Climate change progress for Nest's investments 2022/23

September 2023

nestpensions.org.uk

Data may be obtained from third parties, but these may not be error free and cannot be verified.

Contents

Executive summary

Nest Corporation as Trustee of the Nest Scheme believes it is important that Scheme members and other stakeholders have transparency around how we are considering climate-related risks and opportunities within the investments we make on behalf of our members. Here we share our progress in the 2022/23 financial year, which ran from 1 April 2022 to 31 March 2023. This report supplements the summary in our **Scheme annual report and accounts** for 2022/23 and is in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Governance

The Board maintains oversight of climate-related risks and opportunities as part of its responsibility for the Scheme's investment policy and strategy. The Board delegates some investment decisions to the investment committee. This includes the review and approval of the Scheme's climate change risk policy. Key performance indicators on climate-related risks and opportunities are provided to the investment committee biannually.

Strategy

We believe that climate change can affect the financial stability of companies and other assets in our portfolio, thereby limiting risk-adjusted returns on investments and potentially the pension pot value available to members at retirement. We consider both transition and physical risks resulting from climate change to be financially material and consider climate-related risks and opportunities over three time horizons: short (1–5 years), medium (6–10 years) and long term (10 or more years).

Over the next five years, we believe that some sectors of the global economy could see changes in their valuation because of climate-related risks. Over the long term, we believe that physical risks could begin to predominate if average global temperatures continue to rise. At the same time, the transition to a low-carbon economy brings climate-related investment opportunities, which we wish to access for our members.

In 2022 we commissioned Aon plc to help us test the performance of the Scheme's portfolio under different climate scenarios. Aon's analysis showed that in the short term (up to 5 years), the largest risks to the Scheme's investment funds will likely come from an orderly transition to a low-carbon economy. In an orderly transition, governments take action to tackle climate change through immediate and coordinated regulation. In the long term (more than 10 years), Aon's analysis finds that the Scheme's portfolio performs worst in a disorderly transition. This is driven primarily by increasing physical impacts of climate change.

Risk management

We identify climate-related risks through a range of tools and approaches including internal thematic research and regular reporting on key climate metrics across our portfolios. These risks include:

- Policy announcements on regulations to curb global warming happen faster than expected, meaning that investors and businesses are unprepared, or customers shun unsustainable businesses and products. Either of these would mean our portfolio becoming increasingly misaligned with net zero.
- We correctly identify the decarbonisation trajectory in our policies but these are not reflected in our investment approach due to failures of governance or implementation, either by our investment team or our external investment managers.
- The physical risks of climate change affect assets and companies in the Scheme's portfolio impairing their profitability.

Nest has established an investment risk committee which meets quarterly and sits alongside the Nest asset allocation and manager monitoring committees as part of the investment team's internal investment governance framework. To manage climate-related risk we have established controls

including transitioning our public market allocations into climate-aware funds and increasing our exposure to investments in line with the low-carbon economy, such as renewable energy infrastructure. We also address climate-related risks through engagement and stewardship as well as public policy work.

Metrics and targets

Our key reported metrics are financed carbon emissions. Measuring financed emissions is key to understanding our contribution to climate change, as well as understanding our exposure to climate-related risks across the Scheme's portfolios. We also seek information on the quality of emissions data defined as the proportion of assets for which data was reported, estimated or unavailable.

The disclosure of good quality metrics to assess climate-related risks and opportunities is a challenge for pension schemes. We obtain financed scope 1, 2, and 3 emissions of the funds in which the Scheme is invested directly from our investment managers. We have reported data where we were comfortable that the methodologies used for determining financed emissions were sufficiently robust and consistent. We have therefore not included sovereign debt, commodity futures, liquid assets, and private equity and credit in the data tables, due to the challenges of collecting robust and comparable data. These asset classes make up c. 13% of the portfolio.

This year we have also started reporting on portfolio alignment by measuring the percentage of holdings that have **Science Based Targets Initiative** (SBTi) approved decarbonisation targets. It is the simplest and most transparent portfolio alignment metric, but only the alignment of investments with validated targets is reported, which is currently a relatively small proportion of the total portfolio, and the speed at which coverage increases is dependent on the resources of SBTi. The approach also does not differentiate among companies that have identical targets but different distance to achieving them. It also does not apply to some asset classes like sovereign bonds or commodities.

Despite data challenges, we are using this information to set decarbonisation targets for all of the Scheme's mandates. Analysing this data also gives us a better understanding of existing gaps and will allow us to more effectively work with our external investment managers to improve disclosures over time.

We aim to align the Scheme's whole investment portfolio with limiting global warming to 1.5C above pre-industrial levels by reaching net-zero carbon emissions – across scopes 1 to 3 – by 2050 or sooner.

To set a course for this ambition, we have set a 2025 target of a 30% reduction in scope 1 and scope 2 emissions intensity in our listed equity and corporate bonds from a 2019 baseline. We have set a 2030 emissions reduction target of 50% on the same basis. We work closely with our investment managers to translate our high-level targets into objectives. We develop these targets on a fair share basis, reflecting the different starting point for different regions and asset classes. We are progressing well against these targets and have achieved a 33% reduction across the portfolios that are currently in scope.

We are also mindful of the strategies available to us to reduce financed emissions, and the real-world impacts of doing this. For example, it is possible to reduce financed emissions through large-scale exclusions of carbon-intensive assets. However, such an approach is unlikely to have a significant impact on real-world emissions. In turn, it is unlikely to significantly contribute to meeting the goals of the Paris Agreement. By engaging with investee companies and encouraging them to decarbonise, we have a better chance of achieving real-world emissions reductions. We have therefore set a target to engage with companies responsible for at least 70% of the Scheme's financed scope 1 and scope 2 carbon emissions by 2025.

Introduction

The warming of the planet caused by greenhouse gas (GHG) emissions poses serious risks to the global economy and will have an impact across many economic sectors in which the Nest Scheme is invested. The majority of Scheme members will be invested in the Scheme for decades. Over this time horizon, climate-related risks and opportunities are likely to increase and have an impact on Scheme members' pension pots. As the Trustee of the Scheme, Nest Corporation sees consideration of climate change as a key part of our fiduciary duty to members. For this reason, we have embedded the consideration of climate-related risks and opportunities into our investment strategy.

It is important to the Trustee that Scheme members and other stakeholders have transparency around how we are considering climate-related risks and opportunities. To support this, we are reporting our progress against our **climate change risk policy** on an annual basis against the recommendations of the **Task Force on Climate-related Financial Disclosures (TCFD)** framework.

The TCFD was set up by the Financial Stability Board to improve and increase reporting of climate-related financial information. It recommends that all organisations, including those in the financial sector, provide climate-related financial disclosures in their mainstream annual report and accounts. In line with these recommendations, this accompanying document to the **Scheme annual report and accounts** is structured into four sections corresponding to the four thematic areas of the TCFD framework:

In Section 1, 'Governance', we describe the governance of climate-related risks and opportunities, including the oversight by the Trustee and the day-to-day management of these risks.

Section 2, 'Strategy', covers the climate-related risks and opportunities that we have identified over different time horizons and the impact they could have on the Scheme.

In Section 3, 'Risk management', we discuss how we identify, assess, and manage climate-related risks and opportunities.

Section 4, 'Metrics and targets', discloses the metrics and targets we use to manage and monitor climate-related risks and opportunities across the Scheme's portfolios.

This report covers our activities to address and manage climate-related risks and opportunities in our investment strategy during the 2022/23 financial year, which ran from 1 April 2022 to 31 March 2023. Further information on our broader responsible investment activities can be found in our **2022/23 responsible investment report** and on **our website**. Further information on our operational carbon footprint and environmental activities can be found in the **Corporation annual report and accounts** for 2022/23.

Section 1

Governance

The Board's oversight of relevant climate-related risks and opportunities

Nest, the National Employment Savings Trust, was established by the UK government in 2010 to support the introduction of auto enrolment into workplace pensions. The Nest Scheme is run as a master trust by Nest Corporation with the purpose of providing pensions and other benefits to Scheme members.

The Scheme has one Trustee: Nest Corporation. The Trustee is a public corporation. The Board has responsibility for the overall direction of the Trustee. The Board can have between 9 and 15 members, including the Chair. They are the directors of the Trustee.

The Board maintains oversight of climate-related risks and opportunities as part of its remit of having responsibility and oversight for the Scheme's investment policy and strategy. Our duty to serve every employer with auto enrolment duties, and their workers, is written into the **Nest Order and Rules** as a public service obligation, like the one the BBC or NHS has. The Nest Order gives the Board the sole power to invest the Scheme's assets. In addition, the Nest Rules confirm that the composition of the underlying investments attributed to each investment fund shall be determined by the Board. The Board cannot delegate the setting of the investment strategy.

The Board delegates some investment decisions to the investment committee, which currently has five members. The majority of the investment committee members are members of the Board. There are also two additional subject matter experts on the committee who are not Board members. The Board retains the powers relating to, and responsibility for approval of:

- Our investment objectives, beliefs and related investment strategy, and any proposed changes.
- The approval of the **Statement of investment principles** (SIP).
- Any additions, changes to objectives, or deletions to fund choices.
- Any required changes to the body of the investment management agreement with Nest Invest Ltd (see page 9).
- Our statutory reporting on responsible investment, including the annual **Statement of investment principles implementation statement** and this report on our climate change progress.

