PARIS ALIGNED ASSET OWNERS

INITIAL TARGET DISCLOSURES

ASIA INVESTOR GROUP ON CLIMATE CHANGE

Ceres

Investor Group on Climate Change

IIGCC
The Institutional Investors Group on Climate Change

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Introduction

Paris Aligned Asset Owners is an international group of asset owners committed to supporting the goal of net zero greenhouse gas emissions by 2050 or sooner, in line with global efforts to limit temperature warming to 1.5^{0}C above pre-industrial levels.

The group was an outcome of the Paris Aligned Investment Initiative, which was established in May 2019 as a collaborative investor-led forum to support investors to align their portfolios and activities to the goals of the Paris Agreement.

The Paris Aligned Investment Initiative has a Steering Group of nine investors and is supported by four regional investor networks:

PAII Steering Group

Adam Matthews (Co-Chair)
Church of England Pensions Board

Claudia Kruse (Co-Chair)
APG Asset Management

Akaash Sachdeva
HESTA Superannuation

David Adkins
Lloyds Banking Group Pensions Trustee Limited

Dewi Dylander
PKA

Faith Ward
Brunel Pension Partnership

Liz Gordon
New York State Common Retirement Fund

Michael Marshall
Railpen

Peter Smith
TPT Retirement Solutions

PAII Investor Networks

AIGCC (Asia)

Ceres (North America)

IGCC (Australasia)

IIGCC (Europe)

To date, 57 asset owners have made a net zero commitment through the Paris Aligned Investment Initiative. This includes asset owners from Australia, Canada, Europe, New Zealand, The United States, and The United Kingdom, representing USD 3.3 trillion in AUM.

This document provides an overview of the targets set by Paris Aligned Asset Owners to date and will be updated to incorporate additional targets from asset owners as they are published.

In Autumn 2022, the Paris Aligned Investment Initiative published a more comprehensive progress report. The report details the actions asset owners have taken, and plan to take in the coming year, to contribute to the net zero transition.

Paris Aligned Asset Owner Net Zero Commitment

Paris Aligned Asset Owner signatories made a voluntary commitment to the following 10-point net zero commitment.

Commitment

As asset owners with millions of beneficiaries around the world, we reiterate our full support for the Paris Agreement and strongly urge governments to implement the actions that are needed to achieve the goals of the accord, with utmost urgency.

Recognising the need to address the risks that investors and their beneficiaries face from climate change, investors are taking action, but we acknowledge that there is an urgent need to accelerate the transition towards global net zero greenhouse gas emissions and do our part in helping deliver the goals of the Paris Agreement.

In this context, my institution commits to the following consistent with our fiduciary obligations:

1. Transitioning our investments to achieve net zero portfolio GHG emissions by 2050, or sooner
2. Implementing this commitment with the aim of achieving real economy emissions reductions and undertaking a comprehensive set of actions available to investors, drawing on the Paris Aligned Investment Initiative's Net Zero Investment Framework
3. Setting objectives and targets, including an interim target for 2030 or sooner for reducing Scope 1, 2 and 3 emissions associated with our portfolios and setting a target for increasing investment in climate solutions, consistent with a fair share of the 50% global reduction in CO2 identified as a requirement in the Intergovernmental Panel on Climate Change special report on global warming of 1.5°C
4. Where offsets are necessary where there are no technologically and/or financially viable alternatives to eliminate emissions, investing in long-term carbon removals.
5. Ensure any direct and collective policy advocacy we undertake supports policy and regulation relevant for achieving global net zero emissions by 2050 or sooner
6. Implementing a stewardship and engagement strategy, with clear voting policy that is consistent with an objective for all assets in the portfolio to achieve net zero emissions by 2050 or sooner
7. Engaging with asset managers, credit rating agencies, auditors, stock exchanges, proxy advisers, investment consultants, and data and service providers to ensure that funds, products and services available to investors are consistent with achieving global net zero emissions by 2050 or sooner.
8. Setting a target and reducing our operational (Scope 1 and 2) emissions in line with achieving global net zero emissions by 2050, or sooner.
9. Disclosing objectives and targets, and publishing a clear Investor Climate Action Plan for achieving these goals as soon as possible, no later than one year from making this commitment, and reviewing and updating targets every five years or sooner.
10. Reporting annually on the strategy and actions implemented and progress towards achieving objectives and targets, and in line with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations.

Our institution's commitment recognises that investors across the globe have different opportunities, constraints and starting points for achieving net zero emissions and there are a range of methodologies and approaches available to investors to set targets and implement strategies. In some asset classes or for some investment strategies, agreed net zero methodologies do not yet exist. We will, therefore, work to address these challenges, including through the Paris Aligned Investment Initiative.

Our commitment is based on the expectation that governments and policy makers will deliver on their commitments to achieve the 1.5°C temperature goal of the Paris Agreement, and in the context of fulfilling our fiduciary obligations.

Setting and disclosing targets

The Paris Aligned Investment Initiative Net Zero Commitment includes a requirement to set and disclose targets and objectives within 12 months, drawing on the Net Zero Investment Framework as a key guide.

As such, the structure of the target disclosures presented here reflects the four targets recommended in the Net Zero Investment Framework 1.0.

Portfolio level targets

- A <10-year CO2e emissions reduction target, covering listed equity and corporate fixed income, and real estate.
- A <10-year goal for increasing allocation to climate solutions.

Asset level targets

- A 5-year portfolio coverage target for increasing the percentage of AUM in material sectors that are i) achieving net zero, or, meeting the criteria to be considered ii) 'aligned' to net zero, or iii) 'aligning' to net zero.
- An engagement threshold which ensures that at least 70% of financed emissions in material sectors are either assessed as net zero, aligned with a net zero pathway, or the subject of direct or collective engagement and stewardship actions.

For further explanation of the four recommended target types, see our Supplementary Target Setting Guidance.

ABP

Portfolio level – emissions reduction reference target(s)	**Baseline date:** Holdings data: 31 March 2015 (equities portfolio) **Baseline performance:** 31.2 million tonnes of CO2eq. **Target year(s):** 2025 **Target(s):** Listed equity: -40% by 2025 Whole portfolio: net zero by 2050 **GHG scopes included:** Equity: Scope 1 & 2, Scope 3 for energy and mining sectors Corporate Bonds: Scope 1 & 2, Scope 3 for energy and mining sectors Real Estate: Scope 1, 2, 3 Private Equity: Scope 1 & 2, Scope 3 for energy and mining sectors Government Bonds: Emissions related to activities from the government (Operations and investments) **Asset classes in scope:** Equity for the 2025 reduction target. In 2022, 2030 targets will be published for other asset classes. **Net zero scenarios:** ABP uses the following scenarios as reference for its RI policy: 1.5 degree scenarios with no or limited overshoot of the IPCC and IEA Net-Zero scenario. **Methodology:** Since 2018, APG has had a multidisciplinary climate steering committee in which risk management, fiduciary management and portfolio management are represented. This steering group coordinates the approach to managing climate risks and is the driving force behind the implementation of the climate risk policy. We map climate risks using the TCFD methodology as well as scenarios to stay within the 1.5 degrees ambition of ABP.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** 2020 **Baseline performance:** Sustainable Development Investments (SDIs) accounted for 16,4% of our investment (€80.9 billion). Of that number, €13.8 billion was attributed to SDG 7. **Target date:** 2025 **Target year:** By 2025, ABP wants to have invested 20% of its assets in SDI investments, of which €15 billion in the Sustainable Development Goal 7: Affordable and sustainable energy. **Methodology:** APG uses the SDI asset owner methodology to define relevant investments.
Asset level alignment – portfolio coverage target(s)	**Baseline date:** 2020 **Baseline performance:** ABP plans to have alignment assessments performed for all asst classes not later than the end of the second quarter of 2023. **Target year:** 2030 **Target:** 100% of assets should be aligned with Paris agreement in 2030. **Asset classes in scope:** All asset classes

ABP

Asset level alignment – portfolio coverage target(s)	**Data sources:** On behalf of ABP, its asset manager APG measures climate risks in the real estate portfolio with using the Carbon Risk Real Estate Monitor (CRREM) tool. APG has contributed to the development of the Carbon Risk Real Estate Monitor (CRREM) for transition risks. This is a worldwide method to determine whether a building meets the objectives of 'Paris'. CRREM 'transition paths' have been drawn up that allow for each type of real estate to see how much CO2 per square meter is allowed until 2050 to stay within the target. CRREM has recently joined forces with the Science-Based Targets Initiative (SBTi) Action plans to align the other asset classes with the Paris Agreement will be created in 2022. For now, there has been some alignment work done for equities and credits related to the carbon emissions equivalents for these two asset classes in view of setting a carbon reduction target. ABP's definition of aligned will be consistent with the Net Zero Investment Framework definition.
Asset level alignment – engagement threshold	**Approach:** In 2021, APG introduced new criteria for the climate efforts of the largest oil and gas companies and electricity producers. They should in any case have a target for the long term to reduce their CO2eq emissions in line with the Paris Climate Agreement. See here. APG actively engages in dialogue with companies in which ABP invests to reduce carbon emissions and to participate in the transition in line with the Paris climate Agreement. This is done, among other things, through the partnership with Climate Action 100+. ABP adapted its voting policy to include climate criteria. ABP engages with companies to accelerate energy transition: focus on the demand side, including large energy users and policymakers. This keeps us actively involved in the energy transition. For illiquid markets, acknowledging the challenge of obtaining transparency on emissions, we systematically request as part of our pre-investment engagements, each investee or fund to commit to provide us with emissions information (directly or via platforms like GRESB). In liquid markets, we use data providers to gather the published emissions data (listed and mid-cap unlisted companies) and use industry averages for smaller unlisted companies.
Additional information	**Fossil fuel investment:** In 2021, ABP already divested from companies that derive more than 30 percent of their turnover from coal mines or more than 20 percent from tar sands. ABP announced in October that it would withdraw from its investments in producers of fossil fuels (coal, oil, and gas). This concerns more than 15 billion euros in assets, almost 3% of ABP's total assets. ABP's climate policy since 2015 is based on insights from the UN Climate Panel (IPCC) and committed to 1,5^{0}C. Recent IPCC and IEA reports show that people worldwide are experiencing the physical consequences of climate change. The above elements have been taken into account in the decision-making process.

For further information: ABP annual report 2021 (pages 36-46); ABP CO2 Methodology; ABP Stewardship Policy (page 6); ABP climate Voting policy; Sector specific criteria ABP; ABP votes against Shell's climate strategy; TCFD Report 2022

Accident Compensation Corporation

Portfolio level – emissions reduction reference target	**Baseline date:** 30 June 2019 **Baseline performance:** 562 tCO2e/$USDm revenue **Target year(s):** 2025, 2030 and 2050 **Target(s):** -60% CO2e/$USDm invested by 2025 -65% CO2e/$USDm invested by 2030 Net zero emissions by 2050 **GHG scopes included:** Our target carbon intensity metric includes scope 1 and 2 emissions across all sectors and estimated downstream scope 3 emissions relating to the carbon embodied in the reported fossil fuel production volumes of energy and mining companies that own fossil fuel reserves. Fossil fuels are defined as oil, gas and thermal coal, the combustion of which is the largest single source of global greenhouse gas emissions. Other scope 3 emissions have not been included to date because we believe the comparability, coverage, transparency, and reliability of scope 3 data still varies considerably across companies and that this could distort progress towards meeting decarbonisation targets. We will look to phase in the measurement of scope 3 emissions for other priority sectors according to the guidance of PCAF **Asset classes in scope:** Listed equity. (Our current approach includes all company emissions in our carbon intensity measure for listed equity, i.e all emissions are allocated to equity, rather than allocating them across equity and bond holdings). We are developing our approach to other asset classes. **Net zero scenarios/methodology:** The emission reduction trajectory guided by our interim targets align with the UN Intergovernmental Panel on Climate Change (IPCC) 1.5 degree scenario with no or limited overshoot. **Emissions metrics:** Aligning our portfolio with a 1.5 degree scenario requires a reduction in the emissions of our investee companies in line with a net zero emissions world. All else equal, this implies carbon reductions per unit of output, or sales, in line with net zero emissions. When appropriate, our stewardship and voting will continue to encourage real world emission reductions in line with our targets. We target reductions in carbon intensity because portfolio deposits and withdrawals can limit the comparability of absolute emissions through time. Carbon intensity metrics capture the improvement in carbon efficiency, regardless of fund size.
Portfolio level – investment in climate solutions target	**Qualitative goal:** In December 2021, ACC established a climate change fund dedicated to seeking commercial opportunities in climate change solutions. The fund allocation was initially set at $NZD50mn, with a view to increasing this allocation according to the availability of commercial opportunities. **Methodology:** We do not have a quantitative target so do not have baseline. However, our dedicated search for commercial opportunities in climate solutions started in December 2021. We will continue to do work to determine a methodology to assess climate solution investments and continue to seek commercial opportunities in climate solutions.

Accident Compensation Corporation

Asset level alignment – portfolio coverage target	**Approach:** We have not set a quantitative baseline or target but monitor progress as we progress toward net zero. As of 30 June 2022, 27% of listed equities (by market value) had an SBTi approved target. A further 48% were either committed to an SBTi target or were aimed at aligning with the Paris Agreement according to MSCI's Implied Temperature Rise methodology. We will also explore the approach to the baseline assessment of asset alignment according to the Net Zero Investment Framework and explore setting targets in due course. **Data sources:** Our current alignment data is sourced from MSCI
Asset level alignment – engagement threshold	**Approach:** All global portfolio managers are asked to consider our ethical policy, including our net zero alignment, in their voting. Our domestic internal portfolio managers also actively engage on priority ESG matters, including climate change. We use the Columbia Threadneedle to lead our engagements with the companies within our global equity portfolio. At the moment, 100 per cent of our global corporate bonds portfolio are managed by members of climate action 100+, and almost 20% of our global equity portfolio. We will consider how best to establish the proportion of financed emissions in material sectors that are subject to direct or collective climate engagement actions and will continue to work with managers to assess climate engagement and outcomes.
Additional information	**Methodology:** An annual decline in Carbon emissions of at least 7% per annum emissions aligns with the IPCC 1.5 degree scenario (with no or limited overshoot). It is also consistent with the European Technical Expert Group on Climate Change's requirement to cut year-on-year carbon emissions by 7%. Our current targets are consistent with the expected reductions in carbon emissions. **Operational emissions:** ACC has committed to net zero operational emissions by 2025 in line with the NZ's Carbon Neutral Government policy. **Fossil fuel investment:** We do not invest in companies earning more than 30% of their revenue from thermal coal.

For further information: We plan to include further information on planned actions, governance, strategy, and progress to achieve climate targets in our next Annual Report, and through PRI reporting mid-next year. Our TCFD report will be available in the ACC 2022 Annual Report, which will be available on our website October 2022 (www.acc.co.nz).

