

Action Plan for Delivering the Net Zero Goal Update March 2024

Contents

Introduction	3
Defining the Goal	4
Governance and Strategy	5
Setting Targets Objectives and Reporting	7
Asset Class Implementation	9
Targets and Direction of Travel	177
Risks	188
Conclusion	221

Introduction

At its meeting in March 2021 the Pensions Authority agreed its first Action Plan for Delivering the Net Zero Goal and agreed to update the Action Plan annually. This third annual update reflects on the progress that has been made and identifies a revised set of actions flowing from that progress and developments in the wider environment including the evolution of regulation.

The goal which the Authority has set for itself is ambitious, but that ambition is founded on the belief that institutions such as SYPA need to show leadership in order for the required change to be delivered with the overall degree of urgency required by the position in which the world finds itself. In that context this plan is simply the starting point. The climate challenge that the Authority wishes to address is urgent and in doing so we should not allow the perfect to be the enemy of the good, so we can make progress on the journey to net zero as quickly and purposefully as possible.

This Action Plan has been developed using the Institutional Investors' Group on Climate Change (IIGCC) Net Zero Investment Framework. This recognises that there can be no "one size fits all" route to net zero, investors like SYPA need to focus on maximising efforts that achieve decarbonisation in the real economy, rather than simply creating portfolios with no emissions. This requires a comprehensive investment strategy led approach supported by concrete targets (at portfolio and asset class level) combined with smart capital allocation and engagement and advocacy activity. Such a strategy led approach must not just deliver emissions reductions, but also increase investment in the climate solutions which we need to achieve net zero. This approach will reduce the exposure of SYPA's investment portfolios to climate risk while increasing their exposure to climate opportunity, thus providing greater long-term protection for our scheme members' savings.

All of this does, of course, need to be seen in the context of our participation as one of 11 partner funds within the Border to Coast Pensions Partnership and we will continue to work with and gain the co-operation of the other partners and the operating company to achieve our goal.

There remain significant gaps in both our knowledge and the data available to us, both of which we will need to continue to address. There are however specific actions we will need to take in parallel to address these gaps and to make full use of the relatively short time available to us to achieve net zero. We already report in line with the requirements of the Task Force on Climate Related Financial Disclosure and each year in our Annual Report we will present our progress both in delivering this action plan and towards achieving net zero.

This plan will continue to be developed further, at least on an annual basis, as we better understand our current position and the progress we are making.

Defining the Goal

It is important to understand what we mean by the goal of net zero and how it will be measured.

What we are seeking to achieve seems simple, that the net level of carbon emissions from the holdings in our investment portfolio equals zero. However, there are a number of ways of defining carbon emissions and it is important that we understand which of these we are using so that we can pull the right levers in order to achieve our goal.

The accepted standard for defining (and measuring) carbon emissions has "3 scopes".

Scope 1 emissions are direct emissions from company-owned and controlled resources. In other words, emissions released to the atmosphere as a direct result of a set of activities, at a firm level.

Scope 2 emissions are indirect emissions from the generation of purchased energy, from a utility provider. In other words, all GHG emissions released in the atmosphere, from the consumption of purchased electricity, steam, heat and cooling.

Scope 3 emissions are all indirect emissions – not included in scope 2 – that occur in the value chain of the reporting company, including both upstream and downstream emissions. In other words, emissions that are linked to the company's operations.

Companies reporting in line with the requirements of the Task Force on Climate Related Financial Disclosure Standard (TCFD) must report on Scope 1 and 2 whereas reporting on Scope 3 is voluntary and, as will be clear from the definition, incredibly hard to measure with the significant risk of double counting between direct producer and indirect consumer organisations. However, the data reported by fund managers to the Authority makes no distinction as to these different types of emission, and while a restricted definition might make a 2030 goal easier, this is not practical and would leave the Authority open to the accusation of avoiding the key issues in emissions reduction.

Therefore, for the purpose of delivering the Authority's Net Zero Goal the following definition will be used.

"The Authority's goal is for the net carbon emissions from the totality of its investment portfolio to be zero by 2030."

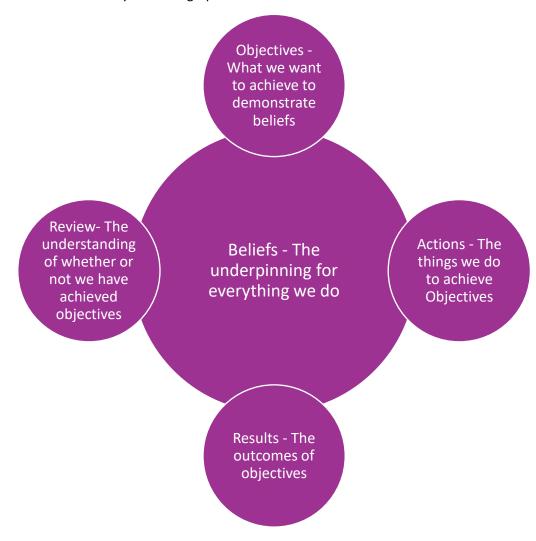
While concentrating on scope 1 and 2 emissions allows the Authority to set targets which are comprehensible and where data is likely to be available, this position will need to be kept under review as more data becomes available and the investment impacts of using specific measures becomes clear. Measurement and regulation are continually developing in this area and to a significant degree we are going to be trying to hit a moving target, particularly in the next few years when the pace of change in these areas is likely to be greatest.