These continued responsibilities and approvals give the Board confidence that its statutory obligations and fiduciary duties are being met.

The Board has delegated responsibility for review of the above matters to the investment committee, and, where relevant, the committee gives its recommendation to the Board.

In addition, the investment committee has responsibility for:

- Approval of our **climate change risk policy**.
- Approval of our annual **responsible investment report**.
- Oversight and approval of our **responsible investment objectives and policies**, including our voting and engagement policy and our stewardship conflicts of interest policy.
- Annual approval of our investment risk appetite statement.
- Approval of strategic asset allocation and changes to the investable universe.
- Review and oversight of the implementation of our agreed investment strategy, activity, costs and performance.

Time and resources

The investment committee assesses and manages climate-related risks and opportunities supported by quarterly updates and information provided by the Chief Investment Officer. The committee is also provided with detailed papers on all the above matters as required throughout the year. Key

performance indicators on climate-related risks and opportunities are provided to the investment committee biannually.

During 2022/23 the investment committee met seven times. In addition to the responsibilities set out above, the committee's work during the year included but was not limited to:

- Approving updates to our **climate change risk policy**.
- Maintaining oversight of the investment performance and risk management of the Scheme's default investment strategy and the other fund choices available to members, including approving changes in asset allocations as required.
- The triennial review of our voting policy which included updated guidance on Say-on-Climate votes.

The Board also receives a regular report from the chair of the investment committee. This includes key updates on the management of climate-related risks and opportunities, where relevant. The Board undertakes periodic training in relation to Scheme governance and Board members' knowledge and understanding. The Board last received training on climate-related risks and opportunities in early 2022.

The allocation of time and resources is in line with the Board's delegations and approvals. It also reflects the Board's broader remit and the investment committee's specific role to consider, make decisions on and provide oversight and challenge of all investment issues. These allocations are kept under review in light of our improving understanding of the types, likelihood and impact of climate-related risks and opportunities, including the understanding we have developed through the activities documented in this report.

Oversight of those undertaking or assisting with governance of relevant climate-related risks and opportunities

Nest Invest Ltd, a wholly owned subsidiary of Nest Corporation, was authorised by the Financial Conduct Authority (FCA) as an occupational pension scheme firm in January 2020.

Nest Invest's relationship with Nest Corporation is governed by an investment management agreement (IMA) under which Nest Invest undertakes to provide investment management and other investment services.

Under the schedules to the IMA, Nest Invest undertakes to:

- Provide advice, recommendations, and assistance to the investment committee in relation to environmental, social, and governance (ESG) issues, responsible investment, and active ownership. This includes advice, recommendations, and assistance around the management of climate-related risks and opportunities.
- Comply with and seek to give effect to our policies on responsible investment and other similar policies including our climate change risk policy.
- Focus on the objective of maintaining the Trustee's reputation with stakeholders and the media as a high-quality responsible investor.

The investment committee, through its terms of reference, is responsible for reviewing whether Nest Invest is taking adequate steps to identify, assess, and manage climate-related risks and opportunities and is given clear direction about how and when it reports to the Board on Nest Invest's work.

Reporting and communications

As noted above, the Chief Investment Officer provides updates at least quarterly to the investment committee on the responsible investment activities carried out on the committee's behalf, including in relation to climate change.

In 2022/23 the Chief Investment Officer's updates included information about:

- Our progress in developing and monitoring the effectiveness of existing investment fund strategies that take account of climate-related risks and align these strategies with the Paris Agreement's target of limiting global warming to 1.5C above the average temperatures recorded before modern industrialisation.

- Our proxy voting activities and company engagement, including how we have engaged with certain sectors on climate change.
- Our responses to public consultations on climate change included responses to the ISSB consultation on sustainability disclosures, Transition Plan Taskforce consultation disclosure framework, the BEIS green finance strategy, Transition Plan Taskforce consultation, and IIGCC Climate Solutions Guidance on Listed Equity and Corporate Fixed Income.
- New investor initiatives and key activities undertaken with initiatives that we have previously joined.

Informing the investment committee about responsible investment-related activity undertaken during the quarter is a standing agenda item for the committee's meetings. The committee members are given opportunities to check their understanding of this information and, where appropriate, critically challenge the information. Investment committee members have in the past year questioned:

- The performance of some investment managers.
- The need for longer-term decarbonisation glidepaths for the portfolio.
- Increasing the allocation to climate solutions.
- The quality of climate metrics data received from investment managers.

In response to the investment committee's feedback, management information provided biannually includes:

- Scope 1, 2, and 3 emissions intensities and decarbonisation trajectory for key mandates, compared to our targets for them. For information on these scopes, see Section 4.
- Progress on our chosen portfolio alignment metric and investment in climate solutions.
- Progress of investment managers against the climate objectives we have set with them.
- Recent company engagement.
- Updates on consultation responses and other policy engagement.

Together, the processes described above enable the investment committee – and ultimately the Board – to check that the Scheme's investment strategy adequately prioritises climate-related risks and opportunities.

In line with our internal investment governance framework, information about the Scheme's assets relevant to the identification, assessment and management of climate-related risks and opportunities is shared between persons tasked with these responsibilities. There are clear lines of communication between our responsible investment team and the manager monitoring team as well as with Nest Invest's investment risk and asset allocation committees, all of which meet quarterly.

Training

FCA-certified staff of Nest Invest must complete a minimum of 30 hours of continuing professional development annually. All Nest Invest staff are encouraged to aim for this level of professional development to ensure continued competency in their role. Where appropriate this includes training on climate change issues. The members of our responsible investment team also provide scheduled and on-demand updates on climate-related risks and opportunities to the various committees on which they sit. They also do this quarterly for all staff of Nest Invest as well as annually during Nest's Responsible Investment month during which responsible investment team members and expert guest speakers present responsible investment and climate change related updates.

Section 2

Strategy

Climate-related risks have the potential to affect the financial stability of companies and other assets in our portfolio, thereby limiting risk-adjusted returns on the Scheme's investments and potentially the pension pot value available to Scheme members at retirement. If we do not take these risks into account in the investment strategy, our goal to help members enjoy a bigger pension in a better world could be adversely impacted. So too could our reputation as a good-quality pension provider among employers choosing workplace pension schemes for their workers.

In addition, if members have less trust and confidence in our investment approach, they might choose to opt out of pension saving altogether. We are mindful of the broader impact, beyond the effect on their retirement saving, that climate change may have on our members. Changes in the climatic system and the economic cost of adapting to a warmer planet will shape our members' lives in the coming years. The transition to a low-carbon economy may also have disruptive effects on workers and communities. We also consider these in developing our strategy.

Identifying climate-related risks and opportunities

We consider both transition and physical risks resulting from climate change to be financially material.

Transition risks

Risks anticipated to arise from the transition to a low-carbon economy. For example, the introduction of new carbon pricing regulations by governments could increase companies' costs of production.

Physical risks

Acute risks of more frequent or severe weather events, such as flooding or droughts, as well as chronic risks of permanent environmental change, such as rising sea levels.

The financial risks of climate change do not stem solely from environmental considerations.

Climate change will also have socioeconomic impacts which are themselves financially material risks for the Scheme. For example, the transition to a low-carbon economy will lead to the decline of highly carbon-intensive industries, affecting jobs and local communities.

Physical risks may directly impact some of the Scheme's assets, for example, by reducing the ability of some of the companies in which the Scheme is invested to continue to deliver value in all their business activities. Physical risks can also create wider socioeconomic problems like food insecurity.

At the same time, the transition to a low-carbon economy brings climate-related investment opportunities, which we wish to access for our members. We monitor and assess specific opportunities as they emerge.

Short-, medium-, and long-term risks and opportunities

For the purposes of identifying the climate-related risks and opportunities which we believe will have an effect on the Scheme's investment strategy, we consider three time horizons:

- **Short term:** 1 to 5 years
- **Medium term:** 6 to 10 years
- **Long term:** 10 years or more

We have defined these time horizons based on how we expect climate-related risks will vary in type and intensity over time.

We expect transition risks to be greatest over the short and medium term and highly dependent on the timing of the transition to a low-carbon economy. In the short term, some sectors of the global economy could see changes in their valuation because of climate-related risks. For example, highly carbon-intensive companies may face withdrawal of financing for projects. We have identified short- to medium-term opportunities in renewable energy generation and green technology, where the cost of production has continued to fall, making these products and services increasingly attractive to consumers.

In the medium term, if the 1.5C target is to be met, the Intergovernmental Panel on Climate Change (IPCC) has highlighted in its **special report on global warming** that carbon emissions will need to be reduced, by around 45% from 2010 levels, by 2030 or sooner. We believe opportunities will be greater in decarbonising initiatives than in negative emissions technologies. We are also engaging in stewardship to encourage the companies in which the Scheme is invested to explore climate-related opportunities.

As we progress through this decade with a persisting gap between policies currently in place and those needed to limit warming to well below 2C, we believe abrupt changes in response to climate-related events are now more likely than a gradual transition to 1.5C. The Principles for Responsible Investment (PRI) work on **The inevitable policy response** project assumes several sudden and significant policy shifts in key countries by 2025. If, however, the low-carbon transition is delayed further, there is a prospect that transition risks will continue to be very significant into the long term.