AP Pension

Portfolio level – emissions reduction reference target	**Baseline date:** 31 December 2019 **Baseline performance:** Listed equities and corporate bonds: 55.21 tCO_2e/$mn Invested (8,29 tCO2e/DKK mn invested). Real estate: 19.7 kgCO2/sqm/year **Target year:** 2025 **Target(s):** Listed equities and corporate bonds: 37% reduction of tCO_2e/mn DKK Invested by 2025. Real estate investments: 52% reduction of CO2e/m2 by 2025 (covering buildings in use). **GHG scopes included:** Our 2019 baseline and target setting covers financed scope 1 and 2 emissions for listed equity, corporate bonds, and real estate. On a portfolio level, we track and report on scope 1, 2 and 3 emissions in absolute terms but are aware of inadequate data quality in scope 3. As data quality and availability improves, we will look to include this in future iterations of the Net Zero Plan for future emissions, engagement, and alignment targets. **Asset classes in scope:** Listed equity, corporate fixed income (European US and Emerging markets High Yield) and Real estate (Danish properties). **Methodology/net zero scenarios:** Methodology and calculations are based on IIGCC´s Net Zero Investment Framework combined with IEA´s two scenarios (Sustainable Development Scenario and Net Zero Emissions by 2050 Scenario) and additionally on the principles in Finans Danmark´s CO2e-model (Framework for Financed Emissions Accounting, Nov. 2020). Emissions are calculated based on EVIC. In accordance with Finans Danmark´s CO2e-model (Framework for Financed Emissions Accounting, Nov. 2020). According to the SDS scenario by IEA, our portfolios emissions will exceed its carbon budget in 2034. We have started our work with target setting for 2030 including a focus on improved data. **Emissions metrics:** We have set decarbonisation targets on financed emissions (scope 1 and 2) in relative emissions terms. However, AP Pension's annual report discloses emissions annually both absolute (total emissions and financed carbon) and intensity based (carbon footprint and weighted average carbon intensity, WACI) on our full portfolio in accordance with the TCFD recommendations.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** 2019 **Baseline performance:** Investments in climate solutions were: • 1.5% of AUM in 2019 • 9.9% of AUM in 2020 • 12.7% of AUM in 2021 Disclosed in AP Pension´s annual reporting.

AP Pension

Portfolio level – investment in climate solutions target	**Target years:** 2023, 2025, 2030 **Targets:** • 2023: 15% invested (of total AUM) in climate solutions ("green investments") according to guide/definitions from Danish Insurance & Pension Association (IPA). • 2025: 18% invested (of total AUM) in climate solutions ("green investments"). • 2030: 25% invested (of total AUM) in climate solutions ("green investments"). **Methodology:** AP Pension calculates green investments based on the methodology and guidance provided by the Danish Insurance & Pension Association (IPA) green classification system. The methodology is currently based on investments supporting SDG 7 regarding "affordable and clean energy" and covers all asset classes including, but not limited to, listed equity, green energy infrastructure, green bonds and real estate. The methodology will use the EU taxonomy from 2023 (reporting year) as a measurement of green investments.
Asset level alignment – portfolio coverage target	**Baseline date:** 31 December 2019 **Baseline performance:** A mix of data sources are used for our analysis of alignment of the portfolio, such as Climate Action 100+ Net Zero Company Benchmark, SBTi, SDS and NZ-scenarios from ISS (based on IEA) and temperature score for the portfolio. We have not calculated proportions/allocation in the different alignment classes yet. **Target year:** 2025 **Target:** We analyse the degree of Paris alignment of our portfolio companies, and we conduct regular screenings to identify the major challenges based on the portfolio companies' specific emissions performance and their decarbonisation strategies. The purpose is to increase the proportion of assets defined as net zero or aligned to net zero. Specific targets for the proportions of assets in the different alignment classes are not set. Actions taken to increase alignment is focused on engagement with companies that seem not to be on a net zero pathway and we combine it with an escalation strategy. **Asset classes in scope:** Listed equity, corporate fixed income, real estate **Data sources:** Listed equity & corporate fixed income: Climate Action 100+ Net Zero Company Benchmark, SBTi, climate data from ISS. Real estate: Energy norms and marked standards.
Asset level alignment – engagement threshold	**Target:** AP Pension has adopted a strategy for active ownership which ensures that at least 70% of the financed CO2 emissions in 2025 are either net zero, aligned to a net zero pathway or subject of direct or collective engagement and stewardship actions. **Approach:** We prioritise our engagement based on a holistic analysis. Climate Action 100+ Net Zero Company Benchmark is used as key tool to identify areas where companies need to improve and where we focus our intensified active ownership. Focus is on companies not aligned to a net zero pathway or companies not able to demonstrate a plan for a transition to net zero. We will also increase our dialogue and climate requirements to our external managers.

AP Pension

Additional information

Methodology: Combining our target for green investments by the end of 2030 (25% of AUM), CO2e-reduction (-37% CO2e/$bn invested in listed equity and corporate bonds by 2025) and CO2e-reduction (-52% CO2e/m2 in real estate by 2025), we are consistent with delivering a fair share of the 50% global reduction in CO2e-emissions by 2030. In addition, AP Pension´s combined portfolio is at a good starting point with low emissions relative to the benchmark (27% less than the benchmark MSCI ACWI for listed equity and corporate bonds) and low fossil exposure.

Operational emissions: AP Pension measures its operational emissions, which are published in AP Pension´s annual report and CSR report. AP Pension is planning to incorporate reduction targets for the operational emissions.

Fossil fuel investment: AP Pension developed a new fossil strategy/policy in August 2022. This strategy includes the following exclusion criteria:

- Coal companies are excluded if they have >5% revenue from the extraction of thermal coal or have expansion plans.
- Utility companies are excluded if they have >25% revenue from energy production with thermal coal or they have expansion plans. A holistic assessment is made of companies that are close to the limit values.
- Fossil companies are excluded if they have >5% revenue from the extraction of tar/oil sands.
- Oil and gas companies are excluded if they have >20% revenue from upstream activities. A holistic assessment is made of the remaining oil and gas companies that have expansion plans with a view to divestment.

Fossil companies which, according to the holistic assessment, are assessed to have taken significant steps, but cannot yet demonstrate a transition compatible with the Paris Agreement (transition companies), will be kept on AP Pension's observation list. AP Pension continue to monitor and enhance active ownership of the companies included on the observation list.

For further information: politik-for-ansvarlighed-og-baredygtighed-pa-investeringsomradet.pdf (appension.dk), Klimaaftryk (appension.dk), Rapportering af klimaaftryk (appension.dk)

Andra AP-fonden (AP2)

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2019 **Baseline performance:** Listed equity and corporate bond portfolio: 4.4 mtCO2e (Scope 1 and 2) Swedish real estate emissions: 1,146 tCO2e (Scope 1 and 2) **Target year(s):** 2025, 2030, 2045 **Target(s):** Net zero by 2045 Listed equities and bonds: 65% reduction of CO2e emissions by 2025 Swedish real estate investments: net zero by 2030 **GHG scopes included:** Scope 1, 2 included. Scope 3 to be included over time in accordance with the PAB framework for all sectors. **Asset classes in scope:** Global equities and corporate bonds Swedish real estate (amounting to about a third of the Fund's total traditional real estate assets) **Methodology/ net zero scenarios:** The Fund developed indices for global equities and corporate bonds in accordance with the EU Paris-Aligned Benchmark (PAB) criteria, which are based on the UN Intergovernmental Panel on Climate Change's 1.5°C scenario with limited overshoot. See more on methodology below.
Portfolio level – investment in climate solutions target	**Qualitative goal:** Investments in solutions are expected to increase as a part of an overall impact portfolio with measurable contribution to SDGs, including SDG 7 and 13. However, AP2 has not set a quantified target for the amount to be invested. **Baseline date:** 2020 **Baseline performance:** SEK22bn (5.8% of AUM) **Methodology:** AP2 has defined criteria for investments to be included in the Fund's impact portfolio. Impact is evaluated based on the five dimensions of the Impact Management Project framework. Measurability is assessed with IRIS+ aligned KPIs (e g for SDG 7, renewable energy generated for sale; and for SDG 13, Greenhouse Gas Emissions Avoided or Reduced) and the investments are evaluated based on materiality and additionality. The Impact portfolio is expected to grow over time, but no quantitative target has been set. By December 2021, AP2's impact investments according to these criteria amounted to SEK28bn SEK or 6.3% of AUM. The Fund's impact portfolio has a clear overweight on climate-related SDGs, including: • Green bonds • Sustainable infrastructure (which includes investment into renewable energy funds and EV battery development through Northvolt) • Impact PE funds, including TPG Rise • Forest investments that fulfil AP2: s 10 criteria for climate and biodiversity • Swedish listed cleantech portfolio Impact measures that will be tracked over time include MWh of renewable energy and CO2e in avoided emissions.

Andra AP-fonden (AP2)

Asset level alignment – portfolio coverage target(s)	**Baseline date:** 31 December 2020 **Baseline performance:** 50% meeting at least "aligning" criteria, consisting of Global equities, listed bonds, and Swedish Real Estate **Target year(s):** 2025 **Target:** 100% Asset classes in scope: • All asset classes, including: • Equities • Fixed income • Tactical asset allocation • Real estate • Private equity • Private Debt • Sustainable infrastructure • Alternative risk premiums **Methodology/ data sources:** Global equities and listed bonds, which are managed in line with PAB. Swedish Real Estate, the only holding of which (Vasakronan) is committed to value chain climate neutrality by 2030, with a plan approved by Science Based Targets.
Asset level alignment – engagement threshold	To be defined.
Additional information	**Methodology:** The emissions reduction strategy detailed to date is in line with or inspired by the Paris-Aligned Benchmark requirements and Science Based Targets. The footprint must be reduced by 7 per cent per year, with the aim of achieving net zero emissions by 2050. Further, according to the PAB framework, the Fund cannot divest from sectors with high emissions. The aim of this regulatory framework is not only to reduce greenhouse gas emissions and achieve net zero emissions by 2050, but also to benefit companies that make a positive contribution to the climate transformation. In order to meet the 7% reduction target, AP2 will continue to engage with high emitters, primarily through CA100+ and the Council on Ethics. AP2 has also contacted the organisations of which the Fund is a member of to ensure that their relevant policies and advocacy work are in line with the Paris Agreement. AP2's voting guidelines state "The Fund advocates that companies express their support for and draw up a strategy to be in line with the Paris Agreement" (see voting guidelines here). However, if companies do not sufficiently reduce their greenhouse gas emissions for AP2 to meet its targets over time, the portfolio will be weighted towards high performers. **Further work:** A more detailed plan is under development and AP2 uses the Net Zero Investment Framework (NZIF) as a guide to develop this plan.

Andra AP-fonden (AP2)

Additional information	**Fossil fuel investment:** The Fund does not invest in companies with more than a certain proportion of their sales from coal, oil and/or gas, or in power companies with more than 50 per cent of their revenue from combustion of fossil fuels. The maximum proportion for coal is 1 per cent, for oil 10 per cent and for gas 50 per cent. Furthermore, the footprint must be reduced by 7 per cent per year, with the aim of achieving net zero emissions by 2050. See AP2's TCFD report. **Operational emissions:** An internal environmental review shows that the largest environmental impact from AP2's office comes from electricity consumption and carbon emissions associated with travel. Internal targets have been set based on the internal environmental policy. 98 per cent of all business trips between Gothenburg and Stockholm are made by train. AP2 consumes only green electricity, and measures to reduce energy consumption and improve waste management.

For further information: TCFD report; Sustainability report; Annual report; Voting guidelines

AP7

Portfolio level – emissions reduction reference target	**Approach:** AP7 reports carbon footprint of the equity portfolio each year. Since 2021 our footprint reporting includes performance allocation, which differentiates between emission changes due to changes in holdings vs changes in companies' emissions. Our expectation is that the carbon footprint will decrease over time because of reductions in company emissions. However, AP7 does not set targets relating to portfolio emissions because we believe that it is a poor metric for tracking progress toward net zero in the short term. Carbon footprint is backward facing and does not evaluate an issuer's plans, policies and investments. Furthermore, targets based on carbon footprint may incentivise counter-productive, short-term actions. AP7 uses carbon footprint data to prioritise companies for enhanced active ownership measures.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** 31 December 2020 **Baseline performance:** Fixed income: Green bonds comprise 5% of AP7's Fixed Income Fund. Equity portfolio: Clean tech and green and ESG-weighted mandates comprise 8% of AP7's Equity Fund. **Target years:** 2022, 2025 **Target:** Fixed income: • 2022: Green bonds comprise 10% of Fixed Income Fund • 2025: Green bonds comprise 50% of Fixed Income Fund Equity portfolio: • 2022: Compile a transition mandate focused on driving the transition through a combination of active investing and active ownership • 2025: Transition mandate comprises 10% of Equity Fund **Methodology:** AP7's total assets under management is USD 90 billion as of 31 December 2021. AP7 has investments in climate solutions (green mandates) in both the Equity Fund and the Fixed Income Fund. AP7's investment directives currently restrict AP7 to only invest in equities and fixed income. New directives are expected to be approved by the Swedish Parliament before the end of 2022 which will allow AP7 to invest in real assets/alternative investments. Overall targets for investment in climate solutions across asset classes will be set after AP7's new directives are decided on and announced.

AP7

Asset level alignment – portfolio coverage target	**Baseline date:** 31 December 2021 **Baseline performance:** AP7 is a universal owner with over 3000 listed equities. AP7 identifies an ICAP Portfolio on which to set the portfolio coverage target. The portfolio is composed of the companies with the largest carbon footprints, which in aggregate correspond to at least 70% of financed emissions for the entire listed equity portfolio. • 26% of the number of companies in the ICAP Portfolio are "transitioning companies" (13.1% of AUM in the ICAP portfolio) • Transitioning companies are assessed as "aligned", "aligning" or "committed to aligning" using publicly available metrics from investor-led initiatives: the CA100+ NZ benchmark and TPI. • 2.1% of AUM in the ICAP Portfolio meet the "aligning" criteria. 11% of AUM meet "committed" criteria. However, less than half of the ICAP portfolio could be assessed as we lack data for 56% of AUM. **Target year:** 2025, 2030 **Target:** 2025: 50% of the number of companies in the ICAP Portfolio are "transitioning companies". 2030: 100% of companies in the ICAP Portfolio are "transitioning companies" by 2030. **Asset classes in scope:** Listed equity, which corresponded to around 86% of total AUM at year end 2021. The ICAP Portfolio covers 10.4% of listed equity AUM. **Data sources:** AP7 chooses to base its assessment of company net zero alignment on publicly available data from asset owner-led initiatives with transparency on data and methodology. Data sources are CA100+ Net Zero Benchmark and Transition Pathway Initiative (carbon performance, underlying metrics within the management quality assessment).
Asset level alignment – engagement threshold	**Approach:** AP7 identifies a list of priority companies to target for enhanced active ownership. The list consists of all companies within the ICAP Portfolio (70% of financed emissions), as well as additional companies which are climate disclosure laggards or have significant scope 3 emissions. Active ownership tools include collaborative and bilateral dialogue with companies, annual meeting actions, public blacklisting and legal processes. In addition, AP7 exercises its voting rights for all companies in its portfolio, (approximately 4000 meetings per year) with a strong voting policy on climate. **Targets:** AP7 has set targets on active ownership: • 2025: 100% of the priority companies will be subject to active ownership activities.
Additional information	**Methodology:** Engagement with companies is important and a central part of AP7's climate action plan. AP7 has a strong engagement strategy covering companies representing 70% of financed emissions and our voting policy covers all companies in our portfolio. As a universal active owner, AP7 strives to influence the whole market in a sustainable direction in the long term. We evaluate and prioritise activities based on the goal of achieving real world impact.

