continue to engage with Shell and monitor progress on its alignment to the CA100+ Net Zero Company Benchmark, which presents a key measure of corporate progress on climate transition. Each vote is taken on its own merit, and USS's views on an issue will evolve as our own policies evolve or if a company changes it position. We will for example, take into account Shell's 2023 comments on climate change and the energy transition in our 2023 voting.	This is a significant vote for USS as Shell is a relatively large holding for USS and there is considerable member interest in how USS voted on the resolutions.

Significant votes – examples for period from April 2022 – March 2023

Meta Platforms Inc.

Date of AGM	Summary of Resolution	Vote	Rationale for Vote	Vote Outcome	Implications of the outcome	Criteria selected for this vote to be significant
25/05/2022	Resolution 1.02 to 1.09- Re-elect board of directors	Withhold (Against)	USS has been concerned with Meta's content management practices, and risk management oversight for a number of years. As part of a global investor coalition, led by the New Zealand Super Fund, USS sought to engage the board on improvements to strengthen controls to prevent the livestreaming and dissemination of objectionable content but without success. We note that in 2021 Meta did move to strengthen controls to prevent the live streaming and distribution of objectional content. However, following the tragic events in Buffalo, New York, in 2022, it appears the controls were insufficient for the scale of the problem. In light of this, USS consider Meta's management and the board to have failed to properly enforce its content management policies and provide the robust and continued oversight needed to mitigate the significant reputational, legal and financial risks and more importantly, retain its social licence to operate and ensure duty of care to its customers. For these reasons, USS withheld its support from the entire board and will support all shareholder proposals that drive further progress and accountability.	All resolutions passed with between 92.75%-99.97% support.	USS followed up the vote with an engagement letter to the chairman outlining our vote rationale. This is an integral communication tool for USS, as a minority shareholder, to share governance priorities with the directors who represent us. USS will continue to engage with Meta and other social media companies in 2023 through an investor collaboration.	This vote is considered significant for USS due to member interest in the company and is an example of how USS use our shareholder rights to reinforce, and where necessary, escalate our company engagements. It is also indicative of a rising voting trend in targeting the re-election of individual directors for mismanagement of material ESG risks.

Significant votes – examples for period from April 2022 – March 2023

Electric Power Development Co.

Date of AGM	Summary of Resolution	Vote	Rationale for Vote	Vote Outcome	Implications of the outcome	Criteria selected for this vote to be significant
28/06/2022	Resolution 8- Disclose Business Plan through 2050 Aligned with Goals of Paris Agreement Resolution 9- Disclose Evaluation concerning Consistency between Capital Expenditures and Greenhouse Gas Emission Reduction Target Resolution 10- Disclose How Executive Compensation Policy Contributes to Achievement of Greenhouse Gas Emission Reduction Target	Resolution 8 - For Resolution 9 – For Resolution 10 - For	Electric Power Development (known as J-Power) operates Japan's largest coal fleet and derives more than 40% of its operating revenue from coal. Whilst USS commended the company's adoption of its Net Zero commitments, we voted in favour of all three shareholder resolutions, as we consider the proposed amendments to be aligned with the interests of the company and its stakeholders. We have concerns with how the company's plans to manage the responsible decline of the coal portfolio align with its decarbonisation strategy and how its compensation policy incentivises executives to work towards set climate goals. USS also requires companies to provide the appropriate level of disclosure on their climate plans so that investors can track progress in achieving those plans. We would welcome enhanced transparency and disclosure on the specific processes and strategies, including metrics and short-, medium- and long-term targets, to align the company's decarbonisation strategy and future capital expenditure with the goals of the Paris Climate Agreement and the IEA's Net Zero by 2050 emissions scenario.	Resolution 8 defeated- 25.9% For; 74.1% Against Resolution 9 defeated- 18.2% For; 81.8% Against Resolution 10 defeated- 19.0% For; 81.0 Against	The institutional shareholders Man Group, Amundi and HSBC Asset Management together co-filed the set of three climate related resolutions, which were the first investor group-led climate proposal in Japan. Under Japanese corporate law, shareholder proposals on climate change have to be filled as an amendment of the company's articles of incorporation, thus requiring two-thirds majority support to pass. USS expect the companies invested in to establish processes to both manage their transition to a low carbon future whilst adapting to the physical risks of a changing climate. USS followed up the vote with a letter to the board outlining key areas of concern and strongly encouraging enhanced corporate disclosure, which would help investors better understand risk associated with climate change.	This vote is considered significant due to the high-profile nature of the first investor group-led climate proposals in a market that has traditionally been difficult for foreign investors to influence. If left unaddressed the scientific evidence points to a world where a changed climate will impact the scheme's ability to achieve the returns it requires and will impact the quality of retirement for our members.