In addition, the Authority will separately seek to make the remainder of its operations carbon neutral over the same timescale with relevant actions included in future iterations of the corporate strategy, for example utilising renewable energy in our office, reducing the generation of waste and setting policies which promote the use of electric vehicles and/or public transport.

Governance and Strategy

Getting the governance and strategy right means that the organisation will retain focus on specific goals. In turn, this will support decision making processes which are able to receive, understand and react to information on progress to specific goals as it comes through.

This is illustrated as a cycle in the graphic below.



Everything we do needs to start with beliefs. Beliefs provide the framework within which we develop objectives which lead to us to take actions, which lead to results, which we then review to see whether we have achieved our objectives, and so the cycle goes on.

In making decisions in relation to any of the stages of this cycle it is important to remember that the Authority is required by the LGPS Investment Regulations to ensure that it has taken proper advice. In most cases this will be provided by a combination of officers and the independent investment advisers. However in this area, there is likely to be a requirement at various points for additional specialist advice. Given the requirement to pool, which is placed on LGPS funds, there is also a need to ensure that Border to Coast are engaged, and aligned, with the Authority on this journey.

In the last 12 months we have continued to build on the foundations set out in our agreed beliefs statement through continuing a dialogue with Border to Coast and the other partner funds to increase the focus on the move to Net Zero and deliver further opportunities for investment in climate positive assets.

The review of the investment strategy was finalised in 2023, with a net-zero tilt in asset allocation, and our reporting continues to progress towards Net Zero. This reporting will continue to be developed as data for more asset classes becomes available and the detailed requirements of new regulations become clear. This work is supported by the work undertaken by external consultants to support the revised Investment Strategy that was signed off at the March 2023 Authority meeting.

The specific actions required to give effect to the structure outlined above are set out in the table below:

Ref	Action	Responsibility	By When
SG 1	Agree Investment Beliefs Reflecting the Commitment to Net Zero	Authority	Completed
SG 2	Revise Investment Strategy following 2022 Fund Valuation directly reflecting Net Zero Commitment, including further scenario and transition path analysis (to be repeated in each triennial strategy review).	Assistant Director - Investment Strategy	Completed
SG 3	Review performance of all investments in the context of the Net Zero Commitment on a rolling basis.	Director	Ongoing
SG 4	Monitor the delivery of the Net Zero Commitment and the transition path on an annual basis	Investment Manager	Ongoing
SG 5	Create a forum to engage with Border to Coast to identify how they can assist and support the Authority on its Net Zero journey.	Director	Completed

The work required to support the investment strategy review will provide a foundation for addressing the new reporting requirements. In addition, we will be working with Border to Coast and their new data provider to develop the forward-looking metrics that will be crucial to measuring progress towards the goal and informing future adjustments to the strategy.

Setting Targets Objectives and Reporting

Measurement and reporting are central to how we drive forward the changes that are required to achieve the net zero commitment. The detail of these will flow from some of the strategic work set out in the previous section and the establishment of a baseline position which enables us to understand how far we must travel to achieve net zero.

In simple terms, what we are seeking to do is establish a set of steps to reduce carbon in each element of the portfolio, over a given time. How this will be achieved for individual asset classes is the subject of the next section of this plan.

This section of the framework deals with the four outer circles in the diagram on page 5, which can be described as the "plan do review" cycle.

At this stage we have some idea for around 60% of the Fund's assets by value of the distance to travel and fund managers have set targets for a number of portfolios, although these relate to their own targets for achieving Net Zero rather than the Authority's own more ambitious target. The key consideration here is that we are not the only investor in the products in which we are invested. Therefore, while in terms of the Border to Coast internally managed funds, we can seek to influence we cannot dictate. Nor are we able to simply switch into a carbon neutral fund because the pool does not offer one, and to do so would require a fundamental change in the Authority's longstanding investment approach (either in terms of active vs passive management, or in terms of internal management vs much more expensive external management) which we do not believe is justified. These issues are dealt with in more detail in the next section of this document.

For other asset classes (such as Property) we are in the process of agreeing a trajectory of emissions reduction with investment managers. This will be incorporated in the next round of updates to targets under the Paris Aligned Asset Owner Initiative. In addition, we have made some significant improvements in the availability of data over the last 12 months. At the same time setting targets will continue to be difficult and on the basis of not letting the perfect be the enemy of the good we will be looking to set emissions targets, for all portfolios, on a downward trajectory as soon as practically possible.

However, setting targets alone is not enough. We need to be held accountable for our progress towards those targets. We have already begun to report publicly on our progress towards the net zero goal and on the specific steps we have taken towards that objective.