Over the long term, we expect physical risks associated with climate change to increase and begin to predominate as average global temperatures rise, extreme weather events increase in frequency and severity and wider disruption to economic activity takes place. In the long term we also believe negative emissions technologies such as carbon capture and storage will need to be developed to counteract residual emissions and ensure a net-zero global economy. These could present investment opportunities. We are currently engaging with investee companies to understand how they are transitioning to a low-carbon future, including what research and development they are conducting around low-carbon manufacturing processes.

How we have managed climate-related risks and opportunities

In managing climate-related risks and opportunities, we consider:

- **Financed emissions:** Monitoring and reducing the greenhouse gas emissions associated with the Scheme's overall portfolio.
- **Exposure to climate solutions:** Direct investments in critical green infrastructure such as renewable energy, as well as the proportion of revenues that our investee companies derive from 'green' products.
- **Decarbonisation:** How we can decarbonise the portfolio to meet our net-zero target.
- **Supporting a low-carbon economy:** The role we can play in contributing to a smooth transition to a low-carbon economy, which will minimise both transition and physical risks as well as broader societal outcomes such as the impact on workers and communities.

Our climate change risk policy covers four distinct areas of the investment process:

Asset allocation

Manager selection and monitoring

Stewardship

Public policy

We review our asset allocation and manager selection and monitoring below. Stewardship and public policy are covered on pages 22 to 233.

Asset allocation

We have publicly stated our aim to align with the goals of the Paris Agreement of limiting the increase in global temperatures to 1.5C above pre-industrial levels, and accordingly reaching net-zero financed carbon emissions across the Scheme's portfolio by 2050 or earlier. We have also set an interim goal of reducing the intensity of funded emissions in our public equity and fixed income portfolios by 30% by 2025, from a 2019 baseline.

We are mindful that methodologies are still being developed to assess portfolio alignment with specified temperature goals across asset classes. We are actively involved in financial industry forums for developing frameworks for portfolio temperature alignment, including through the Institutional Investors Group on Climate Change's **net zero investment framework**.

In addition, we have been working with our external investment managers to develop new strategies aligned with our net-zero target:

- We have transitioned our portfolios to become climate-aware. We started with equities and fixed income. This allows us to manage climate-related risks and opportunities by applying tilts to reduce our exposure to fossil fuels and increase our exposure to companies that are contributing positively to the low-carbon transition. As part of this transition, we are working with investment managers to set decarbonisation targets for each portfolio based on scientific pathways to reach net zero. You can read more about this target-setting work in Section 4, Metrics and targets.
- We will continue to explore practices for identifying net-zero emissions options in other asset classes. Again, this will allow us to reduce our exposure to fossil fuels and increase our exposure to companies that are contributing positively to the transition.
- We believe that engaging with investee companies and encouraging them to transition, we have a better chance of achieving real-world emissions reductions than simply exclude all carbon-intensive assets. It is possible to reduce financed emissions through large-scale exclusions of carbon-intensive assets. However, there are some business activities that we do not believe can be aligned with the goals of the Paris Agreement. These include thermal coal, oil sands and arctic drilling and exploration. Companies that who are heavily involved to these activities may face significant losses as a result of the transition to net zero. We divested from all companies with more than 20% of revenues from these activities at the end of 2020. By the end of 2023, that revenue threshold will decrease to 10% and we will continue to exclude from our investment portfolios:
  - All companies that make new developments in these activities, as we become aware of it.
  - All companies still involved in these activities in 2025 if they have not committed to a full, accountable phase-out by 2030 or sooner.
- We will continue to assess how the companies we invest in contribute to climate change and monitor their alignment with the goals of the Paris Agreement. Companies that we do not consider to be making progress towards the low-carbon transition, or in recognising how climate change will impact their businesses, may be excluded from our portfolios.
- We believe that investment in private markets continues to present opportunities to deliver returns for Scheme members while supporting companies and projects which are contributing to the low-carbon transition. We will seek to allocate more money to investing in climate solutions. During the last year, we started investing directly in private equity infrastructure including an allocation to renewable energy.
- We will continue to research the impact of climate change on asset-class risks and returns. In the future we may increase or decrease investments in certain asset classes or regions depending on how we believe they will perform in a low-carbon economy. You can read more about how we might determine this in the section on 'Identifying and addressing risks across our asset allocation' in our **responsible investment report**.

Resilience of the Scheme's investment strategy under different climate scenarios

In line with statutory guidance, we test the resilience of the Scheme's investment strategy under different climate scenarios every three years. In 2022 we commissioned Aon plc to help us test the performance of the Scheme's portfolio under different climate scenarios. There have been no material changes to the Scheme's investment strategy or the climate scenarios in the past year. We therefore believe that the analysis carried out by Aon continues to be up-to-date and relevant.

In addition to a base case, which projects that actions to reduce greenhouse gas emissions continue at the current pace, Aon, working in in partnership with the **Cambridge Institute for Sustainability Leadership**, has developed five transition scenarios. Each scenario makes a number of assumptions about variables including policy, technology, socio-demographic developments and transition timeframes. These assumptions are translated into impact 'shocks' on macroeconomic variables such as gross domestic product (GDP), interest rates and inflation, using a mixture of economic and econometric models, historical analysis and expert judgement. Finally, Aon calculates the valuation impact of changes in macroeconomic variables on key asset classes. While these scenarios capture the physical climate and transition effects, the scenario analysis doesn't currently capture extreme 'tipping points' in the climate system when critical thresholds are exceeded, as this goes beyond the current limitations of modelling capabilities.

Figure 1: Aon's climate scenarios

Base case
Action to reduce greenhouse gas (GHG) emissions continues at current pace, leading to global warming as priced into markets and our capital market assumptions

Abrupt transition
Action on climate change is delayed for five years, at which point extreme weather events occur more frequently and governments have to address GHG emissions

No transition
No further action is taken to reduce GHG emissions, leading to significant global warming

Orderly transition
Immediate and coordinated action to tackle climate change is taken using carbon taxes and environmental regulation

Disorderly transition
Limited action is taken and insufficient consideration is given to sustainable long-term policies to manage global warming effectively

Smooth transition
Rapid advancement of green technology and government action on climate change that achieves a smooth transition to a low-carbon economy

	Base case	No transition	Disorderly transition	Abrupt transition	Orderly transition	Smooth transition
Temperature rise by 2100	1.5C to 2.4C	4C or more	Less than 3C	1.5C to 2C	1.3C to 2C	Less than 1.5C
Reach net-zero by	2050	After 2050	After 2050	2050	2050	2045
Carbon price 2030	$80	$40	$65	$135	$100	$80

	Base case	No transition	Disorderly transition	Abrupt transition	Orderly transition	Smooth transition
Carbon price 2050	$140	$50	$340	$280	$215	$165
Introduction of environmental regulations	Fragmented	None	Late and aggressive	Aggressive	Coordinated	Highly coordinated

Source: Aon, 2022

Impact of these risks on our assets

The Scheme's relatively high allocation to equity makes the portfolio as a whole fairly sensitive to the timing and pace of the transition to a low-carbon economy.

Aon's analysis shows that in the short term (5 years or less), the largest risks to the Scheme's investment funds will likely come from an orderly transition to a low-carbon economy. In an orderly transition, governments take action with regulation to tackle climate change coming into force soon. As carbon taxes and environmental regulations take hold, companies that conduct highly carbon-intensive activities may need to make costly changes to their operations or even write off assets. For this reason, in the first years of an orderly transition equity performance is expected to be poor, and this is likely to have a pronounced negative impact on asset returns. Equity owners also rank behind all other investors in the case of bankruptcy. This means that equity holders are most exposed to the risks of longer-term earnings impairment of the firms in which they invest and are more likely to lose out if those firms fail.

However, the aggregate decline in equity performance in the orderly scenario is mitigated by the climate tilts we have applied to the Scheme's equity funds. So, while an orderly transition has higher risk, we have mitigated against some of this risk. Indeed, the only scenario in Aon's analysis that outperforms the base case in the short term is the smooth transition scenario. This scenario assumes rapid technological advancement and adoption of green technology, which significantly reduces the cost of transitioning.

In the medium term (6 to 10 years), the Scheme's assets are anticipated to grow from close to £30 billion to approximately £100 billion, based on current estimates. We expect to continue to have a high proportion of equity to debt in the Scheme's portfolio. This approach reflects the age skew towards younger workers across the Scheme's membership. At the same time, we anticipate increasing the proportion of private market assets, including infrastructure, in the Scheme's portfolio. Already we are starting to see the impact of an abrupt transition, which assumes that aggressive policies are introduced in the second half of this decade. According to Aon's analysis the Scheme's portfolio performs best over the medium term in the orderly transition scenario, where the early costs of transitioning are outweighed by later benefits, including lower physical risks, than in the base case.

In the long term (more than 10 years), Aon's analysis finds that the Scheme's portfolio performs worst in a disorderly transition. This is driven primarily by increasing physical impacts of climate change over time. However, the disorderly scenario assumes that actions to make the transition to a low-carbon economy are not only taken very late, but also that they must be very aggressive, because a number of physical impacts of climate change will already be locked in due to the delay. This makes for a very costly scenario. In contrast the orderly transition scenario continues to outperform the base case over the long term.

The table below shows the investment return and cumulative change in value of the Scheme's total portfolio under each of Aon's climate change scenarios at varying time horizons.