AP7

Additional information

Amongst other activities, we support the development of standards and norms and publish findings from our thematic deep-dives, collaborate with academics and interact with policymakers.

Some recent examples:

- AP7 is one of three investors responsible for the development of a global standard on responsible climate lobbying
- We publish our experiences on measuring impact
- We pursue a legal process to defend minority shareholder rights at annual meetings in the German market
- We make our voting record public, and open up our active ownership activities to academic research.

Operational emissions: In line with our latest materiality analysis we are not focussing on our operational emissions. With fewer than 50 staff, all based in Stockholm, AP7 rents office space in a LEED Platinum (2017) certified building with green electricity, and our travel policy includes environmental considerations. AP7 has not set a target for its operational emissions as they are considered negligible in light of the impact of our assets under management.

Fossil fuel investment: AP7 blacklists companies found to be in clear breach of international norms and standards. The climate aspect in AP7's blacklisting is continually being developed in line with research on the climate transition. Since 2020, we have therefore been blacklisting companies with a large absolute climate impact in coal production and coal power, and that do not have plans to transition away from these activities.

For further information: Annual and sustainability report 2021 (page 18 for approach to fossil fuel, page 69 for TCFD mapping), AP7 climate action plan 2022

Avon Pension Fund

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2019 **Baseline performance:** Listed equity: 139,256 tCO2e (scope 1 and 2) **Target year(s):** 2025, 2030, 2050 **Target(s):** Whole fund: Net Zero by 2050 Listed equity: absolute emissions reductions of 43% by 2025 & 69% by 2030 **GHG scopes included:** Targets are in reference to scope 1 & 2 emissions. This will be extended to cover scope 3 as and when data coverage is sufficiently robust and avoids double counting, patchy coverage etc. However, the Fund does also measure its carbon footprint in relation to scope 1, 2 & Tier 1 scope 3 emissions (recognising that this analysis provides useful insight into the decision-making process). The Fund has been a part of engagement work undertaken by strategic partners (principally Brunel) in relation to financed fossil fuels over the past year in recognition of the materiality of scope 3 emissions. **Asset classes in scope:** As above. Due to the availability of data and size of equity allocation as part of whole portfolio the priority has been given to listed equities with a view to extending this analysis to fixed income and real assets as and when data coverage allows. **Net zero scenarios:** IPCC scenario decarbonisation curve consistent with a 1.5C scenario.
Portfolio level – investment in climate solutions	**Qualitative goal** **Target:** Invest at least 30% of the total assets in sustainable and transition aligned investments by 2025, including 5% of assets being invested in renewable energy infrastructure. **Methodology:** Once able, we will also be setting further dedicated climate solutions targets across different asset classes.
Asset level alignment – portfolio coverage target(s)	**Baseline:** £600m in Paris Aligned Benchmark Fund (as at Dec-2021), invested since October 2021. Representing 10% of total assets and 23% of listed equity portfolio. **Target:** The Fund has been undertaking transition alignment analysis of our listed equity portfolio. This will then be used to set future quantitative targets. Future analysis to extend to other asset classes. **Methodology:** The Fund is committed to annually assessing its listed equity portfolio based on a forward-looking framework which categorises holdings from a bottom-up perspective based on emissions intensity and transition risk.
Asset level alignment – engagement threshold	**Target:** The collective engagement baseline across the whole Brunel Pension Partnership is 47.3% of financed emissions. Over the year we will agree with the Brunel Pension Partnership on future engagement priorities and thresholds for action.

Avon Pension Fund

Additional information	**Methodology:** We are targeting alignment by 2050 and have already made good progress towards this goal, with interim equity emissions targets to ensure we remain on track. 2020 alone saw a 22% year-on-year reduction in carbon intensity of our listed equity portfolio, which is now 30% less carbon intensive than the benchmark. We have almost £600m invested in dedicated Paris Aligned equity fund plus a further £380m already committed to renewable energy infrastructure. **Further work:** We also plan to set-out further targets across other asset classes that build on the allocation decisions we have already made. **Operational emissions:** Bath & North East Somerset Council, who administer the Fund, have declared a climate emergency and are working towards their own net zero goal by 2030. A desire to reduce emissions is reflected in staff policy, from hybrid working arrangements to encouraging public transport use and providing bike storage. Separately the pension fund has an ongoing digitalisation programme to improve IT infrastructure, reduce the use of printed/posted material and increase electronic communication with members and employers.

For further information: Avon Pension Fund Responsible Investment Annual Report 2021

Brunel Pension Partnership

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31/12/2019 for listed equity New portfolios may adopt a more appropriate baseline e.g. 31/12/2020 **Baseline performance:** 343 tCO2e/mGBP **Target year(s):** Annual; 2022; 2030 **Target(s):** Annual: At least 7% per annum reduction in weighted average carbon intensity (scope 1,2 and first tier scope 3) for each portfolio compared to its investable universe (benchmark). 2022: At least 20% reduction in weighted average carbon intensity. 2030: At least 50% reduction in weighted average carbon intensity (scope 1 and 2), for each portfolio compared to its investable universe (benchmark). GHG scopes included: Scope 1 and 2 emissions are included in the annual target and 2030 target. First tier scope 3 emissions are included in the annual emissions reduction target for listed equity portfolios for 2022. **Asset classes in scope:** Listed equity (when the target was set, listed equity represented around 88% of Brunel's AUM). The 2030 target covers listed equity and corporate bonds. **Methodology/ net zero scenarios:** At least 7% on average per annum: in line with or beyond the decarbonisation trajectory from the IPCC's 1.5°C scenario (with no or limited overshoot). As a next step, Brunel will establish other data points, metrics and targets in line with the Net Zero Investment Framework and other regulatory asks. **Emissions metrics:** As Brunel has doubled its asset base since 2019, interim emissions intensity targets were deemed more appropriate.
Portfolio level – investment in climate solutions target	**Qualitative goal:** Brunel has a strong commitment to increase investment in climate solutions, as evidenced by the huge amount investment. However, as Brunel does not control strategic asset allocation, a quantitative target has not been set outside of those within specific thematic portfolios e.g. renewable energy infrastructure. **Methodology:** We are also seeking to establish a baseline of green revenues from within the listed equity portfolios as at 31/12/2021. This work is underway with the external support of FTSE Russell and should provide some analysis for each of the listed equities portfolios, from which we aim to extrapolate client exposures. We are then looking to see how we can map private market investments to the same categories, although this will be on committed capital basis.
Asset level alignment – portfolio coverage target(s)	**Baseline:** Brunel is working on establishing a baseline as of 31/12/2021 for material sectors. **Target(s):** Brunel aims to set targets in the updated climate policy in January 2023. Currently, Brunel is targeting all our material holdings to be at TPI level 4 or above by 2022. Asset classes covered: The targets will cover listed equity initially (~88% of the portfolio) with an objective to expand this to other asset classes over time.

Brunel Pension Partnership

Asset level alignment – portfolio coverage target(s)	**Methodology:** For material sectors covered by TPI carbon performance data, Brunel uses this quantitative analysis to provide portfolio analysis. This can be applied to both index (passive) and active portfolios. We have a 1.5C° scenario for electric utilities, oil & gas and mining. Other sectors will need to use scenarios we have available which may be below 2C°. We also plan to analyse all holdings in active listed equity. We intend to work with our managers to establish a current baseline of alignment, using a blend of quantitative and qualitative and using multiple methodologies. There will be a large number of unknown as what constitutes alignment, as in less impactful sectors, this has not been defined.
Asset level alignment – engagement threshold	**Baseline:** Current proportion of finance emissions engaged on is 47.3% **Target:** The near-term target set in the Net Zero Investment Framework is 70%, increasing to 90%. We anticipate that these will be our target. **Approach:** Brunel carries out engagement with material holdings to persuade them to advance at least one level (up to 4*) per year against the TPI Management quality framework.
Additional information	**Methodology:** At least 7% on average per annum emissions reduction is in line with the decarbonisation trajectory from the IPCC's 1.5°C scenario (with no or limited overshoot). **Operational emissions:** Brunel has committed to be net zero in its operational (scope 1 and 2) emissions and made considerable progress in measuring and reducing its scope 3 emissions by 2030.

For further information: Annual Report & Financial Statements (March 2022; pages 21-25); Climate Change Action Plan Report (2021); Carbon Metrics Report (2021). Brunel also plans to update its climate policy in January 2023; Climate section of Responsible Investment and Stewardship Outcomes Report 2022

BT Pension Scheme

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 30 June 2020 **Baseline performance:** Total portfolio financed emissions (listed equity, corporate credit & real estate scope 1-2): 931k tCO2e Portfolio WACI (equity, bonds, real estate scope 1-2): 135 tCO2e/mUSD **Target year(s):** 2025, 2030, 2035 **Target(s):** Total portfolio 2035 net zero goal: -100% (scope 1-3) by 2035 Total portfolio 2025 goal: minimum -25% WACI invested (scope 1 -2) **GHG scopes included:** Our overall net zero 2035 goal is for scopes 1-3, however at present we are only able to reasonably obtain scope 1-2 emissions. As such our emission intensity reduction targets are focussed on scopes 1 & 2. When SFDR makes scope 3 reporting obligatory in 2023, we will work with our managers and data provider to obtain that data. **Asset classes in scope:** Publicly listed equity, corporate credit & real estate. **Methodology:** In 2020 we announced a 2035 net zero goal, covering scopes 1-3, across our entire investment portfolio as well as BTPSM's own operations. It was drafted in line with the Net Zero Investment Framework and the AOA Target Setting Protocol. See below for additional methodology. **Net zero scenarios:** As our net zero by 2035 target is more ambitious than the emissions reductions stipulated in the IPCC scenarios and IEA scenarios, we believe that our target is consistent with delivering a fair share of 50% global reductions by 2030. **Emissions metric:** The 2035 net zero goal is based on absolute emissions, however intensity metrics have been used alongside to adjust for the impact of the expected decline in our portfolio size, low initial coverage levels for certain asset classes and to ensure alignment with real world change. We will continue to monitor and reassess metrics as data quality, coverage and methodologies improve.
Portfolio level – investment in climate solutions	**Qualitative goal:** We will seek investments in climate solutions when they are consistent with our fiduciary investment responsibilities, the Scheme's investment strategy and are classified as a climate solution by the EU Green Taxonomy or another appropriate investor recognised framework. **Baseline date:** 30 June 2020 **Baseline performance:** Real estate (direct): 31% EPC A & B rated as per Net Zero Asset Owners Alliance guidance. Infrastructure (direct): 19% infrastructure in line with EU taxonomy and Climate Bond Initiative Frameworks. For our listed investments we use MSCI ESG to show the number of holdings with exposure to high level sustainable activities, however there is no revenue breakdown available.
Asset level alignment – portfolio coverage target	**Baseline date:** 30 June 2020 **Baseline performance:** Total: 25% **Target year(s):** 2025 **Target:** 50%

BT Pension Scheme

Asset level alignment – portfolio coverage target	**Asset classes in scope:** Publicly listed equity & corporate credit. We do not currently have an alignment target for our real estate as it is being developed with our asset managers. **Methodology:** We have attempted to use an alignment approach which gives us the broadest portfolio coverage. It is important to state however that this approach is open to changes as methodologies and data improve. In addition, data was only available for publicly listed equity and corporate credit and may be restated when data becomes more available. **Data sources:** For this submission we have used CA100+ NZ company benchmark, Transition Pathway Initiative, SBTi & MSCI data to calculate the different sectors' alignment with net zero. As per NZIF guidance, calculations have been dependent on the investee company's sector.
Asset level alignment – engagement threshold	23% of BTPS' publicly listed equity and corporate credit investments, in material sectors, are net zero "aligned". We will undertake collective engagement and stewardship actions with 37 investee companies, representing 70% of our public equity and corporate credit financed emissions. This number may change year on year due to changes in methodology.
Additional information	**Methodology:** In determining what would drive our goal, we selected four key levers that would help us reduce emissions. Three of them were financial levers: 1. portfolio construction, 2. manager and mandates and 3. stewardship and corporate emissions. 1. Under portfolio construction reductions, we estimated that the impact of reallocating assets towards lower emission mandates and portfolio de-risking would deliver 1-2% pa reductions. 2. Under manager and mandates, we estimated that our fund managers would achieve a 2-3% pa reduction, with reduction targets written into investment mandates. 3. Finally, for improvements in corporate emissions, we have assumed historical emission reduction rates achieved organically within the MSCI ACWI and Barclays Global IG Credit Indices will continue to persist at a rate of 2-3% p.a. As our goal is to achieve net zero by 2035, it is more ambitious than the 1.5C scenarios provided by IPCC and IEA amongst others and as such, it is hard to map it to specific climate scenarios and pathways. **Operational emissions:** BT Pension Scheme Management and associated companies have been aware of climate change for some time. Since 2019, BT Pension Scheme Management (BTPSM) and BT Pension Scheme Administration (BTPSA) have offset their operational emissions. In 2021, BTPSM and BTPSA offset carbon emissions of 77 tonnes. In line with the announcement of BTPS' net zero 2035 goal, BTPSM, BTPSA and Procentia, a private pensions software business owned by BTPSM, set their own 2035 net zero targets for operational emissions. To ensure a thorough baseline is established, they are assessing their carbon footprints with a carbon consultant and will create an emissions reduction plan with net zero targets during 2022.

For further information: BTPS Climate Change Policy; BTPS Annual Report & TCFD disclosure; The targets stated here have also been submitted to the Net Zero Asset Owner Alliance target setting protocol (TSP).