We will also need to identify a number of specific measures that will form a core part of our reporting under the forthcoming LGPS Regulations addressing the need to report in line with TCFD requirements. The measures we will adopt, subject to any change to reflect the final regulations and being able to agree a common position across the Border to Coast partnership, are:

- An emissions metric
- A carbon intensity metric
- A weighted average carbon intensity metric (WACI)
- A data quality metric indicating the proportion of the portfolio covered by the relevant metrics
- An alignment metric providing a forward-looking measure

The aim will be to produce the first four of these at both asset class and whole portfolio level while the alignment metric is only meaningful at whole portfolio level.

We will also be required to provide some scenario analysis, although at this stage the detailed requirements are not clear and we will work with colleagues through the Border to Coast partnership to ensure that this analysis is consistent across the whole partnership regardless of what, if any Net Zero goal, each partner has adopted.

The targets that have been adopted while supportive of the Authority's direction of travel are, in themselves, not sufficient to achieve the Net Zero Goal. Additional tools, such as adjustments to the balance of the overall asset allocation, will be required to bring the Authority closer to its goal.

Ref	Action	Responsibility	By When
TR1	Following Investment Strategy Review identify interim targets leading to net zero	Director / Assistant Director - Investment Strategy	Completed but subject to ongoing revision and refinement
TR2	Work with Border to Coast and other investors in relevant products to ensure mandates and performance objectives specifically reflect the Net Zero Commitment	Assistant Director - Investment Strategy	Ongoing
TR 3	Conduct an annual review of progress towards Net Zero and make adjustments to either targets or implementation approach as necessary while continuing to meet return objectives	Assistant Director - Investment Strategy	Annually from April 2022. This update is the third such review

Asset Class Implementation

The products in which the Authority invests are all made up of very different sorts of assets which have different investment characteristics. Therefore, it is highly unlikely that one approach to implementing net zero will be applicable across such a wide range of assets ranging from farmland to private equity investments in tech start-ups, through traditional instruments such as shares and bonds.

This section of the document looks at each major asset class in turn and identifies an initial approach which reflects the need to focus on the real economy and the practical issues associated with operating within the context of pooling, where the Authority is not wholly in charge of its own destiny. All of this also needs to be set within the context of the Authority's broader beliefs about how to do investment.

Specifically, the Authority believes in:

- Being an active investor This means picking the best stocks to invest in using the skill of
 individual managers. However, our moderate risk appetite means that while we believe in
 active investment, we invest in active products that maintain broad portfolios within a
 particular asset class and select the best companies in particular sectors. This is opposed to
 highly active products which would select both companies and sectors, and thus generate
 much more concentrated portfolios.
- Being a global investor This means that we will be exposed to investment in emerging
 economies such as China and India where the stage of development means that economic
 growth is sometimes being driven by companies in high emitting industries, such as cement.
- Managing money internally wherever possible While we now invest through Border to Coast for listed assets we look to the company, where possible, to provide products using its own team rather than external managers. This makes changing products more difficult as a wholesale switch away from the current range of products could significantly undermine and destabilise this important aspect of what Border to Coast offers to its partner funds, and if we wish to make changes which would impact the investment universe, we need to get agreement with other investors.
- Engagement over divestment or exclusion The Authority has long operated on the basis that
 it seeks to influence companies through engagement, this is part of being rooted in the real
 economy.

As we progress along the road to net zero, and further along the pooling journey more generally, these beliefs about how to do investment are all likely to be challenged in different ways. The Authority will need to keep them under review to ensure that they remain compatible with achieving both our return and net zero objectives. In particular, to hasten the move of portfolios towards investment in companies with a longer-term future, the Authority will be seeking to influence partners to continue to reduce the revenue threshold for exclusion of pure coal and coal sands companies, so that it reaches zero before 2030.

The other contextual factor to be considered, before looking at the approach in each asset class, is the fact that the Authority (like all other LGPS Administering Authorities) is part of a pool. Therefore, the Authority needs to secure the co-operation of the other partner funds, within Border to Coast, to make progress where changes are required to investment products. The Pool has now agreed its own Net Zero objective (setting a goal of 2050) and, while this is not the same as the Authority's, the setting of the objective requires the setting of targets and the reporting of metrics. In themselves, these will

support the Authority's work while the ability to alter the asset mix through the Strategic Asset Allocation and to manage the legacy portfolio (the assets not yet pooled or not to be pooled at all) provide potential levers for accelerating or reducing the pace of movement to Net Zero.

Border to Coast have demonstrated their Net Zero commitment by joining the Net Zero Asset Manager initiative (NZAM) by pledging to decarbonise investment portfolios by 2050 or sooner.

To meet their commitment, and support their implementation strategy, Border to Coast have developed targets for investment funds in line with the Net Zero Investment Framework (NZIF). The implementation strategy developed by Border to Coast sets out the four pillars to their approach: Governance and strategy; targets and objectives; asset class alignment; and stewardship and engagement.