Table 1: Impact on expected investment returns

	Base case	Orderly transition	Abrupt transition	No transition	Smooth transition	Disorderly transition
Short term (3 years)						
Absolute return (% pa)	4.6%	0.2%	4.4%	4.6%	6.7%	4.6%
Change in value (£bn)	£ 21.1	£ 17.6	£20.9	£ 21.1	£ 23.5	£ 21.1
Change in value relative to base case (£bn)	£ 0	£ –3.5	£ –0.2	£ 0	£ 2.4	£ 0
Medium term (10 years)						
Absolute return (% pa)	4.6%	5.6%	3.6%	4.5%	5.6%	4.5%
Change in value (£bn)	£ 91.0	£ 105.6	£ 85.2	£ 90.0	£ 97.2	£ 90.0
Change in value relative to base case (£bn)	£ 0	£ 14.6	£ –5.8	£ –1.0	£ 6.2	£ –1.0
Long term (30 years)						
Absolute return (% pa)	4.6%	5.3%	4.4%	4.1%	5.4%	3.5%
Change in value (£bn)	£ 538.8	£ 628.2	£ 542.4	£ 488.7	£ 621.0	£ 467.5
Change in value relative to base case (£bn)	£ 0	£ 89.5	£ 3.7	£ –50.1	£ 82.3	£ –71.2

Source: Aon and Nest Corporation, 2022. Asset allocation as at 31 December 2021

Aon also modelled the impact on a set of representative members of the Scheme. The Scheme's default strategy, the Nest Retirement Date Funds, is comprised of a series of life styled target-date funds, which are invested based on how far away the members in the fund are from their expected retirement date. A 22-year-old member enrolled in the Scheme in 2021 would have their pension pot invested for about the first five years in the foundation phase, which aims to keep pace with inflation. For most of their time in the Scheme, their pot would be in the growth phase, where the maximum growth in assets is targeted with a goal of outperforming inflation. Then, 10 years before their expected retirement date, their pot is moved to the consolidation phase, where investments are progressively switched out of higher risk into lower risk investments. Aon's analysis shows that this younger member will be more exposed to climate-related risks due to their increased exposure to equities during the Nest Retirement Date Funds' growth phase. The findings are quite stark – over the long term, this member's pension pot could be worth £11,000 to £12,000 less if the transition to a low-carbon economy is disorderly, or no transition is made. On the upside, in an orderly or smooth transition, the member could be £6,000 better off compared to the base case scenario.

The Nest Post Retirement Date Fund, Nest Guided Retirement Fund and Nest Lower Risk Fund all have lower exposure to the physical and transition risks associated with climate change. This is a result of their high allocation to fixed-income assets. However, these fund choices still have some climate-related risks, and their overall risk profile means that we expect them to deliver lower long-term returns.

Manager selection and monitoring

Asset allocation and manager selection and monitoring are closely linked. The Scheme's total portfolio is made up of different asset classes and individual portfolios managed by external investment managers.

To keep the Scheme's whole portfolio in line with the goals of the Paris Agreement, we need to work towards aligning all of the underlying investment funds which are the building blocks of the portfolio.

We have taken action on our analysis of climate-related risks and opportunities by working with our investment managers to set specific climate change objectives, whether the assets they manage for the Scheme are in a segregated mandate (where the Scheme's assets are managed separately from other investors') or a pooled fund (where several investors' assets are pooled together).

We have formulated three key expectations for all investment managers to meet by 2023:

- **Reducing emissions:** We expect our investment managers to develop a strategy to align the portfolio they manage for Scheme members with the Paris Agreement's 1.5C global warming limit target. We have asked them to include analysis of how they could halve emissions by 2030.
- **Reporting:** We expect our investment managers to report on climate-related risks and opportunities in the portion of the Scheme's portfolio that they are managing, using the TCFD framework. This includes reporting on the portfolio's carbon footprint as well as climate change scenario analysis. We have asked for reporting on scope 1 and 2 carbon emissions, and scope 3 emissions where available.
- **Voting:** We expect our investment managers to exercise their voting rights and engagement resource to positively influence the companies in their portfolio to transition to a low-carbon economy both directly and by participating in the Climate Action 100+ initiative.

These expectations have become a requirement of our standard tender process for new mandates, and managers that cannot demonstrate their commitment to meeting these expectations will not be selected.

Additional asset manager-specific objectives include, but are not limited to:

- Extending their coal exclusion policy to be in line with the targets to fully phase out thermal coal generation in OECD countries[1] by 2030 and developing countries by 2040.
- Integrating the physical risks resulting from climate change into their country-level risk assessments.
- Providing regular updates on the share of green assets such as green bonds in their portfolio, as well as corporate issuers who have a verified science-based target.
- Working with companies and issuers to improve reporting of climate change metrics such as emissions data.
- Exploring how to set targets for reducing emissions in line with a trajectory to reach net zero.
- Exploring how to set targets for investing in green solutions.
- Further exploring scenario analysis and temperature stress-testing at the asset as well as the portfolio level.

We expect all incumbent investment managers to deliver on our expectations by the end of 2023.

We plan to review our managers' progress annually. If limited progress has been made in any individual portfolio by the end of 2023, we may withdraw our members' assets.

[1] The **Organisation for Economic Co-operation and Development** (OECD) is an intergovernmental economic organisation with 38 member countries.

Section 3

Risk management

Our responsible investment objectives explain that we seek to identify and manage ESG-related risks and opportunities across the Scheme's portfolio where we believe doing so leads to lower risk or enhanced returns.

We consider both climate-related transition risks and physical risks. Our immediate focus is on transition risks, as these have the greatest potential to affect returns in the short to medium term. They are also where we have the greatest ability to effect change – primarily through our stewardship activities, which we describe in more detail on pages 22-23.

We view our risk management processes through the lens of alignment with net zero. This means that we assess the risk to our investments in part by monitoring our progress in reducing our emissions intensity and, in the longer term, our total emissions.

Processes for identifying, assessing, and managing climate-related risks

Governance of climate-related risk management

Nest Invest has established an investment risk committee which meets quarterly and sits alongside the asset allocation committee, and manager monitoring committee as part of the investment team's internal investment governance framework.

The investment risk committee oversees investment risk management activities across the investment process – asset allocation, manager selection, implementation, and monitoring – and makes decisions on:

- The risk management process.
- Risk mitigation measures and resolutions.
- Proposals for changes to existing risk limits or targets, including the inclusion of new risk limits or controls.

The investment risk committee monitors risk management activities across the different teams within our investment risk governance structure to help ensure adequate checks and balances are embedded consistently.

Included in the investment risk committee's terms of reference are specific responsibility for reviewing and assessing relevant climate-related risks and ensuring that these risks are integrated across the investment management process.

Identification of climate-related risks

We identify climate-related risks, through a range of tools and approaches. These include:

- Internal thematic horizon scanning – most recently on green hydrogen deforestation, natural capital, and carbon offsets
- Regular reporting from external investment managers on key climate metrics including total portfolio emissions, fossil fuel reserves, top carbon emitters, the proportion of assets that have set net-zero targets and the proportion of assets under engagement.
- Climate change scenario analysis carried out at the Scheme-level, as well as at the portfolio-level by our external investment managers.
- Research and trends identified by our external investment managers, research procured or received from external data providers and engagement with a range of industry groups.
- Crowdsourcing across our investment team through a regular 'risks and opportunities radar' survey.
- Meetings convened with respect to our internal investment governance framework, including for example through the oversight of the investment risk committee.

Assessment and management of climate-related risks

We take a proportionate approach to the assessment and management of climate-related risks. We have used a traditional impact and severity approach consistent with our assessments of other risks, the materiality of the Scheme's exposure and the implications for investment strategies.

We have identified financial and strategic climate-related risks, over the short, medium, and long term. These include that:

- Policy announcements on regulations to curb global warming happen faster than expected. Examples of this might include the sudden introduction of a carbon tax or a sales ban on vehicles with petrol or diesel engines. Investors and businesses may be unprepared, or customers might shun unsustainable businesses and products. Either of these would mean our portfolio becoming increasingly misaligned with net zero.
- We correctly identify the decarbonisation trajectory in our policies, but these are not reflected in our investment approach due to failures of governance or implementation, either by our investment team or our external investment managers.
- The physical risks of climate change affect assets and companies in the Scheme's portfolio impairing their profitability.

Our assessment is that, without appropriate controls and mitigations, climate-related risks have the potential to be a critical risk to the Scheme. For this reason, we have established a number of processes to control and mitigate them. Our controls and mitigations include:

Ongoing

- Investing the Scheme's equity and public fixed-income allocations in climate-aware funds, allowing us to decrease exposure to those companies most likely to be financially impacted by policy changes and the transition to the low-carbon economy.
- Increasing the Scheme's exposure to investments in line with the low-carbon economy.
- Increasing the Scheme's investment in alternative asset classes, particularly in renewable energy, to take advantage of investment opportunities in the low-carbon transition.
- Excluding the most environmentally damaging business activities, particularly those like thermal coal, oil sands, and arctic drilling and exploration, which are likely to be phased out first in the low-carbon transition.
- Voting and engaging with companies on climate change including participation in industry climate initiatives such as the Institutional Investors' Group on Climate Change and Climate Action 100+.
- Engaging with the highest risk companies in the economy to encourage them to transition towards the low-carbon economy and net-zero emissions. This engagement is covered in more detail in our **responsible investment report**.
- Setting short- and medium-term targets to help us measure and assess our progress towards our net-zero goals for the Scheme's portfolio. These are covered in Section 4.