Church of England Pensions Board

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2019 **Baseline performance:** 203.5 tC02e/$mn revenue **Target year(s):** annual, 2025, 2040 **Target(s):** Year on year improvement (A), and TPI Carbon Performance criteria for Oil and Gas by 2023 (B). A. 7% year on year reduction in carbon emissions intensity (WACI), which equates to -35% by 2025, and -55% by 2040. B. TPI Carbon Performance of at least aligned with NDCs in Oil and Gas. **GHG scopes included:** Scope 1 and 2 typically, but some analysis provided by TPI incorporates a 'lifecycle emissions' approach, which includes Scope 3. Inclusion depends on sector. Our approach will be guided by TPI's evolving analysis. **Asset classes in scope:** Listed equity. (A and B) Corporate Fixed Income (B) Sovereign bonds: We are developing an assessment methodology for Sovereign Bonds (see ASCOR), in collaboration with BTPS and others, which will guide our stewardship of sovereign bond holdings. Real estate: Our real estate holdings are entirely managed indirectly via funds-of-funds, so outside the scope of the current NZIF. **Methodology:** We have conducted climate assessment at the strategic asset allocation level (see IIGCC's Portfolio Testing Report (March 2021)). We support policy advocacy through IIGCC and other networks, and have prioritised market engagement, through founding and chairing the Transition Pathway Initiative, and collaborating with FTSE Russell to develop the FTSE TPI Climate Transition Index series, etc. **Net zero scenarios:** A. Consistent with the European Technical Expert Group on Climate Change's requirement to cut year on year carbon emissions by 7%. B. Transition Pathway Initiative, based on IEA Sectoral Decarbonisation. **Emissions metrics:** The Board integrates TPI assessments (including carbon performance) as the primary tool/methodology to achieve our target. We do not just seek carbon intensity improvements, but intensity alignment: TPI carbon intensity assessments are benchmarked against IEA climate scenarios: Paris Agreement, Below 2D and 1.5 degree pathways, depending on the sector (See TPI methodology documents). IEA scenarios have absolute emissions elements, and derive sectoral emissions intensity budgets from this underlying link to the required global absolute emissions reductions. We make active ownership decisions based on company intensity pathways relative to these benchmarks, which thereby tie them to a global science based and sector specific decarbonisation model.
Portfolio level – investment in climate solutions target	**Qualitative goal:** We commit to increasing investment in climate solutions, where possible **Baseline date:** 31 December 2019 **Baseline performance:** 2.8% of public equity. (classified as "Environmental Impact" by MSCI)

Church of England Pensions Board

Portfolio level – investment in climate solutions target	**Methodology:** Our approach varies by asset class. In public equity we have selected (and helped to develop) a passive index that increases exposure to 'green revenues' (as defined by FTSE Russell) through a portfolio tilt. In alternatives, our approach to manager selection considers the prospects for climate solutions to be incorporated into the investment strategy (and eventual portfolio).
Asset level alignment – portfolio coverage target(s)	**Baseline date:** 31 December 2019 **Baseline performance:** In our baseline year our carbon intensity and TPI carbon performance alignment were close to benchmark **Target year(s):** 2023 (see TPI target (B) above) **Target:** 100% of our public equity mandates are subject to the following rule: "0" weight or exclude any company assessed by TPI that has a TPI carbon performance of "not aligned" with at least the national/Paris pledges, or "no or unsuitable disclosure". **Asset classes in scope:** Listed equity and corporate fixed income **Data sources:** Transition Pathway Initiative assessment, MSCI, Eikon.
Asset level alignment – engagement threshold	**Baseline performance:** 100% **Target:** 100% Due to our integration of TPI assessment throughout our stewardship approach, all public equity holdings face at least proxy voting, but also engagement and allocation decision making, based on climate characteristics
Additional information	**Methodology:** Our net zero targets and approach to climate change as a pension fund reflect our policy ambition to be at the forefront of institutional investors' approach to climate change. The Transition Pathway Initiative began publishing 1.5 degree alignment pathways in 2021, and these are incorporated into our stewardship. While our 2019 public equity portfolio had climate characteristics marginally worse than benchmark, we have achieved significant alignment, years ahead of our target portfolio alignment pathway. This has come primarily as a result of differentiating between companies based on publicly available climate assessments, a methodology we continue to support and Chair, and which enables stewardship and investment decision-making across the financial industry. **Further work:** We are proactively working to establish a common framework to assess sovereign bonds (as co-Chair of the ASCOR project), we are broadening our Net Zero approach to Sovereign Debt in light of this, and to Real Estate (though this asset class is managed indirectly via a fund-of-funds and falls out of scope of NZIF). **Fossil fuel investment:** We are members of the Powering Past Coal Alliance, and exclude investments in thermal coal (10% revenue threshold). We also exclude investments in tar sands (10% revenue threshold) and as described above, we exclude oil and gas companies not aligned to the transition (based on TPI assessment). **Operational emissions:** Target: Net Zero by 2030

For further information: The Board's stewardship reporting contains a more full account of our Net Zero approach and strategy: Stewardship Report; Climate Change Policy

Cornwall Pension Fund

Portfolio level – emissions reduction reference target	**Baseline:** December 2020 **Target Year(s):** 2025, 2030, 2045 **Target(s):** For the whole fund: -50% CO2e by 2030, net zero by 2045 For listed equity: -43% CO2e by 2025, -76% CO2e by 2030, net zero by 2045 **Baseline year performance for the target metric(s):** 31,423 tC02e (absolute emissions) (for listed equity fund holdings of $940 million) **GHG scopes included:** Scope 1 & 2 for all equities, scope 3 to be included in due course **Asset classes in scope:** Currently listed equity. Cornwall's updated RI policy includes a commitment to expanding the Fund's Net Zero target setting to incorporate other asset classes, targeting a whole of Fund approach for example, including property and infrastructure in 2022 and private equity and debt in 2022/23.
Portfolio level – investment in climate solutions	Cornwall's updated RI policy includes raising the Fund's sustainable/low carbon allocation target to 30% (currently 15%) by 2025. This currently includes a dedicated allocation of 2% to renewable infrastructure (although in practice the investment in this will be higher as part of the Fund's broader infrastructure allocation) and also an allocation to UK Renewable Energy through the Fund's Social Impact Portfolio.
Asset level alignment – portfolio coverage target	Cornwall's updated RI policy includes a commitment to developing a more detailed implementation plan for the listed equity portfolio and adopt integration (risk reduction), stewardship (transition capacity) and green targets for the portfolio.
Asset level alignment – engagement threshold	The collective engagement baseline across the whole Brunel Pension Partnership is 47.3% of financed emissions. Cornwall's updated RI policy includes a commitment to developing a more detailed implementation plan for the listed equity portfolio and adopt integration (risk reduction), stewardship (transition capacity) and green targets for the portfolio.
Additional information	The Fund has already achieved a 77% reduction in absolute emissions for the equity allocation between 2010 and 2020 (this equates to approximately 160,000 tCO2e). **Scenario(s) used:** IPCC scenario decarbonisation curve consistent with a 1.5C scenario

For further information: See our Responsible Investment page, which includes our latest Responsible Investment Policy and our Responsible Investment Outcomes Report for the previous financial year.

Devon County Council Pension Fund

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 March 2019 **Baseline performance:** 423 tC02e/mGBP invested (Weighted Average Carbon Intensity) **Target year(s):** 2030, 2050 **Target(s):** Minimum 7% per annum reduction. 50-75% reduction by 2030. Net zero by 2050. **GHG scopes included:** 21% by 2022 from 2019 • The 2022 target is minimum of 7%+ per annum reduction (linear reduction equating to 21%+) of carbon **equivalent** emissions for all listed equity portfolios. **This target includes scope 1,2 and first tier scope 3**. 50%+ by 2030 from 2019 • The 2030 target is a minimum 50% reduction (based on a 7%+ per annum reduction (geometric progression) of carbon equivalent emissions for all listed equity and corporate bond portfolios. This target includes scope 1 and 2. • We will look to set specific scope 3 emission targets in due course. We will continue report on first tier scope 3 as part standard reporting. **Asset classes in scope:** Listed equity, as baseline data only included listed equity data, but will look to add other asset classes. **Net zero scenarios:** The UNEP Gap Report (2019) states that global GHG emissions need to fall by 7.6% annually between 2020-2030 to remain in line with a 1.5°C scenario. The methodology for the UNEP Gap report scenarios is outline in section 3 of the 2019 report. The estimate as to the 2030 emissions are consistent with a least-cost pathway towards limiting global warming to specific temperature limits are calculated from the scenarios that were compiled as part of the mitigation pathway assessment of the Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5°C (IPCC SR1.5) (Rogelj et al. 2018). The IPCC pathways are synthesis of number of scenarios summarised as P1: a low energy demand scenario P2: a sustainability orientated scenario P3: a middle of-the-road scenario.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** 31 March 2019 **Baseline performance:** Not quantified **Target year:** 2025 **Target:** 5% of total fund AUM invested in renewable energy infrastructure
Asset level alignment – portfolio coverage target(s)	**Baseline:** The collective engagement baseline across the whole Brunel Pension Partnership is 47.3% of financed emissions. **Target:** Targets will be set in January 2023 following review of climate change policy working in partnership with Brunel during 2022.

Devon County Council Pension Fund

Asset level alignment – engagement threshold	**Baseline:** 31 December 2019 **Target:** The near-term target set in the NZIF is 70% increasing to 90%. We anticipate that these will be our targets.
Additional information	**Further work:** As detailed above. **Fossil fuel investment:** Policy on coal and other fossil fuel investment is embedded in the index products launched by Brunel that the Devon Fund is invested in. Adoption into wider policy is underway and forms part of the climate policy 2023 development. **Operational emissions:** Devon County Council has committed to reduce the carbon emissions from its operations to net-zero by 2030. This will include the operational emissions of the Devon County Council Investment Team in the oversight of the Pension Fund's investments, and the administration of benefits by Peninsula Pensions.

For further information: Devon County Council Climate Change; Investment Policy

Elo Mutual Pension Insurance Company

Portfolio level – emissions reduction reference target	**Baseline date:** 31 December 2019 **Baseline performance:** Listed equity investments: 208t C02e/$mn turnover (WACI, scope 1+2) Listed corporate bonds: 192t C02e/$mn turnover (WACI, scope 1+2) Direct real estate investments: Commercial properties: Electricity 19.7 kWh/m3/a; District heat 24.5 kWh/m3/a Residential properties: Electricity 4.2 kWh/m3/a; District heat 36.4 kWh/m3/a **Target year(s):** 2025, 2030, 2050 **Target(s):** Listed equity and corporate bonds: WACI -25% by 2025, targets for 2030 to be determined by YE2022. Direct real estate: Elo has joined the Energy Efficiency Agreements for Commercial Properties and Rental Housing Properties (TETS and VAETS) and committed to reduce energy consumption by 7.5% (from 2017 level by 2025). We have set an additional target of reducing the nominal energy consumption of district heat by 10% and electricity by 5% (from 2019 levels by 2025). We are currently setting targets to be net zero by 2030 or sooner. Whole portfolio: Net zero by 2050 or sooner **GHG scopes included:** Our carbon reduction targets for listed equity and corporate bond emissions cover scopes 1 and 2 at the moment. In addition, we also disclose and monitor scope 3 absolute emissions for upstream for all sectors. **Asset classes in scope:** 2025, 2030: listed equity and corporate bond investments, direct real estate investments **Net zero scenarios/methodology:** Elo has been developing its climate strategy roadmap in line with the PAII Net Zero Investment Framework, IEA Net Zero by 2050 and IPCC's 1.5°C pathways. **Emissions metrics:** Due to the changes in our AUM and allocations, we have set the interim targets on an intensity basis (WACI). However, we disclose and monitor listed equity and corporate bond emissions both in terms of intensity as well as absolute emissions. Our aim is to reduce emissions in both, and we will reassess the basis for our targets if necessary. In real estate, we disclose and monitor energy consumption of direct domestic real estate (heating and electricity, MWh), carbon footprint of real estate (tCO2e), carbon footprint of real estate investments normalised by managed assets (tCO2e/MEUR) and emissions intensity (kgCO2e/m2).
Portfolio level – investment in climate solutions target	**Qualitative target** **Baseline date:** 31 December 2021 **Baseline performance:** In direct listed equity investments, sustainable solutions account for 11.4% (environmental 6.0% and social 5.4%) of companies' revenues and for 11.7% (environmental 7.9% and social 3.9%) in direct listed corporate bonds in 2021. The share of sustainable solutions based on the market value of infrastructure investment funds was 82%. Approximately 40% of Elo's direct listed equity investments are taxonomy-eligible. **Target:** Elo has set the target to increase investments in sustainable solutions, including climate solutions in in infrastructure and direct listed equity and corporate bond investments. In addition, we follow the taxonomy-eligibility, and – once available – taxonomy-alignment, of our investments. More information can be found on pages 36–38 in Elo's annual and responsibility report 2021.

Elo Mutual Pension Insurance Company

Portfolio level – investment in climate solutions target	**Methodology:** Sustainable solutions include products and services that help solve the world's major environmental and social challenges. For listed equity and corporate bond investments we use MSCI Sustainable Impact methodology. We are also monitoring the EU Taxonomy alignment criteria. We are constantly monitoring the development of the definitions and methodologies for sustainable solutions investments. The methodologies used are described on pages 36–38 and 70 in Elo's annual and responsibility report 2021.
Asset level alignment – portfolio coverage target	**Baseline date:** 31 December 2020, to be updated **Baseline performance:** In 2020, 5% of companies in listed equity investment's AUM had set an ambitious emissions reduction target such as an SBT. In general, 66% of companies in listed equity investment's AUM had set an emissions reduction target. In 2021, these figures were 7% and 76% respectively. **Target:** To be defined, YE2023 **Work in progress:** We are working on adding other criteria. For indirect investments, we have sent out questionnaire to all of our fund managers regarding SBTs, Paris alignment and other climate issues. **Asset classes in scope:** Listed equity, other asset classes to be defined. **Data sources:** SBTi, MSCI ESG Manager and Climate Action 100+ Benchmark, other datasets and sources to be defined.
Asset level alignment – engagement threshold	**Approach:** Elo engages with companies and managers directly and via collective engagement. We are currently supporting climate related collective engagement for example through IIGCC, CA100+, CDP (Non-disclosure Campaign, Science-Based Targets Campaign) and CLC (Climate Leadership Coalition). Elo attends and participates in AGMs with a focus on the highest emitting companies in the portfolio. Voting activity is based on our ownership policy and climate strategy. In Finnish listed equities, our target is to attend the AGMs of all companies in our portfolio. Elo's participation and voting on general meetings can be found on our website.
Additional information	**Operational emissions:** Elo is committed to reducing the environmental impact of its own operations by setting emissions reductions targets. Elo's total carbon dioxide emissions in 2021 were 7,674 tCO2e (excluding investments). This includes scope 1, 2 and 3. **Fossil fuel investment:** We are currently updating our climate strategy 2030 and Responsible Investment policies including a more detailed approach to fossil fuels. From our direct listed equity and corporate bond investments we already exclude companies deriving more than 25% of sales from coal production or power generation. **Additional information:** We are currently in the middle of the process of updating our new climate strategy and targets for 2030 by YE2022. We are also updating our Principles of Responsible Investment along the process. There will be, for example, more detailed processes for non-listed asset classes, including real estate; updated engagement policy which already includes climate change and mitigation approaches; and a more detailed fossil-fuel policy.