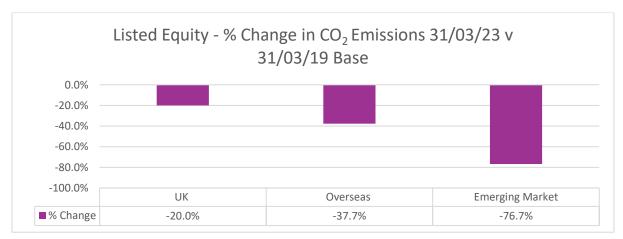
The following sections deal with each asset class in turn.

Listed Equities

The Authority's listed equity investments are managed against benchmark indices with a performance target of 1% over the benchmark and a core risk tolerance of a 3% tracking error. This latter tolerance limits the scale of "active bets" (i.e. the degree of divergence from the index) which the fund manager can take.

Border to Coast have identified a series of changes to the investment process which will make it more sensitive to the scale of climate risk posed by individual companies. These are in the process of being implemented with a target to reduce normalised financed emissions from these funds by 52% by 2025 and 65% by 2030 from 2019 baseline levels.

Compared to the base year of 2019, emissions across the equity portfolios have, as shown in the graph below, reduced substantially. In particular, within the Emerging Markets portfolio, as a result of the restructuring of the China element of the portfolio. However, total financed carbon emissions in the Overseas Developed and UK equity portfolios have increased year-on-year. This is potentially due to a rebound in emissions as economies continue to recover after pandemic slowdowns. This does highlight that the approach adopted by the Authority of not changing the products in which it invests results in a harder path to achieving net zero.



Despite a reduction in Strategic Asset Allocation from 45% to 38%, listed equities remain the single largest asset class in which the Pension Fund is invested. To achieve SYPA's ultimate goal, it will be necessary to reduce the contribution to aggregate emissions from these portfolios in total by at least 50% by 2025. While the targets set by the fund manager do not reflect this maintenance of the current

rate of progress would indicate that this is within the range of possible outcomes. Beyond this the impact of the changes in the investment process, to make it more climate aware, and the weight of assets held in the different products, which will be reviewed as a matter of course, are likely to further influence the level of overall emissions beyond 2025.

Border to Coast, as Fund Manager, has "ratcheted down" their thresholds for excluding public market companies with more than 25% of revenues derived from thermal coal and oil sands. This now brings the exclusion threshold for public markets in line with the threshold of 25% for illiquid assets, which was set lower due to the long-term nature of these investments.

Border to Coast also have additional exclusions in place covering public market companies in developed markets with more than 50% of revenue derived from thermal coal power generation. For companies in emerging markets, the revenue threshold is more than 70%, this threshold is set higher to reflect support of a just transition towards a low-carbon economy which should be inclusive and acknowledge existing global disparities.

An important feature of investments in listed equities is the voting rights which are conferred on asset owners. The way in which the Authority, through Border to Coast, chooses to exercise these voting rights has the potential to accelerate progress by companies towards net zero. Border to Coast continues to update and strengthen the voting guidelines on climate change for the 2024 proxy voting season. As well as voting against the reappointment of board members, where companies are not making progress towards net zero as assessed by the Transition Pathway Initiative (TPI), votes against the Chair have been and will continue to be cast where a company fails one or more of the first four indicators of the Climate Action 100+ Net Zero Benchmark. The Authority will review proposals for the casting of votes in relation to companies' climate transition plans and where it feels that Border to Coast policy is resulting in support for plans that do not deliver a credible move to Net Zero for a company it reserves the right to vote its portion of the shares held in a different way to the remainder of the Partnership.

The ability to exercise voting rights is supported by engagement with investee companies. Most engagement activity is undertaken by Robeco, acting for Border to Coast (the actual share owner in the pooled products). The issues associated with climate change and the achievement of Net Zero remain the single most significant focus of engagement activity. During 2023 an additional engagement programme around the Net Zero theme on "Just transition" was added. Just transition is the integration of social risks and opportunities into decarbonisation strategies. It enables investors to address systematic threats to long term stability and value creation and supports the delivery of a rapid and resilient transition to Net Zero. Border to Coast continue to develop clearer tracking and reporting in this area. Successful engagement on these issues will, likely, hasten progress towards net zero, and engagement will need to remain a key tool in the armoury to ensure that companies in which the Authority is invested meet their commitments to reducing emissions. Climate issues continue to represent a very significant proportion of the engagement activity, which we support, and we report on this each quarter. The Authority will work through the Partnership to seek to define much clearer success criteria for climate engagements along with clearer escalation of consequences up to and including divestment in the event that engagement does not meet those criteria.

Both the Authority and Border to Coast are also members / supporters of a number of investor bodies in the climate space such as the Institutional Investors Group on Climate Change (IIGCC) and Climate Action 100+. Involvement in groups such as these can be used to assist in tracking the progress of individual companies towards Paris alignment but can also be used to assist in influencing the development of standards in relation to data and measurement for adoption by investee companies.

Fixed Income

These portfolios are handled by a mixture of internal and external managers within Border to Coast products, using a variety of performance targets against a benchmark index. The favoured investment styles within these products tend towards relatively low turnover approaches which seek the best credits to buy with little reference to the composition of the index.