Significant votes – examples for period from April 2022 – March 2023

Sainsbury's plc

Date of AGM	Summary of Resolution	Vote	Rationale for Vote	Vote Outcome	Implications of the outcome	Criteria selected for this vote to be significant
07/07/2022	Resolution 21 - Shareholder proposal on paying a living wage to all workers and seek accreditation as a Living Wage Employer by July 2023	For	Half of companies listed on the FTSE100 are accredited by the Living Wage Foundation however no supermarkets are yet accredited despite being amongst the largest UK employers. Before the vote USS joined a collaborative investor meeting with the company's Chair and CEO to discuss the proposal in detail. USS welcomed the candour provided by the company during the engagement as the decision to support the shareholder proposal was not clear cut. USS were disappointed that only Sainsbury's were targeted by this proposal which may cause competitive disadvantage as fair pay is an issue for all companies in the sector. Furthermore, the board brought forward its annual pay review to January and increased workers' salaries to £10/hour (exceeding the real Living Wage of £9.90/hour) and matched the living wage rate for workers in inner London (£11.05/hour). However, on balance USS supported the proposal as contractors, who can be the most poorly paid and vulnerable, were not included in the wage rises and action by Sainsbury's can move the dial in the industry overall.	Resolution 21 defeated – 16.3% For; 81.1% Against; 2.6% Abstain	Prior to the AGM in April, and likely influenced by shareholder discussions, the company reviewed pay again in April and increased the rate for workers in outer London also to £11.05/hour. However, 16% of shareholders still supported the resolution. This is significant support and maintains pressure on the big supermarkets to continue to focus on fair pay.	This vote is considered significant for USS, as it was a high profile and contentious proposal amongst large asset owners and managers. There are clear reputational concerns regarding a supermarket's pay decisions during a cost-of-living crisis and following the pandemic where supermarket workers were put at risk as key workers.

Our responsible investment team

Robert Campbell

Robert re-joined USS in 2020 as a Responsible Investment Senior Financial Analyst, having previously been an Investment Analyst on our Global Emerging Markets equities team (2019-20). He has worked as a Senior Manager on PwC's Valuations team (2020) and as a Portfolio Manager/Analyst for Martin Currie Investment Management (2008-2019). He started his career as a financial journalist for EuroWeek (now GlobalCapital), carrying out this role from 2007-2008. He is a CFA chartherholder and has an MA (Honours) in Economics from the University of Glasgow.

Vikki Hoare

Vikki is a Responsible Investment Analyst. She joined the RI Team at USS in March 2021 to focus on proxy voting, integration and stewardship in the Scheme's public market portfolios. Vikki has worked in Responsible Investment for over ten years. Firstly, as an ESG Officer at a boutique long-only equity asset manager where she set up and ran their ESG approach and more recently at GAM Holdings as a Responsible Investment Analyst in their Governance and RI Team. She focused on ESG integration and analysis, proxy voting and ESG engagement across asset classes with a particular focus on UK, Emerging Markets and Global equity funds.

Helen Hopkins

Helen is a Senior Responsible Investment Analyst covering ESG due diligence and monitoring of the Scheme's externally managed investment strategies in public and private markets. She leads on the scheme's manager Responsible Investment (RI) Ratings process and engagement programme; and provides ESG advice in due diligence and asset management for the scheme's directly held private markets assets. Helen joined USS in 2007. She started her career in RI at UKSIF, the UK Sustainable Investment and Finance Association, where she helped launch the Institutional Investors Group on Climate Change (IIGCC) and EuroSIF amongst other RI initiatives. Helen sits on the Institutional Limited Partners Association (ILPA) ESG Advisory Council and recently participated in working groups in private equity for the PRI and IIGCC's Paris Aligned Investment Initiative.

Bruce Jackson

Bruce is a Senior Responsible Investment Analyst, and Stewardship Team lead. He is a Chartered Geologist with over 25 years' experience in environmental consultancy and contracting, working on projects in the UK and overseas including pipelines in Georgia, new port development in Qatar and the investigation and remediation of ordnance factories in the UK and Israel. Most recently, Bruce spent six years with Sustainalytics, a major ESG service provider where he was involved in company and collaborative engagement on a range of critical sustainability issues, including tailings dams, human and labour rights. Bruce has also experience of proxy voting specific markets in accordance with a voting policy.

Philipp Kloucek

Philipp is a Senior Responsible Investment Analyst. He joined USS in 2019 to focus on the integration, stewardship and voting of ESG issues across the Scheme's portfolios. Prior to joining USS, he worked as an ESG Consultant for Institutional Shareholder Services and as an ESG analyst for Vigeo Eiris. Philipp holds an MSc in Environmental Engineering from Imperial College London, the CFA Level 4 Diploma in Investment Management (IMC & ESG), and the CFA Certificate in Climate and Investing (CCI). He currently sits on the ICGN Natural Capital Committee, UKSIF Analyst Committee as well as Eumedion's Investment Committee.

David Russell

David is Head of Responsible Investment and leads our RI activities. With more than 20 years' experience in RI, David is a former Board member of the UNPRI Association, an advisor to the Board of the Institutional Investors Group on Climate Change (IIGCC) and is also a founding Board member of the Transition Pathway Initiative. He is also on the Board of the International Centre for Pensions Management, the UK Investment Associations' Sustainability and RI Committee, the PLSA Sustainability Committee, and the FTSE Russell Sustainable Investment Technical and Sustainable Investment Strategic Advisory Committees. Prior to USS, David has previously worked as an Environmental Manager for a UK retail company and was for five years a university lecturer in Environmental Management. He has an MSc in Environmental Impact Assessment.

Edward Salibi

Edward joined USS in 2020 as a RI Analyst. Edward primarily focuses on the ESG due diligence and monitoring of the Scheme's external fund managers, direct and coinvests assets. He also supports the teams' ESG integration and stewardship activities in public markets. Previously he worked for AXA IM as an Impact Research Analyst, where he assessed companies' positive impact and SDG alignment. He is a graduate of the University of Nottingham with a BA (Honours) in Politics and International Relations.

USS For members, for the future.

For further information on responsible investment and stewardship at USS, please contact:

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