For further information: Elo's Climate Strategy 2020-2025, Elo's annual and responsibility report 2021, Elo's ownership policy

Environment Agency Pension Fund

Portfolio level – emissions reduction reference target	**Baseline:** 30 December 2010 **Target Year(s):** 2025, 2030, 2045 **Target(s):** tC02e absolute emissions scopes 1 & 2: 2025 = 35,318 (87% reduction) 2030 = 14,580 (95% reduction) 2045 = net zero **Baseline year performance for the target metric(s):** 276,485 tC02e (absolute emissions, scopes 1 & 2) **GHG scopes included:** Scope 1 & 2 for all equities. Scope 3 to be included in due course. **Asset classes in scope:** The above reductions are for our listed equity portfolio. Across all asset classes, we have a target of halving emissions by 2030 and getting to net zero by 2045.
Portfolio level – investment in climate solutions	**Target year:** 2025 **Target:** 17% of our investments across the portfolio will directly tackle climate change by helping to reduce emissions or build resilience. **Baseline:** No baseline – target is a relative % of total investments. **Methodology:** Those assets in the FTSE Sustainable classifications of renewable & alternative energy and energy efficiency and those private market funds from our Targeted Opportunities Portfolio (TOP) which directly tackle climate change through providing lower carbon alternatives.
Asset level alignment – portfolio coverage target	EAPF is currently undertaking a transition alignment analysis of its listed equity portfolio. Further to this, we will consider what further targets we may set and over which timescale.
Asset level alignment – engagement threshold	The collective engagement baseline across the whole Brunel Pension Partnership is 47.3% of financed emissions. Further to the outcome of our transition alignment analysis, the EAPF will agree with the Brunel Pension Partnership on future engagement priorities and thresholds for action.
Additional information	**Scenario(s) used:** IPCC scenario decarbonisation curve consistent with a 1.5C scenario (2010 baseline).

For further information: The EAPF goes net zero

Government Superannuation Fund Authority

Portfolio level – emissions reduction reference target

Baseline date: 30 June 2019

Baseline performance: Carbon intensity (CO2e/$mn sales) of 202 for scope 1 and 2 from all industries; and 362 including scope 3 from fossil fuel producers.

In the absence of our own portfolio data, we assumed carbon intensity equivalent to the MSCI ACWI index in the baseline year, i.e. 100%. We monitor against both the baseline and the broad market.

Target year(s): 2025 and 2050

Target(s): A 50% reduction in carbon intensity (CO2e/$mn sales) of the public equity portfolio (global and NZ public equities) by 2025 compared to June 2019, and total investment portfolio to be carbon neutral by 2050.

Targets for other asset classes in the portfolio will be set in due course.

GHG scopes included: Scope 1 and 2 are measured and reported for all industries. Scope 3 is measured and reported for Oil, Gas, and Coal. The 4 GICS sub-industries included for scope 3 are oil and gas exploration and production, coal and consumable fuels, diversified metals and mining, and integrated oil and gas.

Asset classes in scope: Global and domestic public and private equities, Global fixed income, and insurance linked securities

Net zero scenarios/methodology: Baseline: In the absence of our own portfolio data, we assumed carbon intensity equivalent to the MSCI ACWI index in the baseline year, i.e. 100%. We monitor against both the baseline and the broad market.

As a Crown Financial Institution, the Authority has targeted reductions of portfolio carbon intensity in line with the current commitment by New Zealand to reach net zero emissions by 2050, through the Zero Carbon Act. This is consistent with Government policies and the goals of the Paris Agreement to which New Zealand has committed. These goals determine a target level that aims to keep the global average temperature less than 2 degrees above pre-industrial levels.

We intend to use the Paris Aligned Investment Initiative Net Zero Investment Framework and assess alignment of our approach to a 1.5°C pathway.

Emissions metrics: The cost of reducing global emissions will be minimised by allowing it to be reflected in relative prices of goods and services throughout the value chain according to their carbon intensity, i.e., emissions per dollar of revenue. It requires a shift of consumers away from emissions-intensive products and services not just a switch in production technology by emitters.

As an investor, the Authority can direct capital away from carbon-intensive products and services to increase their cost of capital and encourage companies to adapt to a lower carbon future. It is the companies, however, that must reduce absolute emissions in response to signals from consumers and regulators as well as from investors.

The Authority engages with companies through its active external investment managers and collectively with peer funds through Columbia Threadneedle's global engagement service occasional joint collaborations, e.g. with PRI signatories. These engagements encourage companies to disclose emissions and develop plans to reduce them. External managers are assessed on the integration of climate factors in their investment process and their stewardship activity.

Government Superannuation Fund Authority

Portfolio level – investment in climate solutions target	**Qualitative goal:** The Authority is investigating investment in dedicated climate solutions strategies. GSFA will invest as much as is consistent with overall portfolio objectives. The Authority expects that the initial investment in climate solutions will be at least 1% of the total Fund (approximately NZD 50m). GSFA has not set a specific quantitative target for investment in climate solutions as the investment is conditional on financial attractiveness as well as contribution to reducing real emissions. As at 30 June, GSFA has 37% of its public equities invested in companies that derive some revenue from clean technology solutions, as defined by MSCI ESG. **Quantitative target:** Work in progress **Methodology:** GSFA will continue to do work to determine a methodology to assess climate solution investments. At this stage GSFA can use revenue from clean technology solutions, as defined by MSCI ESG.
Asset level alignment – portfolio coverage target	**Approach:** GSFA plans to undertake a baselining assessment of asset alignment according to the Net Zero Investment Framework and set targets in due course.
Asset level alignment – engagement threshold	**Approach:** GSFA will continue to do work to improve understanding of the proportion of financed emissions that is under climate engagement either directly or on GSFA's behalf. The Authority's public equity portfolio makes up 53% of the total portfolio as at 31 August 2022. 17.1% of this allocation is managed with Paris-aligned benchmarks. Public equity and fixed income portfolio holdings are sent to a third-party global engagements provider quarterly, where engagements are carried out with companies on behalf of the four CFIs collectively, which includes GSFA.
Additional information	**Methodology:** The Authority's target to reduce its portfolio's exposure to emissions intensity by 50% by 2025 surpasses IPCC scenarios. The GSFA portfolio is 53% public equities. Reductions in this asset class are measured more reliably than other asset classes while the 15% in private equities has lower carbon intensity. The longer term target of a carbon neutral total investment portfolio by 2050 is also aligned with keeping the global average temperature less than 2 degrees above pre-industrial levels. **Operational emissions:** The Authority measures and reports its operational emissions annually. The organisation has a light operational emissions footprint and intends to lower this over time but has not set a quantitative target for this. There is an opportunity to reduce the organisation's emissions by reducing travel of both the Board and staff by increased use of online meetings and staff working from home. **Fossil fuel investment:** The Authority is currently considering transition to low carbon or Paris-aligned benchmarks for its global equity portfolio. These indices essentially exclude fossil fuels. GSFA also have some external investment managers individually benchmarked against those indices.

H. E. S. T. Australia Ltd

Portfolio level – emissions reduction reference target	**Baseline:** 30 June 2020 **Target Year(s):** 2030, 2050 **Target(s):** 2030: 50% reduction in tCO2e/AU$M invested 2050: net zero carbon emissions **Baseline year performance for the target metric(s):** 53 tCO2e/AU$M invested **GHG scopes included:** Scope 1 and 2 measured and included in the portfolio emissions across all asset classes. We seek to collect scope 3 data, but complete data is not available. We will look to improve data capture and reporting over time. **Asset classes in scope:** Listed Equities, Global Debt, Alternative Credit, Infrastructure, Property, Private Equity **Methodology:** HESTA has set portfolio carbon reduction targets as it represents HESTA's share (based on Enterprise Value) of real-world emissions. HESTA's target aligns with the aim of the Paris Agreement to limit global warming to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C, which requires economic transition to 'net zero emissions by 2050'.
Portfolio level – investment in climate solutions	**Quantitative target** **Baseline date:** 31 December 2021 **Baseline performance:** 7.7% of portfolio **Target year:** 2030 **Target:** 10% of portfolio **Methodology:** We measure progress towards our 2030 climate solutions target through annual measurement of investments aligned to SDG 7, 11.1 and 13, such as renewable energy and sustainable property, according to the Sustainable Development Investment Asset Owner Platform (SDI AOP) Taxonomy.
Asset level alignment – portfolio coverage target	HESTA plans to undertake a baselining assessment of asset alignment according to the Framework and set targets in due course.
Asset level alignment – engagement threshold	Work currently in progress. HESTA conducts company engagement through direct engagement, collaborative engagement and through service providers. Approximately half of HESTA's total scope 1 and 2 financed emissions (12 companies) are subject to direct engagement. Remaining material emitters are engaged either through collaborative engagement or service providers. Furthermore, all ASX300 companies held in the portfolio receive an annual letter ahead of voting season asking to set and deliver a verified climate strategy, with Paris aligned targets. In July 2022, HESTA conducted its annual assessment of the climate change transition progress of companies that are key contributors to portfolio emissions. The assessment identified AGL, Origin, Santos and Woodside faced significant decarbonisation challenges, requiring a major shift in their strategies to offer low carbon energy products. These companies have now been moved to a watchlist position according to HESTA's engagement escalation framework.

H. E. S. T. Australia Ltd

Additional information

Methodology: HESTA's Climate Change Report, embodying the Climate Change Transition Plan, describes the inclusion of climate considerations in investment integration and active ownership. Our targets, alongside our actions defined by clean engagement pathways and escalation, focused industry advocacy and supporting the health and community services sector through the transition are consistent with delivering the requirement in the IPCC special report on global working of 1.5°C.

Scenario(s) used: HESTA has set portfolio carbon reduction targets to manage key financial and reputational risks. Our target aligns with the aim of the Paris Agreement to limit global warming to well below 2°C, which requires economic transition to 'net zero emissions by 2050'. We intend to use the Paris Aligned Investment Initiative Net Zero Investment Framework and assess alignment of our approach to a 1.5°C pathway.

Fossil fuel policy: HESTA has a portfolio-wide exclusion, effective of 30 Sep 2022, on:

- Any listed company that derives 15% or more revenue from the mining of thermal coal.
- Any unlisted company that derives 15% or more revenue from mining or transportation of thermal coal.
- Any company that derives both:
  - 75% or more revenue from the extraction, production and refining of unconventional oil and gas; and
  - 75% or more of its reserves from unconventional oil and gas.
- Unconventional oil and gas includes tar sands, shale oil and gas and coal seam gas.

More details on HESTA's fossil fuel exclusions can be found here (Pg. 19).

Operational emissions: HESTA's operations are carbon neutral. See here for more information.

For further information: HESTA's Climate Change Report and Climate Change Statement

Updated target: Previous target can be found in the June 2022 publication of Paris Aligned Asset Owners: Initial targets disclosures. See here for the press release regarding HESTA's updated targets.

HSBC Bank (UK) Pension Scheme

Portfolio level – emissions reduction reference target	**Baseline:** 31 December 2019 **Target Year(s):** 2030 **Target(s):** 50% CO2e/$mn invested **Baseline year performance for the target metric(s):** DB: 104tCO2e/£mn invested, 78tCO2e/$mn invested DC: 103tCO2e/£mn invested, 78tCO2e/$mn invested **GHG scopes included:** Scope 1 and 2 DB portfolio: Scope 1: 45.9%, Scope 2: 48.6% DC portfolio: Scope 1: 85.0%, Scope 2: 84.6% Scope 3 emissions to be evaluated as part of next annual data gathering exercise. **Asset classes in scope:** Listed equity and corporate fixed income. We plan to engage with our real estate managers to discuss including real estate and agree targets in the first half of 2022.
Portfolio level – investment in climate solutions	HSBC Bank (UK) Pension Scheme has committed to increasing investment in climate solutions, where possible. **Baseline:** 31 December 2019 Due to the lower investment risk of the DB portfolio, it is less likely new allocations to climate solutions will be appropriate. The portfolio already contains long-term illiquid allocations to renewable energy infrastructure in the United Kingdom. However, the Trustee will allocate to solutions that are consistent with its long-term investment goals. The DC portfolio has a much greater allocation to equity, principally through the Legal & General Future World Fund. From Q3 2021, this allocation will already be achieving a 30% emissions intensity reduction relative to the FTSE All World. There will also be a doubling of the green revenue exposure – to 100% greater than the reference benchmark, as well as integration of TPI's Management Quality and Carbon Performance metrics in the portfolio construction process. Whenever the Trustee reviews the investment strategies of both the DB and DC portfolios, it will evaluate the potential of investing in climate solutions. The next upcoming review is of the regional equity allocation for the DC portfolio. These will likely be reinvested in more climate-aware versions, with a higher allocation to climate solutions (EU Taxonomy defined). Given the future de-risking investment strategy of the DB portfolio, we have not set a specific quantitative target for climate solutions yet.
Asset level alignment – portfolio coverage target	**Target year:** 2030 **Target:** 100% of assets expected to meet least "aligning" criteria **Baseline year performance for the target metric(s):** As at 31 December 2019: **DB:** 50% of the corporate fixed income portfolio had an average TPI Management Quality score of 3, meaning climate change-associated risks are being integrated into operational decision-making. No data exists currently for the remaining 50%. **DC:** 76% of the DC portfolio (listed equity and corporate fixed income) had an average TPI Management Quality score of 2.7, meaning capacity is being built to manage climate-related risks. No data exists currently for the remaining 24%.

HSBC Bank (UK) Pension Scheme

Asset level alignment – portfolio coverage target	We recognise this metric only captures governance and decision making at the issuer level. We have begun collecting the percentage of our holdings that have set Science-based targets under the SBTi and we will consider adopting the new TPI IEA-consistent Carbon Performance benchmark when it is released. **Scope of target(s):** Listed equity and corporate fixed income **Data sources:** Listed equity & corporate fixed income: CA100+, Transition Pathway Initiative (Carbon Performance and Management Quality), SBTi. The alignment metrics referenced are those currently utilised but we will be reviewing what additional metrics we will use going forward to augment existing measurement processes, including those closer to the framework. The HSBC Trustee views this as an evolving area where new metrics may evolve and so is keeping a flexible approach to allow time for the industry to evolve a "widely shared approach" to measuring alignment.
Asset level alignment – engagement threshold	We are currently assessing a more accurate measure of this value. Currently 79% of our listed equity, corporate fixed income and real estate managers are members of the Climate Action 100+ initiative. However, we recognise there are gaps in our largest holdings not being subject to targeted engagement. We are currently in the process of reviewing the operating model through which we exercise our stewardship and engagement responsibilities. When this is complete, we will have a better assessment of the proportion of financed emissions that are aligned or subject to engagement.
Additional information	**Scenario(s) used:** In line with the findings of the most recent Intergovernmental Panel on Climate Change (IPCC) report. **Additional info:** Emissions reduction primarily to be driven by real economy reduction, rather than portfolio construction. **Fair share:** Our commitment is to target real economy emissions reductions in line with global requirements identified by the IPCC. Whereas the DB portfolio will continue to run-off, the DC portfolio is expected to grow exponentially in size over the next ten years. This portfolio will be diversified across sectors and geographies and will likely have a lower tracking error to the real economy. Therefore there is not an appropriate solution to reduce the emissions intensity of the portfolio other than targeting absolute emissions in the economy. **Fossil fuel policy:** The Future World Fund (over 60% of the DC portfolio, £3.4bn) excludes companies generating 30% or more of revenues from thermal coal mining/extraction. This fund also excludes ten companies from the global benchmark due to the lack of progress made on targeted engagement activities. This list includes a number of companies from the fossil fuels extraction sector.