Emissions data is less readily available within fixed income investments compared to equity markets, although for corporate credits there is the ability to use the same underlying data for both debt and equity investments. However, many of the credits included in these portfolios are from sovereigns or multi-lateral institutions (such as the European Investment Bank) where the calculation of emissions data is much more difficult. While it is possible to engage with corporate bond issuers in the same way as for equities, this is not possible for sovereigns and multi-lateral institutions so the ability to influence behaviour is not present in the same way.

Fund managers in this space do seek to engage with corporates and there is an increasing issuance of "green bonds" both by corporates and governments. Border to Coast are beginning to examine options for a specific product in this space and the Authority will be positively supporting this work as it may provide the opportunity provide funding for a more rapid transition to Net Zero. However any investment will depend on successful due diligence being undertaken.

Given Border to Coast's Net Zero commitment they will need to produce metrics and set targets for fixed income products, although at present sovereign bonds and the Multi Asset Credit Fund are excluded from their emissions targets due to insufficient data availability and a lack of quality in the data. The combination of products provides an opportunity for the Authority to set its own targets for the asset class as a whole once such data is available.

Data is only currently available for the Investment Grade Credit portfolio and this indicates a decline in emissions of close to 50% from inception. However, as indicated above data quality in relation to this product, in particular coverage of portfolio companies, is not as good as for the equity portfolios and this may mean that this statistic is not a representation of the on the ground position. However, it is a starting point for this portfolio and the Fund Manager has set specific targets for emissions reduction for the portfolio aiming for a c50% reduction in emissions by 2030. Based on the information available this may be overachieved, although overachievement here may compensate for slower progress on more recently launched fixed income funds.

The Authority will take the following actions in relation to fixed income investments in the coming year:

- Seek to understand and monitor the impact of changes to the investment process required by the adoption of the Net Zero target and assess their impact.
- As with equities, seek to define much clearer success criteria for climate engagements and clearer escalation of consequences up to and including denial of debt in the event of engagement not meeting those criteria.
- Seek to ensure existing exclusion policies for pure coal and coal sands are applied across fixed income portfolios.
- Continue to support Border to Coast's work to develop a "green" bond product as a positive
 way of financing the transition by reducing exposure to the Multi Asset Credit (MAC) mandate
 and, subject to due diligence, transitioning to a green bond mandate when launched.

Alternatives

While there are four asset classes within alternatives (Private Equity, Private Debt, Infrastructure and Natural Capital) these will, at this stage, be considered together.

The key initial issue here is the lack of data, which has improved but remains less complete compared to public equities. This issue is being addressed, to some extent, through work already commissioned by the Authority and through the introduction of new regulatory requirements on asset owners which give leverage with fund managers to secure data. While this is helpful it is likely to be some time before data is comprehensive and it will also take some time to achieve the necessary quality of data, although starting later may allow some of the mistakes made in the early stages within other asset classes to be avoided.

Regardless of the data issue though alternatives are the area where Net Zero provides the greatest opportunity. We already have significant investments in renewables and other investments which support the transition (such as electric trains replacing more polluting diesels), and the low carbon transition is a clear investment theme within these portfolios. This will over time result in a build-up of assets with positive offsetting characteristics such as investments in timberland.

Any investment portfolio of the scale of SYPA's alternatives portfolio is likely to contain some investments which could be regarded as "carbon negative". The work commissioned on data should allow at least some of these to be identified, and it will then be necessary to consider whether any action is appropriate. By their nature alternatives are often highly 'illiquid' meaning they are not bought and sold on exchanges like listed equities and secondary sales very often result in a loss of value. Therefore, it is likely to be necessary to hold such investments to maturity which will require additional carbon positive investments to offset them.

In order to achieve diversification, it would not be unreasonable to seek to emphasise low carbon or transition supportive investments within the alternatives portfolio. To support this Border to Coast are have successfully launched a Climate Opportunities sleeve within the alternatives platform. The success of this Fund and growth of the market mean that it is likely that the planned 3 year investment period will be reduced to 2, which will to some extent mitigate the scaling back of our original intended allocation. We will be monitoring this Fund as it is deployed to ensure that these investments can be measured in terms of their offsetting characteristics and thus how they can be used in our net zero calculations.

The latest Investment Strategy, implemented from March 2023, resulted in a recommended strategy with a more significant tilt of the alternative portfolio in a climate positive direction. New benchmark allocations to 'Climate Opportunities' and 'Renewable Energy' were added, each targeting an allocation of 5.0% of total assets. In addition, the target allocation to 'Natural Capital' was also increased from 2.0% to 3.5%, with investments in suitable Timberland managers being evaluated. These increased allocations will be balanced through the reduction of equity assets and the Multi Asset Credit (MAC) Fund. The reweighting of allocation to climate positive investments and away from the MAC fund has additional benefit as the MAC fund is a relatively high emitting asset class with challenges around reporting and transparency of underlying investments.