Quarterly

- Having the investment committee review climate-related risks and the controls and mitigations in our investment risk register.
- Reviewing all investment exclusions against current company revenues where we screen out investments based on a percentage of revenues coming from thermal coal, oil sands, and arctic drilling and exploration.

Semi-annually

- Having the investment committee review our progress on climate change risk metrics and targets.
- Reviewing investment managers' performance against their specific climate change objectives and benchmarks to progress the mandates they manage for the Scheme in line with reaching net-zero targets in the medium and long term. Where progress is poor, monitoring is stepped up and they are placed on a watchlist, with next steps discussed at manager monitoring committee meetings.

Annually

› Having the investment committee review our climate change road map. This sets out our approach to manage climate change risk across the Scheme's portfolio through asset allocation, exclusions and, where necessary and after voting and engagement, divestment from companies ill- prepared for the transition to a low-carbon economy. All changes are clearly communicated to our external investment managers.

Our assessment of climate-related risks

Collectively, these controls lower the likelihood of climate-related risks causing the Scheme's investments to fail to meet our performance objectives from very likely to unlikely. The mitigating actions lower the impact of climate-related risks to the Scheme's investments from severe to moderate.

Integrating processes into overall risk management

We have incorporated climate-related risks into our existing risk management framework and enterprise risk register utilising the same process for identifying, assessing, and managing climate-related risks as for other financial and strategic risks.

Climate-related risks could have both a financial and strategic impact on the Scheme. This is captured under one of the principal risks in our risk management framework – the risk that our investments fail to perform to targets or that stakeholders, in particular members, could lose confidence in our investment approach. In other words, we do not view climate change as a new risk category within our risk management framework. Instead, climate-related risks are mapped into our existing risk categories.

The principal risks are discussed and monitored by Nest Corporation's executive committee.

By integrating climate-related risks into our overall risk management framework, we seek to ensure that all relevant functions, departments, and experts are involved in the integration and ongoing management of these risks. Our risk framework is designed to ensure that a robust and consistent approach to risk management is applied to drive improvements in our risk management in line with our risk appetite – the level of risk that we are prepared to accept while pursuing our strategic priorities.

The framework also ensures there is both individual and collective accountability for risk management, risk oversight and risk assurance. We use the industry best-practice three lines of defence model:

1. The people doing the job – those who own day-to-day controls and processes to manage risks.
2. The control function – those providing assurance to senior management that processes and controls are operating properly.
3. Internal and external audit teams – independent, specialist auditors who provide in-depth analysis to the board.

Stewardship

We actively employ stewardship as a mechanism to manage climate-related risks, both to reduce the impact on the Scheme of abrupt policy responses leading to a disorderly transition, or the likelihood of a shock to the financial system from catastrophic climate change. We believe that all companies have a role to play in the low-carbon transition. They can do this through:

› **Managing direct emissions** generated by their operations.

› **Managing indirect emissions**, for example, the emissions generated through their supply chains, financing decisions and public policy and lobbying activities.

Stewardship is one of the four core pillars in our climate change risk policy:

We will continue to make climate change a focus of our stewardship strategy. We believe that stewardship is one of the most powerful tools investors can use to influence companies to change to low-carbon approaches. It also provides a means for protecting our members' pension pots. Where engagement fails, we will divest.

We have committed to the following:

- **Engagement:** We engage with companies on how they are transitioning to meet the goals of the Paris Agreement. We do this through direct engagement as an investor, and through coalitions such as Climate Action 100+. Our investment managers also engage with companies on our behalf and report quarterly on progress.
- **Disclosures and reporting:** We support all reasonable shareholder resolutions that call on companies to disclose more information on how they manage climate-related risks and opportunities. We vote against management where companies do not make adequate disclosures on climate-related risks. This year we expanded our guidance for Say-on-Climate resolutions in our **UK voting policy** to set clear expectations of the elements we expect to see companies disclose in their climate transition plans. Where companies' transition plans do not meet our expectations, we will vote against the Chair of the sustainability committee, Chair of the audit committee or the Chair of the board.
- **Milestones:** We review our voting and engagement standards on climate change annually, and we set time-bound milestones in our stewardship activity on which we expect the company to deliver.
- **Divestment:** Where engagement is unsuccessful and we consider a company to be progressing insufficiently or too slowly towards alignment with the goals of the Paris Agreement, we will consider divesting.

Our engagement activities are described in more detail in our annual **responsible investment report**.

Public policy

A second core commitment in our climate change risk policy is the related tool of public policy engagement:

We will continue to contribute actively to the public discourse on climate change risks and opportunities as one of the UK's largest pension schemes by membership. This includes addressing how climate change will affect the pensions industry and the global economy.

We aim to use our influence as one of the UK's largest defined contribution (DC) workplace pension schemes to improve disclosures on climate-related risks and opportunities in line with the TCFD's recommendations.

We continue to exchange views and work with our peers in the financial sector on climate change issues, both directly and through industry groups such as the Institutional Investors Group on Climate Change and the UK Sustainable Investment and Finance Association.

We also aim to support better stewardship more broadly through our active participation in the Occupational Pensions Stewardship Council, of which Nest Corporation is a founder member.

Section 4

Metrics and targets

The data reported in the metrics and targets section has been obtained from the investment managers of each portfolio. The draft report was shared with the investment managers for verification prior to publication. Nest Corporation assume no responsibility for the accuracy of the data.

Our chosen metrics

Absolute financed emissions and emissions intensity metrics

Our key reported metrics are financed carbon emissions, which are the emissions associated with our investments. Measuring financed emissions is key to understanding our contribution to climate change, as well as understanding our exposure to climate-related risks across the Scheme's portfolios. We also use this data as a starting point for setting mandate-level decarbonisation targets that are in line with our long-term goal of net-zero emissions by 2050 or sooner. These will be regularly reviewed and ramped up over time as net-zero pathways for different asset classes become clearer.

We report on financed scope 1, 2, and 3 greenhouse gas (GHG) emissions in tonnes of carbon dioxide equivalent (tCO_2e) emissions – that is, absolute emissions – across our building block funds. Absolute financed emissions are a function of the total emissions of the assets in our portfolio, adjusted for the share that Nest holds in each asset. This means that as the Scheme's total assets under management continue to grow and we put more money into each asset, total financed emissions will go up in the short term.

We also measure an emissions intensity metric by calculating the emissions per million pounds (tCO_2e /£m) invested or financed – the carbon footprint. Assessing emissions per million pounds invested helps us to better understand whether the Scheme's exposure to climate-related risks has changed by identifying whether the assets we are investing in are reducing their emissions.

Scope 1

Direct emissions from the reporting company's owned or controlled

Scope 2

Indirect emissions from the generation of purchased electricity, steam, heating and cooling that has been consumed by the reporting company.

Scope 3

All other indirect emissions that occur in the reporting company's value chain.

Source: **Greenhouse Gas Protocol**

Our methodology and its limitations

Wherever possible we have followed the GHG emissions accounting and reporting standard developed by the **Partnership for Carbon Accounting Financials** (PCAF) when calculating the emissions attributed to the Scheme's investments.[2] This means calculating our share of the emissions of the financed asset using a ratio between the amount we have invested in the asset (such as the market value for equity investments and the book value for debt investments) and the value of the financed asset (for listed assets this is enterprise value including cash, or EVIC).

[2] carbonaccountingfinancials.com/files/downloads/PCAF-Global-GHG-Standard.pdf

This attribution factor is not suitable for all asset classes. Governments for example do not have an enterprise value. Our emerging market debt manager uses consumption-based emissions to attribute emissions from sovereign debt holdings, which takes into account emissions resulting from the final use of goods and services in a national economy, including imported emissions. Another approach is to only measure emissions from goods and services produced within the country. While measuring consumption emissions gives a more holistic assessment of a government's role as a regulator, it can lead to double counting as emissions are attributed both to the sovereign as well as the companies operating in the economy, in which we may have investments in other parts of the portfolio. It is also difficult to categorise sovereign emissions as scopes 1, 2, or 3. We have therefore chosen not to include the sovereign debt emissions in the table.

In private markets (private credit, private equity, and private infrastructure equity), there are few data providers that are able to estimate emissions, so where data is not reported directly there can be significant gaps in reporting. It can also be challenging to obtain EVIC data for private issuers. As a result, some of our managers instead report on Weighted Average Carbon Intensity (WACI), which uses revenues as an attribution factor, as this data point is more readily available. This methodology gives slightly different emissions figures to the metrics using EVIC. As a result, we have not included portfolios in the data tables where we were only able to obtain WACI data. We are working with our investment managers to improve the quality and comprehensiveness of data in this area.

We also do not report on commodity futures as there is no generally agreed upon standard for estimating the emissions associated with a commodity futures contract.

Portfolio alignment metric

Portfolio alignment metrics are forward-looking metrics that can provide an indication of the exposure of a scheme to climate-related transition risks and opportunities. Methodologies and approaches are still evolving. The percentage of portfolio with net zero targets is the simplest and most transparent approach and allows for a basic assessment of the extent to which a portfolio is committed to net zero. We are only including targets that have received third-party validation through the **Science Based Targets Initiative (SBTi)**[3] to ensure that targets are scientifically robust. The SBTi methodology only applies to companies, so we are not currently able to measure alignment for other asset classes such as sovereign debt and commodity futures. A key drawback of the binary target approach is that only the alignment of investments with validated targets is known, which is currently a relatively small proportion of the total portfolio. The speed at which coverage increases is dependent on the resources of SBTi. The approach also does not differentiate between companies that have identical targets, but a different distance to achieving them.