For further information: Press release: HSBC Bank (UK) Pension Scheme sets out plans to achieve net zero by 2050 or sooner

Ilmarinen Mutual Pension Insurance Company

Portfolio level – emissions reduction reference target	**Baseline date:** 2020 (total portfolio): • Direct listed equity 2020 • Finnish real estate 2018-2020 average • Corporate bonds 2020 (roadmap under development) • International real estate 2021 (roadmap under development) More detailed asset class specific roadmap are being built **Baseline performance:** • Direct listed equity: 216 tCO2e/MEUR sales (WACI) • Finnish real estate use phase: 27 CO2e/m2 • Finnish real estate new construction net: 387 CO2e/m2 **Target year(s):** • Direct listed equity: 2025, 2030, 2035 • Finnish real estate: 2025, 2030, 2035 **Target(s):** • Total portfolio: 2035 Net Zero • Direct listed equity: -30% (2025) and -50% (2030) • Finnish real estate use phase: -50% (2025) and -80% (2030) • Finnish real estate new construction: -15% (2025) and -30% (2030) **GHG scopes included:** Direct listed equity targets cover scope 1 and 2 emissions. However, we monitor and report scope 3 emissions and investigate the possibility to further set targets. Finnish real estate covers scope 1 and 2 and the material scope 3 emissions (construction and demolition phase). **Asset classes in scope:** Direct listed equity and Finnish real estate. We are currently building a corporate bond roadmap and international real estate roadmap. Going forward, our aim is to cover the whole portfolio (one to two asset class specific roadmaps per year). **Net zero scenarios/methodology:** Aligned with IEA scenarios from energy technology perspective and the PAII Net Zero Investment Framework. In Finnish real estate, we used data from energy suppliers and their climate roadmaps. **Emissions metrics:** We monitor and report annually both intensity-based footprint and absolute emissions (financed emissions) of our direct listed securities portfolios. We have noticed our listed equity portfolio absolute emissions have increased less than portfolio size, so the portfolio has become more efficient. Corporate bonds financed emissions have decreased, but the portfolio is limited in size. We are investigating options to include absolute emissions-based targets in the coming years.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline year:** 2021 **Target year:** 2025 **Target:** by 2025, 1.5 times 2021 level

Ilmarinen Mutual Pension Insurance Company

Portfolio level – investment in climate solutions target	**Methodology:** We included both direct and fund holdings. We've run our listed equity holdings through MSCI SDG tool and measured the investees' exposure to environmental solutions. Our current data system doesn't allow product level analysis on our private equity holdings. We hope to develop our systems going forward and believe we can provide data on private equity in time. Green infrastructure includes investments in the industries listed by IIGCC except ICT. Green bonds are labeled green bonds, and we also added our non-listed debt investments in the industries listed by IIGCC except ICT as explained above. Climate friendly property is property with environmental certificate such as LEED Gold or similar. Sustainable forestry is certified forest holdings.
Asset level alignment – portfolio coverage target	**Approach:** Ilmarinen currently has the following baseline and targets at the total portfolio level: • 2020 baseline for direct listed equity: 2.4C degree trajectory • Target(s): 2025: below 2 degree 2030: below 1.5 degree Asset level target setting, and monitoring is currently under development. Overall, collecting and analysing data is work in progress in relation to IIGCC alignment criteria. 2020 baseline is 34% (2021: 40%), where our data is based on our service providers' alignment methodology (i.e. share of portfolio below 2 degree trajectory). One should note that the coverage is 80%. This approach is different to IIGCC's definition of "aligning companies". **Data sources:** For listed equity we are using service provider data and other open-access sources such as TPI.
Asset level alignment – engagement threshold	**Work in progress:** We aim to set a target in the coming years. Direct and collaborative engagement with most high emitting companies in our portfolio, currently covering over 40% (direct engagement only) of financed emissions. Engagement target is work in progress. For proxy voting we use Sustainability Policy that pays specific attention to climate and other ESG-relevant items.
Additional information	**Methodology:** Our targets are directly in line with 50% global reduction target and secondly, we invest in transition which supports real economy decarbonisation. **Operational emissions:** Work in progress **Fossil fuel investment:** Coal policies for direct listed equity: • Excluding companies planning new thermal coal investments starting 2021 • Excluding companies with thermal coal extraction revenue starting 2021

For further information: Ilmarinen Climate Roadmap, Ilmarinen's Annual and Sustainability Report 2021

Lægernes Pension (Danish Medical Doctors' Pension Fund)

Portfolio level – emissions reduction reference target	**Baseline date:** Holdings as of 31 December 2019 **Baseline performance:** Listed equity: 5,95 tCO2e/DKKmn Listed corporate bonds: 18,90 tCO2e/DKKmn Real estate: 12 kgCO2e/owned m2 **Target year(s):** 2025, 2050 **Target(s):** Lægernes Pension has adopted a net zero target for 2050. In order to achieve the target we have set an interim target for 2025. By 2025 we target reductions of: • Listed equity: 30% reduction (tCO2e/DKKmn) • Listed corporate bonds: 25% reduction (tCO2e/DKKmn) • Real estate: 55% reduction (kgCO2e/owned m2) Baseline and 2025 targets are based on scope 1 and 2. We intend to include scope 3 emissions over time. **GHG scopes included:** Data coverage for scope 1 and 2 emissions: Equities: 98%. Corporate bonds: 58% Real estate: 83% Scope 3: To be included at a later point. **Asset classes in scope:** Listed equity, listed corporate bonds, and real estate (Danish properties, ownership ≥25%). The 2023 target will be published for an additional asset class, infrastructure. **Net zero scenarios/methodology:** Methodology is based on AOA Target Setting Protocol.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** Holdings as of 31 December 2021 **Baseline performance:** 1.7bn USD (approx. 11bn DKK). Assets classes currently included: Listed equities, listed corporate bonds, sovereign bonds, infrastructure, European real estate **Target year:** 2030 **Target:** 15% of portfolio in 2030. By 2030, 15% of the investment portfolio (AUM) is to be invested in line with one or more of the six environmental objectives of the EU taxonomy. The commitment will mark an increase of at least 50% by 2030 compared to the investment level as of end 2021.

Lægernes Pension (Danish Medical Doctors' Pension Fund)

Portfolio level – investment in climate solutions target	**Methodology:** The definition of green investments is based on the EU taxonomy for sustainable activities (environmentally sustainable economic activities) and the European green bond standard. For the equity, corporate and sovereign bond portfolios, the proportion of green investments, is estimated using alignment data from MSCI and data on green bonds from Bloomberg, respectively. For the infrastructure portfolio, only the proportion of eligibility is estimated. The estimate is based on the proportion of assets in the renewable energy sector. For the European real estate portfolio, alignment is based on data from relevant asset manager in accordance with the criteria stipulated in the Commissions Delegated Act (EU) 2021/2139.
Asset level alignment – engagement threshold	**Approach:** Lægernes Pension engages in dialogues with our investment companies through external partners. Proxy voting is executed through ISS-ESG. On climate specifically, Lægernes Pension engage with high emitters, through the international investor network Climate Action 100+.
Additional information	**Fossil fuel investment:** Lægernes Pensions fossil fuel policy includes investment restrictions on fossil fuel exposure. Thresholds are: • Extraction of thermal coal: >1% of revenue. • Energy production of thermal coal: >50% of revenue. • Extraction of oil and gas from oil sands: >5% of revenue. • Arctic oil and gas extraction: >5% of revenue. The policy is currently under review and is expected to be revised by end of 2022.

For further information: Lægernes Pensions ESG report 2021

Lloyds Banking Group Pensions Trustees Limited

Portfolio level – emissions reduction reference target	**Baseline date:** 31 December 2020 **Baseline performance:** 62.5tC02e/$mn invested for listed equity and listed corporate bonds (scope 1 and 2) **Target year(s):** 2030, 2050 **Target(s):** -50% tCO2e/$mn invested by 2030 Net zero by 2050 or sooner **GHG scopes included:** Scope 1 and 2 emissions for listed equities and listed corporate bonds. Scope 3 emissions to be included in the future when data coverage and quality improves. Note we appreciate this will lead to short term fluctuations against our target. **Asset classes in scope:** The target portfolio reference target covers all asset classes. However, currently only measure and report on listed equities and listed corporate bonds. Other asset classes will be reported as data coverage and quality improve. **Net zero scenarios/methodology:** Methodology used is consistent with the IIGCC Net Zero Investment Framework. Scenarios used are consistent with global 1.5 degree scenarios in the Intergovernmental Panel on Climate Change (IPCC). **Emissions metrics:** In aggregate, AUM is expected to reduce over time, reducing carbon intensity should lead to a reduction in absolute emissions.
Portfolio level – investment in climate solutions target	**Qualitative target** **Approach:** We are committed to increasing investment in climate solutions in line with our fiduciary duties and risk appetite. No quantitative target has been set at this point in time. We expect our allocation to climate solutions to increase as investment opportunities that meet our risk appetite expand.
Asset level alignment – portfolio coverage target	**Baseline date:** 31 December 2020 **Baseline performance:** 42% of assets meeting at least “aligning” criteria **Target year:** 2030 **Target:** 100% **Asset classes in scope:** The target covers all asset classes. However, the baseline only includes listed equities, listed corporate bonds, sovereign bonds and real estate. Other asset classes will be reported as data coverage and quality improve. **Methodology:** Our approach to assessing alignment to Paris is top-down focused at present. It varies by asset classes and is subject to data availability (currently limited to scope 1 and 2 emissions) and practicality of assessing alignment to Paris for that asset class. For example, for Sovereign Bonds we rely on the Sovereign’s legally binding commitment to the Paris Agreement. For other asset classes, we assess emissions against Paris Aligned Benchmarks and other external data points that could be reasonable and practical for assessing alignment to Paris. Over time our approach will evolve to focus on a bottom-up assessment of the portfolio where possible to do so as data quality and coverage improves.

Lloyds Banking Group Pensions Trustees Limited

Asset level alignment – engagement threshold	**Approach:** Our engagements with companies are through our investment managers, where the majority of them are members of the Climate Action 100+ initiative. We have active engagement with all of our investment managers on the portfolio holdings, including those in material sectors. We also engage with consultants, custodians/administrators, data providers and the wider investment community to achieve net zero by 2050.
Additional information	**Methodology:** Our medium and long term carbon emission targets apply to 100% of the assets under management and are consistent with the IPCC 1.5 degree global warming pathway. **Operational emissions:** Work in progress. However, given the outsourced nature of the pension schemes, the operational emissions in scope 1 and 2 are expected to be de minimis. It is worth noting, Lloyds Banking Group plc has committed to net zero operational emissions by 2030. **Fossil fuel investment:** In 2021, a number of exclusions and tilts were introduced to help manage the exposure to fossil fuels and sectors deemed to be highly exposed to climate change. As a baseline, the Trustee excludes companies that generate 10% or more of their revenue from thermal coal where possible and practical to do so. Furthermore, having worked with strategic partners to analyse the impact of climate change, maturity limits in the listed corporate bond portfolios (c. $12bn) have been introduced on sectors that are deemed to be highly exposed to climate change. Some of the listed equity (c. $1.9bn) has also implemented climate tilts towards companies more aligned to the Paris Agreement as assessed by the Transition Pathway Initiative. We plan to increase this over time.

For further information: Please note, there are 5 separate pension schemes under Lloyds Banking Group Pensions Trustees Limited. The links below relate to the schemes that have made mandatory public climate disclosures for the year ending 31st December 2021.

Lloyds No.1, Lloyds No.2, HBOS

National Grid UK Pension Scheme

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 30 June 2020 **Baseline performance:** Sec A: 78tC02e/£mn invested Sec B: 81tC02e/£mn invested **Target year(s):** 2030, 2050 **Target(s):** Target by 2030: Reduction of 50% CO2e/£mn invested Target by 2050 or sooner: Net Zero **GHG scopes included:** Target setting currently only includes scope 1 and 2, with plans to include scope 3 over time, in line with the Net Zero Investment Framework recommendations. **Asset classes in scope:** Listed Equities and Corporate Fixed Income. Currently working on incorporating Real Estate with further details to follow. **Methodology/ net zero scenarios:** NGUKPS has used the Paris Aligned Investment Initiative Net Zero Investment Framework (NZIF) to set the target and assessed the alignment to a 1.5°C pathway. In particular, NGUKPS is adopting a 50% reduction in emissions intensity by 2030 pathway to align with the IPCC's modelled global pathways in which CO2 emissions are reduced to Net Zero globally around 2050, with no or limited overshoot. **Emissions metrics:** The finance emission target used above is based on absolute carbon emissions scaled by £mn invested. A reduction in this measure over time (assuming the amount invested does not fluctuate) does directly translate to a reduction in absolute emissions.
Portfolio level – investment in climate solutions target	**Qualitative goal:** NGUKPS is a mature scheme well into their de-risking journey. NGUKPS will endeavour to increase investments in climate solutions, where possible noting the constraints around its maturity. **Methodology:** NGUKPS will continue to monitor developments in data and the evidence base in defining allocations to climate solutions as we increase investments in the space if appropriate to do so. The scheme is currently assessing the possibility to evaluate the percentage of assets in the portfolio that are aligned or eligible to meet the EU Taxonomy as a reasonable proxy for the percentage of the portfolio currently invested in climate change opportunities.
Asset level alignment – portfolio coverage target(s)	**Baseline date:** 20 June 2020 **Baseline performance:** NGUKPS has assessed the proportion of assets meeting at least 'aligning' criteria. Based on this assessment the proportion of material sector assets meeting at least aligning criteria is 32% and 29% of Section A and Section B respectively. Having said that, data coverage remains poor with approximately 50% of the portfolio still needing to be classified. We therefore expect the baseline to fluctuate considerably as coverage improves. **Target date:** 2025 and 2040 **Target:** Target by 2025: Proportion of assets in material sectors expected to meet at least "aligning" criteria as follows:

National Grid UK Pension Scheme

Asset level alignment – portfolio coverage target(s)	Section A: Of our investments in 'material' sectors, 20% will be either Type 1 (already at net zero GHG emissions), Type 2 (aligned to net zero) or Type 3 (aligning to net zero). Section B: Of our investments in 'material' sectors, 20% will be either Type 1 (already at net zero GHG emissions), Type 2 (aligned to net zero) or Type 3 (aligning to net zero). We note that the target set above is below the current baseline. This is due to the expectation that the baseline will fluctuate as coverage improves. That said, NGUKPS has an ambition to increase these targets over time as confidence around the data improves. **Target by 2040:** Of our investments in 'material' sectors, 100% will be either Type 1 (already at net zero GHG emissions), Type 2 (aligned to net zero) **Asset classes in scope:** Listed Equities and Corporate Fixed Income. **Data sources:** CA100+ benchmark, Transition Pathway Initiative, SBTi and MSCI
Asset level alignment – engagement threshold	**Target:** In the near term NGUKPS has the ambition for 70% of financed emissions in material sectors to either meet the net zero "aligned" criteria or be subject to direct or collective engagement & stewardship actions. By 2030, the scheme has the ambition for 90% of financed emissions in material sectors to either meet the net zero "aligned" criteria or be subject to direct or collective engagement & stewardship actions.
Additional information	**Fossil fuel investment:** The scheme has a policy in place to phase out thermal coal-related investments by the end of 2022.