It is anticipated that investments in timberland assets will form a significant weighting of the overall 3.5% allocation to Natural Capital. Timberland has the benefit of capturing and storing carbon and in 2016 the Paris Accord recognised that healthy forests play a critical role in absorbing and storing global CO2 emissions. Qualifying timberland is able to generate a nature-based removal Verifiable Carbon Asset (VCA). A VCA represents one tonne of CO₂ equivalent removed and/or reduced that has been

verified to meet the criteria of a carbon project. The carbon sequestered in forests can be quantified and reported in a net carbon footprint. In addition, carbon offsets generated by a forest carbon sequestration project can be registered and retired or monetized to supplement existing income returns. We will look to register VCAs and retire or offset them against carbon arising from investments in other asset classes.

Principally we will explore with Border to Coast ways of meeting the new allocations to climate positive investments through the pooling framework. We recognise that this route supports the pooling process and utilises the resources at Border to Coast given the limitations on our in-house resources. In order to facilitate our increased climate positive targets, Border to Coast have agreed to allow the doubling of investment in new, specific climate opportunities and renewable energy investments through the use of a 'side car' arrangement. We anticipate utilising our allowances through these side car arrangements, however these on their own will not be sufficient to meet the target allocations in the March 2023 strategy. Therefore, it is anticipated and planned we will make direct investments in timberland and renewable energy assets to meet our target allocations. This highlights a conflict that is present in meeting out 2030 Net Zero target, specifically that we are limited by the products and allocations within those products that are made by Border to Coast. We will look to influence Border to Coast to provide more climate positive products at a faster pace, however there are 10 other partner funds with later Net Zero targets and therefore different priorities on where cost and resource should be spent.

Property

The property portfolio provides a number of opportunities in terms of the movement to Net Zero. Again, there is a lack of robust and comprehensive data required to fully understand the carbon footprint of the portfolio. A third-party review undertaken gave a detailed baseline of energy consumption based on c74% of actual data, however reporting continues to improve. There remain challenges in undertaking alterations, such as the addition of solar panels, where the cost needs to be recovered through service charges, with the current economic climate making this particularly challenging.

Over the last 12 months Abrdn as the Fund Manager have made significant progress in the overall management of ESG risks (including climate) related to the portfolio resulting in a improvement in the GRESB score from 74 to 78 with plans to improve it further in 2024. A number of projects to improve environmental performance via refurbishment have been identified, with some (including a solar PV installation on a very large industrial unit) completed. In addition, "green clauses" continue to be added to all new leases. This programme of work will continue and provide a foundation on which Border to Coast will be able to build when direct property assets transition into the proposed pooled product, expected to be during 2024. The target for the portfolio is net zero by 2050 but with reductions of c 30-35% by 2025 and 50-60% by 2030. New acquisitions target EPC A or B minimum with developments BREEAM Excellent or Very Good as a minimum. Data coverage has significantly improved and the future workplan reflecting the need to deliver further improvements.

The completion of Project Chip in January 2024 sets the agricultural portfolio on a road to be a positive asset in terms of the Authority's approach to climate. It will take a number of years to deliver the projects necessary to achieve this and in the next year we expect to see the establishment of both an understanding of the current position and of the opportunities available and associated actions.

The table below sets out the specific actions proposed in relation to each asset class.

Ref	Action	Responsibility	By When
AC1	Agree and implement changes to equity mandates following production of proposals by Border to Coast (subject to agreement by other investors).	Assistant Director - Investment Strategy	Completed
AC2	Consider whether further changes are required to the structure of equity products, including implementing further exclusions in the light of the impact of the changes made under AC1 and whether they are achievable given SYPA's current product mix and other investment beliefs.	Assistant Director - Investment Strategy	As part of the 2025 strategy review
AC3	Continue to seek tightening of the voting guidelines in relation to climate issues and actively review potential votes in relation to climate issues	Director	Annually as part of Border to Coast Policy Review and as necessary.
AC4	Work within the Border to Coast partnership to achieve clearer success criteria for climate related engagements with clearer escalation of consequences up to and including divestment or denial of debt in the event of engagement not meeting those criteria.	Director	Ongoing process feeding into the annual Border to Coast Policy Review
AC4	Consider the approach to Net Zero for Fixed Income Portfolios in the light of emerging data and undertake the identified actions set out in this Action Plan	Director & Assistant Director - Investment Strategy	Initial assessment completed. Results to be reflected in the nest strategy review
AC5	Support the further development of a "green bonds" product by Border to Coast	Assistant Director Investment Strategy	Ongoing discussion with decision as to launch of product by end of 2024

AC6	Identify through the work being carried out on data any particularly carbon negative alternative investments and consider whether any action is possible	Director	This action will now be taken as part of a deep dive into the legacy alternatives
AC7	Engage Border to Coast in discussion over the best means to achieve a positive bias to supporting the low carbon transition within the alternatives portfolios	Assistant Director - Investment Strategy	Completed – in addition to the Climate Opportunities Fund side car vehicles have now been provided for renewable and natural capital.
AC8	Work with Abrdn to identify and initiate a programme of improvements to the environmental performance of the commercial property portfolio	Director	Completed property level action plans in place and being reported.
AC9	Deliver intended outcomes of Project Chip in terms of the climate opportunities within the agricultural portfolio.	Director	Project Chip transaction completed. Monitoring of progress will now be an ongoing issue.