Neither financed emissions nor portfolio alignment metrics are perfect, but combining these metrics gives a more holistic picture of Nest's progress in meeting its net zero ambition.

Data quality metric

We are also reporting on data quality as an optional metric. Our investment managers receive carbon emissions information from a range of sources including directly from companies or assets, from external data providers such as MSCI or Trucost, or estimate them internally using proprietary modelling. We have asked our managers to disclose the proportion of assets for which data was reported, estimated or unavailable and have reported this as a data quality metric in the data tables below. Where data is unavailable, this is because the companies or projects in which the Scheme is invested are not reporting it, and estimates have not been produced by our investment managers or their contracted data providers to fill those gaps.

Where data has been estimated, these estimates have been made by our investment managers or contracted data providers using company energy consumption, output and revenue, combined with relevant emissions' factors for that energy source, product or sector, as well as other assumptions.

[3] The SBTi is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). Companies submit their targets to SBTi for validation based on sector-specific science-based criteria.

We have found that the proportion of reported emissions data from companies varies significantly across asset classes, but no portfolio has achieved 100% reported emissions even for Scope 1. Gaps in reporting are generally filled by estimates carried out by data providers using proprietary methodologies. This means that the emissions figures for the same company could be different depending on which data provider was used, which can be challenging when aggregating data across portfolios. This is a particular issue for Scope 3 where the majority of available data has been estimated by third-party data providers, **so this data should be treated with caution.**

Nest works closely with its managers and other industry groups to improve disclosure of high-quality data. For example, we participated in a working group with the Pensions and Lifetime Savings Association (PLSA), Association of British Insurers (ABI), the Investment Association and other asset owners and managers to develop a template to help pension schemes and investment managers to meet their reporting obligations and standardise disclosures across the industry. We also engage directly with investee companies on their own TCFD disclosures through the ClimateAction100+ collaborative investor initiative.

Default strategy

The below table shows the selected metrics for the Scheme's default strategy by asset class. The majority of members (currently over 98%) will be invested in Nest's default strategy, made up of around 50 tailored retirement date funds. Nest's flagship default strategy provides a fund for each year in which we expect a member could retire. The actual asset allocation will vary depending on the year of retirement. As at 31 March 2023, total assets under management were £29.6 bn, of which 95.4% was in the default strategy. Table 2 below aggregates the relevant metrics for each underlying portfolio within an asset class to give an overall metric. It does not include sovereign debt, commodity futures, liquid assets, and private equity and credit, due to the challenges of collecting robust and comparable data. These asset classes make up c. 13% of the portfolio. Figure 1 shows the asset allocation of the default strategy at 31 March 2022 and 31 March 2023.

Figure 1: Asset allocation in the default strategy

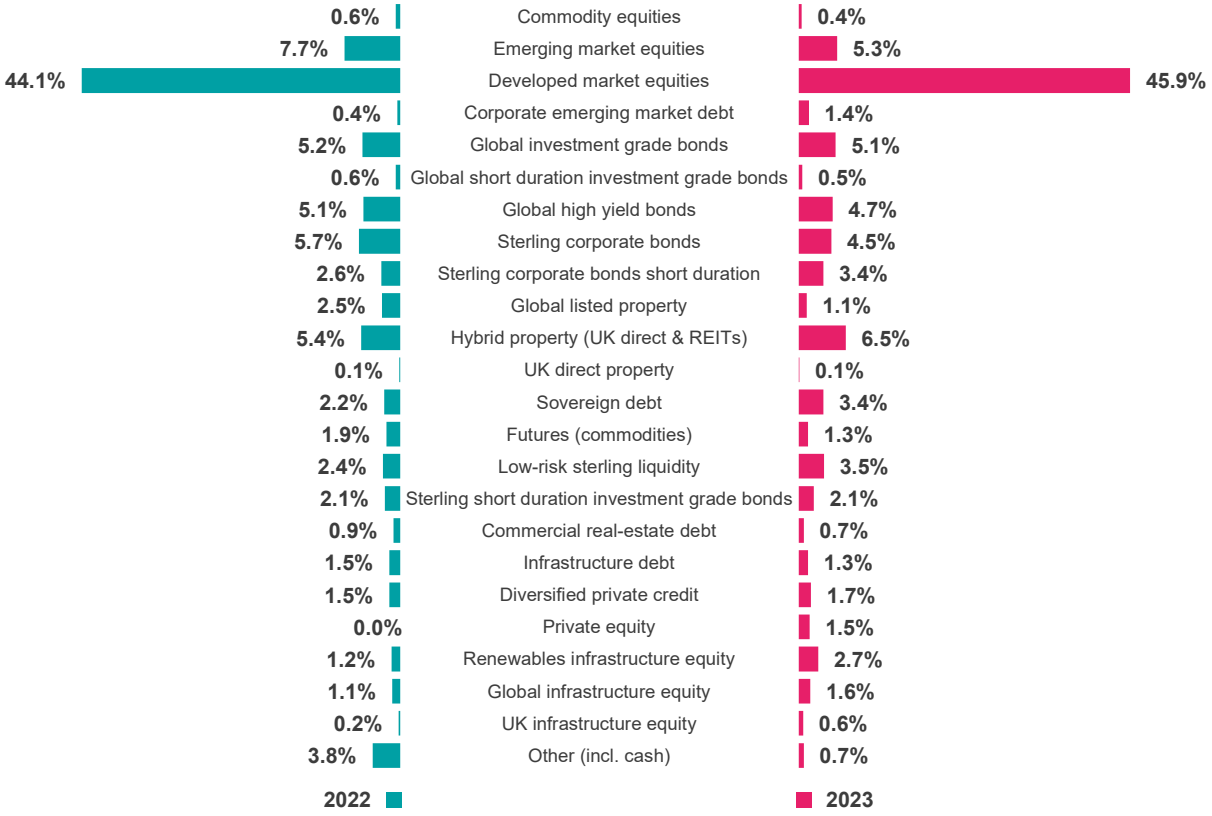

Table 2A: Default strategy metrics by asset class

Asset type	% of total portfolio	Absolute emissions (tCO2e)		Carbon footprint (tCO2e/£m)		Year-on-year change in carbon footprint (%)	
		Scope 1+2	Scope 3	Scope 1+2	Scope 3	Scope 1+2	Scope 3
Equities	51.6%	652,995	1,812,165	45.2	125.0	-18%	-5%
Corporate Bonds	19.6%	543,696	1,179,504	128.6	338.8	+52%	+3%
Property	7.6%	2,030	25,031	6.1	0.9	-24%	n/a
Infrastruc-ture Equity	4.9%	56,650	31,582	38.6	19.0	+15%	+63%
Total	**83.8%**	**1,255,372**	**3,048,281**	**60.8**	**157.5**	**+7%**	**-3[4]%**

Table 2B: Default strategy metrics by asset class

Asset type	Data quality – % of holdings for which						Portfolio alignment (% of assets with SBTi target)
	Scope 1+2 data			Scope 3 data			
	Reported	Estimated	Unavail-able	Reported	Estimated	Unavail-able	
Equities	51%	47%	1.5%	1%	96%	1%	31.6%
Corporate Bonds	58%	22%	20%	51%	16%	33%	10.1%
Property	12%	2%	85%	0%	0%	100%	5.2%
Infrastruct ure Equity	81%	19%	0%	61%	5%	33%	n/a
Total	**52.2%**	**35.6%**	**13.3%**	**16.6%**	**65.0%**	**18.5%**	**18.7%**

n/a: denotes not applicable

What the data shows

There are several reasons why the carbon footprint may vary from year to year, including:

- Changes in the carbon emissions reported by the underlying assets
- Changes in asset allocation, for example by allocating more money to less carbon-intensive holdings
- Changes in the methodology used to estimate emissions that are not directly reported by the assets
- Changes in data providers, which may lead to changes in estimated emissions where emissions are not reported
- Changes in the attribution factor. The carbon footprint metric based on EVIC is quite sensitive to market volatility and can lead to fluctuations in the metric that are not driven by changes in the actual emissions of the underlying asset. For example, if a company's market capitalisation falls while total debt remains the same, a bigger proportion of the company's emissions will be attributed to bondholders.

In the past year, changes in the carbon footprint seem to have been driven mainly by asset allocation decisions, although in some portfolios we have also observed some changes in the methodologies used to estimate emissions, and some changes in the carbon emissions of underlying holdings. We expect that in the next few years, the carbon footprint may still fluctuate as more companies report data directly and we become less reliant on data estimation. In the longer term, we expect that asset allocation and decarbonisation of the underlying assets will become the main drivers of the carbon footprint.

[4] Total does not include property as there was no Scope 3 data for 2022.