For further information: Climate Change Strategy Statement

National Provident Fund

Portfolio level – emissions reduction reference target	**Baseline date:** 30 June 2019 **Baseline performance:** Carbon intensity (CO2e/$mn sales) of 202 for scope 1 and 2 from all industries, and 362 including scope 3 from fossil fuel producers. In the absence of our own portfolio data, we assumed carbon intensity equivalent to the MSCI ACWI index in the baseline year, i.e. 100%. We monitor against both the baseline and the broad market. **Target year(s):** 2025 and 2050 **Target(s):** A 50% reduction in carbon intensity (CO2e/$mn sales) of the public equity portfolio (global and NZ public equities) by 2025, and total investment portfolio to be carbon neutral by 2050. Targets for other asset classes in the portfolio will be set in due course. **GHG scopes included:** Scope 1 and 2 are measured and reported for all industries. Scope 3 is measured and reported for Oil, Gas, and Coal. The 4 GICS sub-industries included for scope 3 are oil and gas exploration and production, coal and consumable fuels, diversified metals and mining, and integrated oil and gas. **Asset classes in scope:** Global public equities, New Zealand public equities, and Global fixed income **Net zero scenarios/methodology:** NPF is a statutory provider of superannuation schemes. Like New Zealand's Crown Financial Institutions, NPF has targeted reductions of portfolio exposure to carbon intensity in line with the current commitment by New Zealand to reach net zero emissions by 2050, through the Zero Carbon Act. This is consistent with Government policies and the goals of the Paris Agreement to which New Zealand has committed. These goals determine a target level that keeps the global average temperature less than 2 degrees above pre-industrial levels. We intend to use the Paris Aligned Investment Initiative Net Zero Investment Framework and assess alignment of our approach to a 1.5°C pathway. **Emissions metrics:** The cost of reducing global emissions will be minimised by allowing it to be reflected in relative prices of goods and services throughout the value chain according to their carbon intensity, i.e., emissions per dollar of revenue. It requires a shift of consumers away from emissions-intensive products and services not just a switch in production technology by emitters. As an investor, NPF can direct capital away from carbon-intensive products and services to increase their cost of capital and encourage companies to adapt to a lower carbon future. It is the companies, however, that must reduce absolute emissions in response to signals from consumers and regulators as well as from investors. NPF engages with companies through its active external investment managers and collectively with peer funds through Columbia Threadneedle's global engagement service occasional joint collaborations, e.g. with PRI signatories. These engagements encourage companies to disclose emissions and develop plans to reduce them. External managers are assessed on the integration of climate factors in their investment process and their stewardship activity.
Portfolio level – investment in climate solutions target	**Qualitative goal:** NPF is investigating investment in dedicated climate solutions strategies. NPF will invest as much as is consistent with overall portfolio objectives. NPF expects that the initial investment in climate solutions will be at least 1% of the total Fund (approximately NZD 20m).

National Provident Fund

Portfolio level – investment in climate solutions target	NPF has not set a specific quantitative target for investment in climate solutions as the investment is conditional on financial attractiveness as well as contribution to reducing real emissions. As at 30 June, NPF has 32.9% of its public equities invested in companies that derive some revenue from clean technology solutions, as defined by MSCI ESG. **Quantitative target:** Work in progress **Methodology:** NPF will continue to do work to determine a methodology to assess climate solution investments. At this stage NPF can use revenue from clean technology solutions, as defined by MSCI ESG.
Asset level alignment – portfolio coverage target	**Approach:** NPF plans to undertake a baselining assessment of asset alignment according to the Net Zero Investment Framework and set targets in due course.
Asset level alignment – engagement threshold	**Approach:** NPF will continue to do work to improve understanding of the proportion of financed emissions that is under climate engagement either directly or on NPF's behalf. NPF's public equity portfolio makes up 42% of the total portfolio as at 31 August 2022. 22.8% of this allocation is managed with Paris-aligned benchmarks. Public equity and fixed income portfolio holdings are sent to a third-party global engagements provider quarterly, where engagements are carried out with companies on behalf of the four CFIs collectively, which includes NPF.
Additional information	**Methodology:** NPF's target to reduce its portfolio's exposure to emissions intensity by 50% by 2025 is consistent with the IPCC requirement. The NPF portfolio is 42% public equities. Reductions in public equities are measured more reliably than other asset classes. The longer term target of a carbon neutral total investment portfolio by 2050 is also aligned with keeping the global average temperature less than 2 degrees above pre-industrial levels. **Operational emissions:** NPF measures and reports its operational emissions annually. The organisation has a light operational emissions footprint and intends to lower this over time but has not set a quantitative target for this. There is an opportunity to reduce the organisation's emissions by reducing travel of both the Board and staff by increased use of online meetings and staff working from home. **Fossil fuel investment:** NPF is currently considering transition to low carbon or Paris-aligned benchmarks for its global equity portfolio. These indices essentially exclude fossil fuels. NPF also have some external investment managers individually benchmarked against those indices.

For further information: NPF's Climate-related Disclosure report, which constitutes an investor climate action plan, and is TCFD aligned, will be able to be found on its website under publications, (https://www.npf.co.nz/) by the end of the calendar year. The Climate-related disclosure report going forward will include information on progress and strategy to achieve climate targets, alongside GSFA's climate actions, engagement and integration etc.

Nest Corporation

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2019 **Baseline performance:** See below **Target year(s):** 2025, 2030 **Target(s):** -30% CO2e/£mn invested by 2025 -50% CO2e/£mn invested by 2030 **GHG scopes included:** Scope 1 and 2 for the 2025 target, Scope 3 to be phased in by 2025 for the 2030 target. **Asset classes in scope:** Listed equity and corporate fixed income (currently c. 65% of our total AUM) **Methodology/ net zero scenarios:** IEA NZE2050. This target is implemented through portfolio level sub-targets on a "fair share" basis. For example, our developed market equity portfolio, which makes up nearly half of our total assets, has a target of -35% CO2e/$mn invested by 2025 from a 2019 baseline of 56.4 Scope 1+2 CO2e/$mn. Our investment grade credit portfolio has a self-decarbonisation target of -7% CO2e/£mn invested per annum from a 2020 baseline, as we only started investing in the asset class in 2020. As our managers use different data providers and due to our changing asset allocation mix, we have not aggregated these into one baseline metric. We are gradually reviewing each of our portfolios to set specific reduction targets. This includes private markets which we aim to have covered by 2025. **Emissions metrics:** Our developed market equity portfolio also has targets on absolute emissions reductions relative to its benchmark and we also report on absolute financed emissions on an annual basis in our TCFD report. Our target of net zero emissions by 2050 is based on absolute emissions. However, due to our projected growth in AUM we feel that an interim intensity target is more appropriate.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline:** We only started investing in renewable energy infrastructure in late 2019 so have not set a baseline, as this would've been effectively zero. **Target year:** 2030 **Target:** £1.4 bn **Methodology:** Our current target is based on our projected allocation to renewable energy infrastructure. Please note, we have only recently added this asset class and as a result have added an absolute target, rather than a percentage increase. We are also considering broader definitions of climate solutions and will update our target once this has been completed.
Asset level alignment – portfolio coverage target(s)	**Baseline date:** 31 December 2021 **Baseline performance:** 19.5% of developed market equity portfolio have set targets in line with well below 2C as at June 2021 **Target date:** 2025

Nest Corporation

Asset level alignment – portfolio coverage target(s)	**Target:** We are currently working with our developed market equity fund manager on setting an appropriate target. Our preferred methodology is SBTi but coverage is low and the accreditation process can take time. **Asset classes in scope:** Listed equity developed markets initially to reflect the higher proportion of holdings covered by SBTi, but this will be extended to other portfolios gradually. **Data sources:** SBTi
Asset level alignment – engagement threshold	**Target:** Engaging with companies responsible for at least 70% of our financed Scope 1 + 2 emissions by 2025.
Additional information	**Methodology:** Our overall target is in line with the IEA NZE2050 scenario. At portfolio-level we are using a "fair share" approach of setting stricter targets for developed markets and lower targets for other markets and asset classes to build the overall goal. **Fossil fuel investment:** We already exclude companies deriving more than 20% of revenues from thermal coal production or power generation, oil sands or arctic exploration of oil & gas, as well as companies investing in new developments in these sectors. This threshold will be tightened over time to a maximum of 10% of revenues in 2023 and 0% in 2025, unless companies have committed to a full phase-out of these activities by 2030 at the latest. See Nest's Climate Change Policy. **Operational emissions:**We have set a target of reaching net zero operational Scope 1 and 2 emissions by 2050 at the latest. Operational emissions are disclosed in the Nest Corporation annual reports and accounts in Appendix 2.

For further information: Nest's climate change risk policy; Nest's 2025 climate change roadmap; Nest's 2020/21 TCFD report

New York State Common Retirement Fund (CRF)

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 2022 **Baseline performance:** Percent of public assets aligned with 1.5-degree scenario is 13% **Target year(s):** 2030 and 2040 **Target(s):** The CRF's overarching quantified target is to reach 100% portfolio alignment with a 1.5-degree scenario or net-zero greenhouse gas emissions across the portfolio by 2040. The CRF's interim target is 50% of public securities to be aligned with a 1.5-degree scenario by 2030. **GHG scopes included:** Coverage includes scope 1 and 2 **Asset classes in scope:** Public corporate securities held in the CRF's public equity and fixed income asset classes, which covers over 50% of the CRF's entire portfolio. **Methodology:** The CRF's portfolio alignment assessment uses a number of different data points, factors, and models, including companies' historical emissions and reduction trends, transition strategies and capital expenditures, and emissions reduction goals, as well as public policy impacts and technological advances, to assess whether a company is aligned with a 1.5-degree scenario and on a trajectory to achieve net zero by 2040. The CRF's primary metric to measure progress toward net-zero is portfolio alignment with a 1.5-degree scenario, not a pure emissions reduction target. Carbon emissions (reported and estimated) are a component of our 1.5-degree alignment target, but we view pure carbon-footprinting as an inherently backward-looking metric. Measuring the percentage of assets aligned with a 1.5-degree scenario is a more appropriate, forward-looking metric, that better measures our goal of having both our portfolio and the real economy align with net-zero by 2040. While we will continue to measure the carbon footprint of the CRF's public securities, we believe that it should not be our primary metric for measuring progress toward net-zero because it does not evaluate an issuer's plans, policies and investments.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** 2018 **Baseline performance:** $7 billion committed to Sustainable Investment and Climate Solutions (SICS) Program in 2018. **Target date:** 2030 Target year: $20 billion allocated to the SICS program, targeting 75% ($15 billion) to investments in climate solutions. **Methodology:** The metric measures the total dollar amount committed to the CRF's SICS Program that supports climate solutions by tallying the total commitment to three specific SICS themes: climate and environment, resource efficiency, and pollution and waste management.

New York State Common Retirement Fund (CRF)

Asset level alignment – portfolio coverage target(s)	**Baseline date:** 2022 **Baseline performance:** 13% in 2022 to date **Target date:** 2030 **Target:** 50% **Asset classes in scope:** Public corporate securities held in the CRF's public equity and fixed income asset classes. **Data sources:** Working with multiple consultants, analysts, and data providers, using proprietary modelling, research and datasets to assess assets' alignment.
Asset level alignment – engagement threshold	**Baseline:** Currently 13% of the CRF's public securities meet our net zero aligned criteria **Target:** For 2030, the CRF has set an interim goal of actively engaging with 50% of the public companies in our portfolio, which are in high-impact sectors (as defined by TCFD), on net-zero alignment.
Additional information	**Methodology:** The CRF's interim goal is alignment of 50% of publicly traded assets with a 1.5-degree scenario by 2030, which is consistent with the IPCC's stated carbon reduction goals necessary to limit global warming to 1.5 degrees by 2100. **Fossil fuel investment:** The CRF's Climate Action Plan and the transition risk assessments and minimum standards that we apply to energy sector investments are all derived from science-based policies and research. The CRF has applied transition risk assessments and minimum standards to certain energy sector industries, including thermal coal mining, oil sands, and shale oil and gas, which inform prioritized engagements and investment decisions. The CRF will begin to evaluate integrated oil and gas companies in 2022. For further information of Transition Assessment and Minimum Standards **Operational emissions:** The CRF's investment staff are part of the New York State Office of the State Comptroller, which has a variety of initiatives to reduce operational emissions, including initiatives that focus on energy usage and efficiency in our buildings, travel and fleet improvements, and recycling across the organization. Energy efficiency improvements, such as LED lighting installation, garnered an Energy Star Rating of 85 for OSC's headquarters at 110 State Street in Albany, New York in 2016.