Targets and Direction of Travel

Based on the data we have available for the equity portfolios, and the initial work carried out by Border to Coast in relation to their interim targets, to achieve a 2030 goal we will need to achieve a trajectory of emissions reduction which:

- Reduces emissions by between 67% and 75% by 2025 compared to the 2020 baseline.
- Accelerates the rate of emissions reduction significantly beyond that set out in Border to Coast's interim targets.

The current direction of travel is positive, and in line with Border to Coast's targets, and if maintained would on a straight-line basis result in achieving net zero between 2044 and 2048. Thus, it is clear that a significant increase in the rate of reduction is necessary if we are to meet our 2030 goal. This increase in the rate of reduction will be in addition to the need to fill in the data gaps which continue to exist, particularly within fixed income investments. It is anticipated that further investment within alternatives will be a focus as the opportunity to earn carbon offsets will be vital to achieve out net zero ambition.

Emissions data coverage of the listed portfolio continues to improve with over 82% now covered by carbon emissions reporting compared to 66% in 2022. The level of carbon emissions coverage, at a fund level, is monitored and reported on in the quarterly Responsible Investment update.

As part of the work carried out on the revision of the investment strategy, the likely trajectory of emissions was considered and the impact of a number of different wider world scenarios on the overall position of the Pension Fund. This has allowed us to have a clear idea of the likelihood of the Fund delivering its overall objective of being able to pay pensions when due in each scenario. The review found that changes in asset allocation will have a positive impact on emissions and thus on the Fund's ability to meet the Net Zero goal, whilst only marginally increasing the likelihood of a more negative impact on the funding level compared to the previous investment strategy.

After the implementation of the 2023 investment strategy, there will be significant questions that need answering prior to the next strategy review in 2026.

- What are we willing to do and what sacrifices will we make to reach net zero by 2030.
 - Are we willing to look outside of Border to Coast fund options?
 - Are we willing to incur transaction costs to liquidate invested funds?
 - Are we willing to take on more liquidity risk by holding less liquid positions that could lead to sub optimal investment decisions to meet contractual pension payments?
 - Are we willing to increase company specific risk and expected volatility of portfolio returns through a less diversified portfolio?
 - Are we willing to reduce the correlation between Fund assets and liabilities through investment in less interest rate sensitive hedging assets?
- What changes to our investment beliefs are we willing to accept.
 - O Would we go to fully actively managed with a net zero focus?
 - What level of tracking error, eg deviation from the benchmark, are we willing to accept?

Risks

Achieving net zero by 2030 remains a very ambitious goal, and consequently there may be a greater degree of risk that the goal is not achieved compared to if a less ambitious goal had been adopted. That does not mean that the goal is wrong, simply that the risk of not achieving it is greater, and therefore it is important that we understand the risks so that we can identify actions which can mitigate against them.

The key risks identified are:

Unintended Consequences

Changing one aspect of the way in which we invest can result in unexpected results elsewhere. Thus, for example, adopting a more climate aware benchmark could reduce oil and gas exposure but increase tobacco exposure which could be seen as undesirable for other policy reasons. Similarly, a focus on scope 1 and 2 emissions could result in an increased exposure to financial institutions, although they represent very significant different forms of investment risk within a portfolio. Similarly when Scope 3 emissions are examined Apple's emissions increase by 475x whereas Shell's only increase by 12x which might appear counter intuitive.

Further this could lead to, excluding companies with high carbon footprints but credible decarbonisation plans, these strategies risk omitting quality firms that are aligning to net zero and whose progress might be underappreciated by the market. Perversely, investing only in low-carbon-now companies withholds capital from transitioning firms in economically important but hard-to-abate sectors, like steel and agriculture. This approach slows emissions-reduction where it is most needed and risks slowing carbon reduction in the real-world economy.

Given that the Authority will wish to continue to invest in internally managed products with a broadly similar risk appetite, it is important that changes affecting the structure of mandates and the investment process are thoroughly researched and debated before implementation. It should be noted that, In the context of the Pooling process, this will also require the agreement of other investors.

Inability to Secure Agreement of Other Investors

This is perhaps the most significant risk to SYPA being able to make changes to the way in which money is invested so that net zero can be achieved. Effectively the pooling process means that other investors can block SYPA from achieving its objectives (although equally viewed through a different lens SYPA could be seen as moving others in a direction which is not in line with their objectives). Fundamentally this is a challenge of the pooling process, perhaps magnified by SYPA's commitment to internal management which makes it more difficult simply to change managers. The only mitigation is for all involved to maintain an open dialogue. However, ultimately it may not be possible to secure agreement to changes which are necessary to allow the achievement of SYPA's climate goal. In this case the Authority will need to determine an appropriate course of action within the context of pooling which allows it to meet its financial objectives. This may require the reconsideration of key aspects of the Authority's current investment beliefs, and the weighing of the relative importance of different factors against the achievement of the climate goal. This action plan highlights the need for these fundamental conversations to take place as part of each strategy review and with partners on an ongoing basis.