Below we give more detail on the changes in the carbon footprint from last year for each asset class:

- **Equities:** Almost 90% of our total equities allocation in the default strategy is in our climate-aware developed market equities fund. This fund has a lower carbon footprint than the other two equity funds in emerging market equities and commodity equities. Compared with March 2022, we invested more in the developed market fund and less in the emerging market equities fund. This led to a reduction in both the Scope 1+2 and Scope 3 carbon footprints. The carbon footprint of the developed market equities fund also decreased as a result of a reduction in the carbon intensities of the oil and gas, electricity and metals and mining sectors in the portfolio.
- **Corporate bonds:** Our corporate bonds allocation includes investment grade, high yield and emerging market bonds. The increase in the carbon footprint in the bonds portfolio is primarily driven by a higher relative allocation to emerging market corporate bonds than in March 2022, which have a much higher carbon footprint than our other bonds portfolios. The increase in the carbon footprint of the emerging market corporate bonds largely reflects the improvement in data quality and coverage for the underlying holdings.
- **Property:** The overall property portfolio scope 1+2 carbon footprint decreased. 30% of this decrease was driven by the top 5 holdings. The decrease also reflects a slight change in allocation; the portfolio no longer holds two high emitting companies and increased its allocation to three others with lower emissions.
- **Infrastructure:** In 2022, we were only able to obtain Scope 3 data for our renewable infrastructure mandate, so the change in the Scope 3 carbon footprint is driven entirely by this mandate. This year, the investment manager carried out an internal audit and identified that a Scope 3 category had been missed out in previous reporting, but did not provide a restated figure for 2022. As a result, the 2023 carbon footprint was much higher than the 2022 number.
- **Total default fund strategy:** The year-on-year increase in the Scope 1+2 carbon footprint is almost entirely due to the increase in the carbon footprint of the corporate bond asset class for the reasons detailed above. However this overall increase was somewhat offset by the reduction in the carbon footprint of equities.

Fund choices

In addition to the default fund, we offer a number of other fund choices for our members and report on the relevant metrics in table 3:

- **Ethical Fund**: The Nest Ethical Fund is for people who want to invest in line with specific ethical or moral concerns, for example in areas such as human rights and fair trade. It doesn't just exclude companies that harm the world, its people, or the environment, it also proactively invests in organisations that make a positive contribution to society. The fund invests in a range of asset classes to manage risk appropriately at different stages of members' lives. It follows a dynamically managed, three-stage glide path which is similar to our flagship Nest Retirement Date Funds. We have chosen to display the ethical growth stage fund as most of our members will be in the growth phase fund for a long time. 60% of this fund is invested in equities, with the remainder in corporate bonds, property, renewable equity infrastructure and liquid assets
- **Sharia Fund**: The investments in this fund are screened by Islamic scholars to meet Sharia standards. Lifestyling and diversification at the asset allocation level are not currently possible for this fund as it invests entirely in a single asset class – equities.
- **Higher Risk Fund**: The Higher Risk Fund is for members who are more confident about taking investment risk in the expectation that their pot will grow faster. 70% of this fund is invested in equities, with a higher proportion in emerging market and commodity equities than the default fund.
- **Lower Growth Fund**: This fund is provided for members who are very cautious about investing and are prepared to accept their pot will not grow very much. The aim of the fund is to maintain the value of members' savings after all scheme charges over the long term. It may not keep up with the rising cost of living. All of this fund is invested in investment grade bonds.

You can read more about the asset allocation of our retirement date funds in our **quarterly investment report**. We are not reporting separately on Nest's post-retirement option, the Nest Guided Retirement Fund.

Table 3A: Metrics by fund choice

Fund choice	Absolute emissions (tCO2e)		Carbon footprint (tCO2e/£m)		Year-on-year change in carbon footprint (%)	
	Scope1+2	Scope 3	Scope 1+2	Scope 3	Scope 1+2	Scope 3
Ethical Fund	7,690	56,386	44.16	233.1	+10%	+21%
Sharia Fund	5,963	n/d	30.7	n/d	+13%	n/d
Higher Risk Fund	36,343	643,177	79.1	235.5	+15%	+11%
Lower Growth Fund	475	793	32.5	196.5	-7%[5]	-10%

Table 3B: Metrics by fund choice

Fund choice	Data quality – % of holdings for which****						Portfolio alignment (% of assets with SBTi target)
	Scope 1+2 data			Scope 3 data			
	Reported	Estimated	Unavail-able	Reported	Estimated	Unavail-able	
Ethical Fund	79%	0%	21%	7%	0%	93%	32.1%
Sharia Fund	n/d	n/d	n/d	n/d	n/d	n/d	16.0%
Higher Risk Fund	52%	34%	14%	8%	69%	23%	22.3%
Lower Growth Fund	35%	10%	55%	24%	3%	73%	4.2%

n/d: denotes no data

n/a: denotes not applicable for the asset class

What the data shows

- **Ethical fund:** The majority of the ethical fund is invested in ethical equities and corporate bond funds, with a small proportion in property and infrastructure assets. There's been an increase in the scope 3 carbon footprint in the equities fund primarily due to a change in the methodology used by the third-party data provider. While the provider previously estimated all data, it now includes some reported data. The investment manager also added utility SSE to the equity portfolio, which is now the most carbon-intensive holding but meets expectations on ambition, interim targets, strategy and disclosure around net zero. Some of the increase in the scope 3 carbon footprint was also due to the renewable equity infrastructure allocation due to the inclusion of the additional scope 3 emissions category outlined in the previous section. The increase in the Scope 1+2 carbon footprint was driven by the corporate bond portfolio where cement producers Holcim and CRH are the most carbon-intensive holdings, but are both under engagement on their net zero strategies and have SBTi-approved interim emissions targets.
- **Sharia fund:** As a result of being invested only in equities with a high proportion of technology companies, this fund has a low Scope 1+2 carbon footprint at 30.7 tonnes of CO2e per £million invested. The investment manager does not provide Scope 3 carbon data.
- **Higher risk fund:** The higher risk fund has a higher allocation to emerging market equities and high-yield corporate bonds than the default fund. Both of these sub-asset classes are relatively

[5] Lower Growth fund's Scope 1+2 carbon footprint for 2022 was rebased to 35tCO2e/£m

carbon-intensive. The fund's carbon footprint increased from last year primarily due to an increased allocation to the more carbon-intensive corporate bonds in emerging markets.

- **Lower growth fund:** The lower growth fund only invests in investment grade corporate bonds. There's been a decrease in the carbon footprint driven primarily by the reduction in carbon footprint in the investment grade bond allocation, which makes up 55% of the strategy.

Targets

We aim to align the Scheme's whole investment portfolio with limiting global warming to 1.5C above pre-industrial levels by reaching net-zero carbon emissions – across scopes 1 to 3 – by 2050 or sooner.

To set a course for this ambition, we have set a 2025 target of a 30% reduction in scope 1 and scope 2 emissions intensity in our listed equity and corporate bonds portfolios from a December 2019 baseline. We have set a 2030 emissions reduction target of 50% on the same basis. We have communicated these targets to our investment managers and reflected them in our governance, strategy and risk management processes. Twelve of the Scheme's current external investment managers[6], collectively managing almost 85% of the Scheme's assets, are signatories to the **Net Zero Asset Managers Initiative**. As part of this initiative, they have committed to work in partnership with asset-owner clients such as the Nest Scheme on setting goals for decarbonisation consistent with an ambition to reach net-zero emissions across all assets under management by 2050 at the latest. They have also committed to set at least one interim target for achieving net-zero emissions by 2050.

As a result of the challenges around data availability we have not yet set targets for alternative asset classes, although we are tracking emissions performance where possible and have set specific objectives for managers for all asset classes. We take account of our performance, as well as improving data quality and progress in the wider economy, including updates to decarbonisation pathways, when reviewing these targets. We will consider extending these targets to include scope 3 emissions and a wider range of asset classes in due course. Just under 70% of total assets in the default fund have specific portfolio-level decarbonisation targets for 2025. These are shown in table 4 below.

We are also mindful of the strategies available to us to reduce financed emissions, and the real-world impacts of doing this. For example, it is possible to reduce financed emissions through large-scale exclusions of carbon-intensive assets. However, such an approach is unlikely to have a significant impact on real-world emissions. In turn, it is unlikely to significantly contribute to meeting the goals of the Paris Agreement. By engaging with investee companies and encouraging them to decarbonise, we have a better chance of achieving real-world emissions reductions. We have therefore set a target to engage with companies responsible for at least 70% of the Scheme's financed scope 1 and scope 2 carbon emissions by 2025.

Progress to date

Table 4 sets out the decarbonisation targets for each relevant mandate and the progress to date. We work closely with our investment managers to translate our high-level targets into objectives. We develop these targets on a fair share basis, reflecting the different starting point for different regions and asset classes. As a result, our target for developed market equities is more ambitious than our overall portfolio target.

In aggregate, we have achieved a 33% reduction since 2019 in the carbon footprint for the equities and corporate bond portfolios in scope. These changes have been driven primarily through asset allocation decisions, tilts and exclusions in specific portfolios. For example, moving our entire developed market equity allocation into a climate-aware mandate in 2020 led to a 30.6% reduction in the scope 1 + 2 carbon footprint.

[6] As at 31 March 2023 these were Amundi (UK) Ltd, BlackRock Inc., BNP Paribas Asset Management, CBRE Investment Management, Columbia Threadneedle Investments, HSBC Global Asset Management, J.P. Morgan Asset Management (UK) Ltd, Legal & General Investment Management Ltd, Northern Trust Asset Management, Royal London Asset Management Ltd, Schroders plc and UBS Asset Management (UK) Ltd.