Data Gaps

As indicated throughout this document, this is an area that is bedevilled by gaps and inconsistencies in data. These inconsistencies are evident from the apparent disagreement between data vendors about the alignment of individual companies to the climate transition. While the Authority has taken action to address this it will on occasion have to act in the absence of data and almost always with limited data. This is to accept that in the initial stage of the process it is important to build a momentum behind measures moving in the desired direction allowing the development of measures and the achievement of comprehensive data to follow.

Regulation is supporting the Authority's direction of travel in relation to data. However, this is likely to be a long road and there will be resource implications from securing and analysing data.

Transition Cost / Performance Erosion

This risk exists if the Authority decides to make changes in the products in which it is invested solely to achieve the net zero goal. It is unlikely that this will be the case. For example, in the case of the Emerging Market Equity allocation a reduction in carbon metrics has occurred as a result of the restructuring of the China allocation which was done in order to improve the overall management of the Fund and make achieving its performance objective more likely.

Whenever changes are made to the way in which funds are managed some form of transition cost is incurred in the buying and selling of assets. The nature and scale of the change is what determines the scale of the cost. The key issue for SYPA will be to minimise the number of times changes need to be made. The ability to achieve this is constrained by the Authority's success in achieving agreement to a direction of travel with other investors in relevant products and is therefore linked to the previous risk.

In terms of performance, the Authority needs at all times to ensure that the construction of its investment portfolio is designed to achieve the actuarial return target. This is always based on assumptions and estimates and will always be subject to market events. Clearly the Authority would not make changes to its investment mandates which were designed specifically to erode performance and any changes need to be made in the context of the overall objective of being able to meet the Fund's liabilities when they become due, and the likelihood of success is a key element in each strategy review.

Success and Embedding of Process Changes

In order to deliver their own net zero goal Border to Coast have committed to changes in the investment process for the equity funds in which SYPA invests. These changes are intended to reduce emissions to achieve a 2050 target. However, it remains to be seen how these changes will interact with the overall approach to these portfolios of taking small "active bets". This risk will remain until there is evidence of the impact of the changes proposed by the Company and the Authority will need to focus on the impact of these changes as part of its overall oversight process.

Lack of Integration

The Authority's investment strategy has one overriding goal which is to ensure that the required returns are delivered to ensure pensions can be paid. Given that Climate Change is the largest systemic risk to the value of the Fund's assets (and hence the long-term achievement of return targets) it is

important that delivering the Net Zero Goal is regarded as a key part of the overall investment strategy rather than something separate which is overlaid on the strategy at a later stage, otherwise either one or both of the return objective or the Net Zero Goal will be compromised. This will be addressed in the scope of work commissioned to support the review of the investment strategy following the 2022 valuation.

Lack of Diversification

Achieving a net-zero portfolio will require a forward-looking assessment to maximise opportunities and reduce risks associated with a climate transition. Focus would have to be given to potential leaders of the climate transition within the lowest emitting sectors of the economy. This forward-looking view will introduce uncertainty and dependency on the company delivering their net-zero target. What is certain is that to achieve a net-zero portfolio by 2030, only a small number of companies in the MSCI World Index (which comprises the largest companies in developed markets) with 2030 net-zero targets will be investable. Currently, the number of companies with 2030, or near, net zero targets is 71, which makes up less than 5% of the total Index. This reduction in the size of the investible universe will significantly constrain the ability to build diversified portfolios. As a result, company specific risk, rather than market risk would become the primary risk factor in the portfolio due to a lack of diversification.

Diversification is the process of spreading investments across different asset classes, industries, and geographic regions to reduce the overall risk of an investment portfolio. The idea is that by holding a variety of investments, the poor performance of any one investment potentially can be offset by the better performance of another, leading to a more consistent and less volatile overall return. Diversification thus aims to include assets that are not highly correlated with one another.

Although diversification does not guarantee against loss, diversification is an important component in reaching long term investment goals, whilst minimising the risk of missing that goal.

Conclusion

The actions set out in this Action Plan will not, in themselves, be enough to achieve the 2030 goal. However, we must start to make progress and the specific steps outlined here will begin moving us towards the Goal. Progress has been made since the goal was agreed in engaging with Border to Coast and Robeco, in analysing a specific approach by asset class, engaging with third parties such as Abrdn and planning a climate solutions strategy and in taking the first steps to implement these plans. We will continue to implement the revised Investment Strategy which will increase our understanding and experience of investing in new asset classes that will be crucial to achieving our Net Zero ambitions. These building blocks are essential to enable proper governance and oversight as we continue along the road to net zero.

In these initial stages a stand-alone action plan like this is appropriate. However, in carrying out our next review of the investment strategy we must ensure that Net Zero becomes part of how we do investment rather than something separate which is overlaid on the strategy once it has been developed, and consequently this may be the last action plan of this sort.