Table 4: Targets and progress across portfolios

Portfolio	Decarbonisation rate and baseline year	2023 target implied by decarbonisation rate[7]	2023 actual performance
Developed market equities	-7% per annum, 2019 baseline	-19.6%	-64%
Investment grade bonds[8]	-7% per annum, 2019 baseline	-19.6%	-52%
Investment grade bonds short duration[8]	-7% per annum, 2019 baseline	-19.6%	-61%
High-yield bonds	-7% per annum, 202 baseline	-13.5%	-33%

[7] The implied target is as at March 2023 assuming a 7% decrease per annum from a December 2019 baseline

[8] Target is based on WACI rather than EVIC. WACI normalises by revenues and is therefore often preferred by investment managers for comparing potential holdings and making investment decisions, while the EVIC is generally the preferred approach for assessing the emissions financed by investors.

Attestation

Pension schemes have the ability to influence the entities in which they invest, including to improve those entities' own climate-related financial disclosures. We welcome the introduction of mandatory reporting against the TCFD framework for large pension schemes as set out in the Pension Schemes Act 2021. This requirement aims to raise standards of reporting across the industry. We hope that in time the TCFD will become the global standard for climate-related disclosures.

Brendan McCafferty
Chair, Nest Corporation

21st September 2023

Glossary

absolute emissions
The total GHG emissions of an asset class or portfolio

asset
Something of economic value that an individual, an organisation, a corporation or a government owns, for example, a piece of property, a share in a company or a building or machinery.

asset class
A group of assets that have the same characteristics, for example, real estate, equities or bonds.

benchmark
A standard used to judge the investment performance of an asset or asset class. Stock and bond indices which track the average performance of a broad selection of assets are often used as benchmarks.

bonds
Loans, issued as tradeable securities, made between an investor and a borrower. Bonds are usually issued in the investment markets by corporations or governments.

carbon footprint
A measure of the emissions per million pounds (tCO2e /£m) invested or financed.

carbon offset
Compensating for emissions by funding an equivalent unit of carbon dioxide saving elsewhere.

carbon pricing
Attempts to capture the external and often indirect cost of CO2 emissions to society and shift this cost to the actual emitters based on their emissions. Carbon pricing forms the basis for regulatory instruments such as carbon taxes.

Climate Action 100+
Global investor initiative of more than 570 signatories with US $54 trillion assets under management. It engages with the 100 biggest emitters globally and more than 60 companies considered instrumental to the low-carbon transition.
climateaction100.org

climate-aware fund
A fund invested in equities and based on a market index, but with overweighting and underweighting of company shares in certain sectors based on the companies' exposure to climate-related opportunities (when overweighted) or risks (when underweighted).
The methodology for 'tilting' our developed and emerging markets equities climate-aware fund was developed by us in partnership with UBS Asset Management and Northern Trust Asset Management, our investment managers for developed and emerging markets equities respectively.

commodities
Raw materials, such as coffee, wheat, cotton, gold and oil, which can be bought and sold.

default fund
A pension fund set up for members into which they are automatically enrolled.
The Scheme's default investment strategy, the Nest Retirement Date Funds, are target-date funds, where the investment objectives follow a glide path based on how far away the member is from their expected retirement date, year by year.

divestment
When an investor sells assets. This can be based on poor performance, ethical or governance concerns or social or political goals.

environmental, social and governance factors
These are investment risks that investors consider when evaluating investments.
We believe that well-run organisations with sound ESG practices have a better chance of long-term success and profitability. This is set out among our investment beliefs.

equities
Shares in a company or other entity which can be bought or sold.

EVIC
Enterprise value including cash. The sum of the market capitalization of ordinary shares at fiscal year end, the market capitalization of preferred shares at fiscal year-end, and the book values of total debt and minorities' interests. No deductions of cash or cash equivalents are made to avoid the possibility of negative enterprise values.

financed emissions
Emissions that investors finance through their loans and investments.

green bond
A fixed-income instrument issued by companies or governments to raise money for environmental and renewable energy projects.

green finance strategy
Strategy put forward by the UK government in 2019 to support financing of companies developing sustainable, low-carbon technologies and increasing consideration of climate change and other environmental issues in the financial sector.
gov.uk/government/publications/green-finance-strategy

greenhouse gases (GHGs)
There are four GHGs that are linked to global warming: carbon dioxide (CO2), methane, nitrous oxide and fluorinated gases. Over three quarters of global GHGs are CO2.
The Greenhouse Gas Protocol, an international accounting tool, categorises GHG emissions into three groups or 'scopes':
- **Scope 1** covers direct emissions from the reporting company's owned or controlled sources.
- **Scope 2** covers indirect emissions from the generation of purchased electricity, steam, heating and cooling that has been consumed by the reporting company.
- **Scope 3** includes all other indirect emissions that occur in the reporting company's value chain.

ghgprotocol.org

Institutional Investors Group on Climate Change (IIGCC)
European membership body for institutional investor action on climate change. Its work focuses on corporate governance, investor practices and public policy. IIGCC runs the European secretariat for Climate Action 100+.
www.iigcc.org

Intergovernmental Panel on Climate Change (IPCC)
United Nations intergovernmental body for assessing the science of climate change. The IPCC's assessment reports supported the creation of the UNFCCC and the Paris Agreement.
ipcc.ch

International Energy Agency (IEA)
Autonomous intergovernmental organisation established in the framework of the OECD (Organisation for Economic Co-operation and Development). It provides analysis, data and energy policy advice to member states.

investment beliefs
A set of values used to guide day-to-day investment decisions and strategy. Our investment beliefs are set out in our 'Statement of investment principles' (SIP).
nestpensions.org.uk/schemeweb/nest/aboutnest/investment-approach/statement-of-investment-principles.html

investment committee
A group that oversees the overall investment strategy and approach of an organisation as well as the investment team. The Board delegates these powers to our investment committee, whose membership includes members of the Board and independent investment specialists.

investment manager
A third party that is responsible for implementing an investment strategy in an asset class or classes and for managing the portfolio of assets in which members' money is invested on their behalf.

investment return
The amount gained or lost on money invested in assets, usually expressed as a percentage. Annualised investment returns over several years help to demonstrate the longer-term performance of an investment.

investment risk
The probability, or likelihood of occurrence, of losses on an investment in assets, relative to the expected return on them.

investment strategy
The guidelines that lay out future investment goals and the rules and procedures to be used when making investment decisions. Investment strategy evolves in response to changes in the economy and investors' needs. We also prioritise members' needs when evolving our investment strategy.

market index
A hypothetical portfolio of investments used to judge the performance of types of assets or asset classes. An example is the FTSE 100 Index which calculates the value of shares in the 100 most highly capitalised companies on the London Stock Exchange. Some indices focus on particular sectors or geographic regions.

Net Zero Asset Managers Initiative
A global association of investment managers who are committed to achieving net zero greenhouse gas emissions by 2050 at the latest. As at May 2021, 87 investment managers with US $37 trillion in assets under management had signed on to the initiative.
netzeroassetmanagers.org

overweighting
When an investor purposefully increases holdings of a certain stock or group of stocks above the investor's normal target or above a designated benchmark.
In the case of our developed market equities climate-aware fund with UBS, we are overweighting companies who are having a positive impact on climate change relative to their peers – for example, investing more in renewable energy companies compared to pure fossil fuel companies.

Paris Agreement
The Paris Agreement was reached at COP21 in 2015, the 21st meeting of the decision-making body of the UNFCCC. Its central aim is to ensure global warming in the twenty-first century remains well below 2C above the average level recorded for the period 1850 to 1900 and to pursue efforts to limit global warming to 1.5C.

In total, 193 of 197 countries have ratified the agreement to date. Countries which have signed but not yet ratified the agreement as at 31 March 2022 are Eritrea, Iran, Libya and Yemen.
unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

Partnership for Carbon Accounting Financials (PCAF)
A global partnership of financial institutions that work together to develop and implement a harmonized approach to assess and disclose the greenhouse gas (GHG) emissions associated with their loans and investments.
carbonaccountingfinancials.com/

purchasing power parity
The rate at which the currency of one country would have to be converted into that of another country to buy the same amount of goods and services in that country.

science-based targets
Targets adopted by companies to reduce GHG emissions are considered science-based if they are in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement—to limit global warming to well-below 2°C above preindustrial levels and pursue efforts to limit warming to 1.5°C.

Task Force on Climate-related Financial Disclosures (TCFD)
Provides a framework for consistent climate-related financial risk disclosures for use by companies in communicating information to investors, lenders, insurers and other stakeholders.
fsb-tcfd.org

underweighting
When an investor purposefully reduces holdings of a certain asset or asset class in relation to the investor's normal target or a designated benchmark.

United Nations Framework Convention on Climate Change (UNFCC)

United Nations entity to address the threats of climate change. Adopted in 1992, it is the parent treaty to the 2015 Paris Agreement and the 1997 Kyoto Protocol.

unfccc.int

voting versus engagement

Most shares in publicly traded companies give their owners a right to vote on some of company decisions, including things such as whether to take over another company or approve the amount senior executives are paid. Voting usually takes place at each company's annual general meeting (AGM).

Engagement can be done by voting at AGMs or separately by engaging with companies directly or through investor groups. An individual or organisation with shareholder ownership has more opportunities for engagement.

WACI

Weighted Average Carbon Intensity. Measures a portfolio's emissions intensity by calculating the weighted average emissions of the portfolio normalised by revenues.

Nest Corporation
10 South Colonnade
Canary Wharf
London, E14 4PZ

nestpensions.org.uk