For further information: Net zero commitment; New allocation to the climate transition index and interim goals; Climate Action Plan Progress Report 2021

New Zealand Super Fund

Portfolio level – emissions reduction reference target	**Baseline date:** 30 June 2022 - We set our targets relative to our reference portfolio. Therefore, our baseline is the emissions intensity of the Reference Portfolio in the current year. We will consider introducing a decarbonisation target in the future (our passive equity investments are set up to decarbonise by 10% each year). **Baseline performance:** 194.8 Emissions Intensity per $ of firms sales tonnes of CO2e/$USm Sales **Target year:** 2025 **Target(s):** 40% by 2025 emissions Intensity per $ of firms sales tonnes of CO2e/$USm Sales relative to the 2025 CO2e/$USm Sales of the ACWI IMI. **GHG scopes included:** Our targets are based on scope 1 and 2 emissions only due to data limitations for our unlisted assets. However, we are looking to include scope 3 emissions over time. Our investments into Paris Aligned Benchmark indices (33.5% of NAV) already incorporate scope 3 emissions. **Asset classes in scope:** Listed equity, direct investments, investment through funds, including real estate and infrastructure. Currently, our market cap approach to accounting approach does not attribute emissions to fixed income. Further, we attribute nil emissions (and revenue) to our strategic tilting program and other market neutral strategies (mainly executed through derivatives), as well as life settlements, natural catastrophe insurance, active collateral, and 5G spectrum. We plan to review our approach to carbon accounting and whether these assets will be covered by our targets, should they have carbon attributed to them. **Methodology/net zero scenarios:** We had targets in place prior to signing up to the Paris Aligned Asset Owners Commitment, so rather than setting a new target, we have tested whether our target was sufficiently ambitious. The IPCC Special Report on Global Warming of 1.5oC suggests that real world emissions need to decrease by 50% by 2030. Our targets seek to deliver a 40% reduction 5 years earlier. **Emissions metrics:** Our Reference Portfolio had 3.5m tonnes CO2-e scope 1 and 2 emissions and an emissions intensity of 230.7 per tonnes of CO2-e per US$m revenue in 2019. This compares to 2.9m tonnes CO2-e and a carbon intensity of 194.8 per tonnes of CO2-e per US$m revenue in 2022. This means that our targets are more ambitious than the same percentage targets set against a historical benchmark – we would have achieved a 60.6% and a 56.9% respectively against the historic benchmark versus a 49.0% reduction compared to our actual benchmark. We will continue to monitor this and may review our targets if this changes.
Portfolio level – investment in climate solutions target	**Qualitative goal** **Baseline:** As we do not have a quantitative target, we do not have a formal baseline but we believe that our unadjusted reference portfolio represents a measure of how we would invest if we did not have a climate change objective. For the ACWI IMI - 8.3% is invested in low carbon solutions and 5.4% of revenue is green revenue.

New Zealand Super Fund

Portfolio level – investment in climate solutions target	**Approach:** Investing in climate change solutions is one of the four pillars of our Climate Change Investment Strategy and we seek to invest in climate change solutions not just because they play an important role in generating the energy transition but also because we believe they make attractive investments. We also have a climate search project which explicitly pursues investment in climate solutions. We seek to invest in commercially attractive climate solutions across the whole portfolio. Our passive equity portfolios invested in Paris-aligned Benchmark portfolios which have explicit green revenue objectives of: (1) doubling Green Revenue exposure; (2) increasing the Green/fossil fuel-based ratio to 4x higher than their parent indices; and overweighting of companies providing climate solutions. Based on MSCI's data, 13.4% of our total long equity holdings are invested in low carbon solutions and 7.4% of the revenue of these holdings is green revenue (as defined by MSCI). We are currently exploring opportunities to deploy capital in carbon credits, reforestation and have recently deployed capital into energy transition and renewable energy investments. On top of that, we have created a Sustainable Transition Opportunity which seeks to invest in technologies which contribute towards a sustainable economy and have deployed into two access points. We are working through the best way to measure and increase the proportion the fund that is invested in impact investments (including in climate solutions). We will consider whether to set a quantitative target for climate solutions in 2024.
Asset level alignment – portfolio coverage target	**Baseline:** We have not yet set an asset level alignment target for our portfolio because metrics are still emerging and because our portfolio is in a state of flux as we transition our reference and passive portfolios to a Paris-Aligned Benchmark indices. We have provided some data on our relative performance below, but this should not be considered a baseline. Instead, we have taken significant actions to improve the alignment of our underlying assets, such as shifting our passive equity into the Paris-Aligned Benchmark indices and engaging with our private assets. **Approach:** 33.5% of our assets (by NAV) are invested in Paris Aligned Benchmark indices. At an individual holding level, 37.1% of our listed equity and long synthetic exposures portfolio have set Science-Based Target initiative approved targets compared to 31% for the ACWI IMI. We have not yet selected a methodology for assessing the alignment of our private assets but we ask each of them (except those in run-off) to report their carbon footprints and encourage them to set net zero targets. Where we believe we can help a manager or direct asset to improve their climate change strategy, we will work to support them. **Data sources:** We have sourced our data on SBTi alignment from MSCI. Percentage holding data is from internal data.

New Zealand Super Fund

Asset level alignment – engagement threshold	**Approach:** We have voting guidelines on climate change and vote all of our shares in a consistent way. Our default position is to support climate change-related resolutions, which we do unless there is a compelling reason not to. We recall shares that we have lent out to vote on significant climate change issues. We use Columbia Threadneedle to lead our engagements with the companies within our global equity portfolio. We are also members of CA100+ and the TPI.
Additional information	**Operational emissions:** We have been certified as operationally carbon neutral for the last four years. For the last two years, we have elected to offset our operational carbon emissions plus 20% of the rolling average of the past five years, effectively becoming carbon negative. **Fossil fuel investment:** We target an 80% reduction in fossil fuel reserves by 2025 relative to the ACWI IMI. See the Reduce section of our Climate Change Report for further details.

For further information: Climate action plan will be available here once it has been published. TCFD report available here.

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Portfolio level – emissions reduction reference target(s)	**Baseline date:** 2021 (based on underlying emissions from 2019) **Baseline performance:** 125 tCO2e per Euro million invested as reported at year-end 2021 (relating to underlying emissions data from 2019) **Target year(s):** 2025, 2030, 2050 **Target(s):** -25% by 2025 -45% by 2030* Net zero by 2050 *Please see 'Additional Information' for an explanation of NN's fair share emissions reductions and approach that aims to deliver real world decarbonisation. **GHG scopes included:** Scope 1 & 2 financed emission (metric: tCO2e per Euro million invested). Scope 3 financed emissions are currently not included because data quality is insufficient. We have plans to include scope 3 over time as reporting develops using PCAF guidance. However, disclosure and target-setting on material scope 3 emissions is part of the portfolio alignment assessment of investee companies and engagement objectives. **Asset classes in scope:** Corporate investments (i.e. listed equity, corporate fixed income. Corporate fixed income primarily includes corporate bonds). We also developed strategies for Paris Alignment of the sovereign bond and real estate portfolios, which you can find described below in 'Additional Information' below. **Methodology:** We used the Paris Aligned Investment Initiative's Net Zero Investment Framework (NZIF) as a main guide for the approach and strategy which we developed together with our asset manager. **Net zero scenarios:** The available tools used to inform the target-setting of the corporate investment portfolio included the IEA's Sustainable Development Scenario (SDS) reference trajectory. Some pragmatic adjustments were made to accelerate the pathway in line with our ambition to steer the investment portfolio towards net-zero GHG emissions by 2050.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** 31 December 2021 **Baseline performance:** EUR 5 billion, or approx. 3% of total AuM **Target date:** 2030 **Target:** We target EUR 6 billion additional investments in climate solutions by 2030, bringing the total AuM to around EUR 11 billion, or approx. 6% of AuM (assuming AuM remains constant). **Methodology:** To support our Paris Alignment strategy, NN Group has developed an internal framework to define 'climate solutions investments' as part of our proprietary investment portfolio. We have defined climate solutions as investments in economic activities that contribute substantially to climate change mitigation or adaptation. As an initial step in classifying climate solutions investments, and in line with guidance from the IIGCC Paris Aligned Investment Initiative, we focused on 'SDG 7'- related areas of energy efficiency and renewable energy. Furthermore, we supported our definitions with external certifications, asset labels, and environmental standards where possible and relevant. Our definitions are as follows:

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Portfolio level – investment in climate solutions target	• Green bonds: the green bonds we invest in meet the minimum standards specified in the ICMA's Green Bonds Principles and the Climate Bonds Initiative Taxonomy and Standards. Furthermore, to qualify as a green investment, it also has to meet additional criteria according to our asset manager's proprietary Green Bond Assessment Methodology to confirm the actual 'greenness' of the projects as well as the issuer. • Renewable energy infrastructure: Investments in projects (equity/debt) for renewable energy infrastructure in solar PV, offshore and onshore wind. • Certified green buildings within our real estate portfolio (equity/debt): our definition is limited to assets with an Energy Performance Certificate ('EPC') of class A, or if EPC is not available a high level of building certification (BREAAM or HQE certification of at least 'Excellent', or LEED or DGNB of at least 'Gold'). • Other: Investments that do not fall into any of the categories above, including investments in unlisted entities. For example, impact private equity funds that target and report on clearly defined climate impact KPI's or funds that have a broader ESG focus, but where clean and renewable energy projects account for a substantial part of the fund's total assets. **EU Taxonomy alignment**: In setting our definitions, we have tried to align as much as possible with the EU taxonomy criteria. Currently, it still proves to be challenging to assess the extent of alignment because the taxonomy requires very detailed information. Furthermore, it is still uncertain what is accepted as evidence for alignment. For instance, for the acquisition and ownership of buildings, the EU has defined that existing buildings should have at least an EPC class A to qualify for EU Taxonomy alignment. As an alternative, it has to qualify in the top 15% of national stock's most sustainable properties. In our climate solutions definition, buildings are considered when holding an EPC label A, or if an EPC label is not available a building certification above defined thresholds. However, official guidance is needed on whether building certifications can be used to demonstrate EU taxonomy alignment.
Asset level alignment – portfolio coverage target(s)	**Baseline date:** 31 December 2021 **Baseline performance:** At the end of 2021, the AuM invested in assets in material sectors for the corporate investment portfolio classified as 'achieving net-zero'; 'aligned' or 'aligning' is 29%.* * Please see 'Additional Information' for an explanation on how we approach sovereign bonds and real estate assets **Target date:** 2025 **Target:** 45% of assets expected to meet least "aligning" criteria **Asset classes in scope:** Corporate investment portfolio (includes listed equity and corporate fixed income) **Data sources:** We used various data sources including: Climate Action 100+ Net-Zero Company Benchmark; ISS ESG Climate Solutions data (carbon footprint and carbon budget assessment); Science Based Target initiative (SBTi); TPI assessment from Transition Pathway initiative; CDP; and analyst research.

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Asset level alignment – engagement threshold	**Target:** For the corporate investment portfolio, we have set an (i) an engagement threshold of 75% by 2025, meaning that by that time a minimum of 75% of financed emissions are in sectors that already meet net zero 'aligned' criteria or will be subject to direct or collective engagement actions (at year-end 2021: 66%). Additional engagement efforts have been defined to help increase the engagement target, but achieving the target is dependent also on the continuation of the collective engagement programme Climate Action 100+.
Additional information	**Methodology:** To inform the GHG emissions target-setting process for the *corporate investment portfolio*, various approaches and methods amongst which the IIGCC recommended carbon budget approach have been used. In addition, portfolio comparisons of carbon intensity were also made with regards to the industry average and peers to the extent possible. We believe that the intermediate reference targets are ambitious and consistent with delivering a fair share of 50% global reduction in GHG emissions by 2030. We aim to reach these reference targets by implementing a strategy for portfolio alignment by which we aim to focus on achieving real economy decarbonisation. Together with our asset manager, we developed a methodology to categorise the companies in the portfolio according to their alignment or potential to align to a net zero pathway. For new investments, we use a best-in-class policy to allocate towards companies who are better positioned in their journey to transition to a low-carbon future. For existing assets, we focus on stewardship and engagement to drive alignment, as we believe this has the best chance of realising real-word impact. We have also developed asset-class specific strategies for our sovereign bonds portfolio and our real estate portfolio. Refer to 'Further work' for more details. **Further work:** In addition to the Paris Alignment strategy for the corporate investment portfolio, we also developed strategies for our sovereign bonds portfolio and our real estate portfolio as described below. **Sovereign bonds:** For the sovereign bonds portfolio, we developed a strategy together with our asset manager by following the approach as set out in the NZIF. The objective of the sovereign bond portfolio is to achieve net-zero GHG emissions by 2050 by improving the average climate performance of the sovereign bond portfolio over time. Following the NZIF as a guide, investments are scored against a set of current and forward-looking alignment criteria. The Germanwatch Climate Change Performance Index (CCPI) forms a key part of our proprietary scoring methodology to evaluate and compare the climate performance of sovereign holdings. For countries which are not part of the CCPI, our asset manager has developed an own methodology comparable to CCPI to score sovereigns. For new or re-investments, the preference is to allocate towards higher climate performing issuers and/or eligible green bonds. Also, we seek to increase dialogue with sovereigns on ESG and climate change related topics. **Real estate:** For our (non-listed) real estate portfolio, we also developed a strategy using guidance such as from the NZIF. We have set targets for both our directly managed portfolio and our indirect portfolio that focus on increasing the percentage of AuM in net-zero or aligned assets as well as increasing engagement. Further work will be done on setting a quantified target for reducing kgCO2e/square metres. Additionally, a first analysis has been performed toward assessing our potential exposure to physical climate risks in our real estate portfolio. Together with our real estate manager, we have set clear objectives to address physical climate risks in our portfolio. See NN Group's annual report 2021 (p. 70) for more information on the objectives and assessment of physical climate risks.

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Additional information

For our direct portfolio using the Carbon Risk Real Estate Monitor (CRREM) 1.5°C tool to guide the process, we have set the following interim objectives:

- Our aim is for all our buildings to be on a 1.5-degree pathway by 2030. This is for scope 1, 2 and part of scope 3 (tenant operational emissions). Key measures to achieve these targets are improving energy efficiency, expanding the use of renewable energy and engagement with tenants. For operational GHG emissions (i.e. scope 1 and 2) we aim to achieve net-zero by 2040, and the remainder by 2050.
- For 100% of standing assets in the direct portfolio to have a Sustainability Certificate as approved by GRESB (beginning of 2021: 83%)
- Further, all new investments in the direct portfolio will also be assessed using the Carbon Risk Real Estate Monitor (CRREM) tool.

For our indirect portfolio, investments in real estate funds, the following targets are set:

- The majority of our funds (>75% based on GAV) to be committed by 2030 to achieving net-zero GHG emissions by 2040 or sooner (scope 1 and 2), and the remainder by 2050 or sooner.
- For our indirect portfolio, our main lever is engagement with the management of the funds in which we invest to increase their ambition to reach net-zero emissions.

Fossil fuel investment: NN Group excludes companies that derive 20% or more of their revenues from the mining of thermal coal or from oil sands extraction.

In addition, for NN's proprietary investment portfolio, we apply a strategy to phase out our investments in companies which are involved in thermal coal mining and coal-fired power generation, reducing our exposure to close to zero by 2030. ('Close to zero' refers to applying a maximum threshold level for coal activity of 5%). See NN Group Responsible Investment Framework policy for more information on our exclusion criteria.

Operational emissions: At NN Group, we are committed to reducing the environmental impact of our own operations by reducing our emissions year-on-year. We have committed to reduce our GHG emissions by 35% by 2025, and by 70% by 2030 compared with 2019. These reductions are independent of offsetting. Following this path, we expect to reach net-zero by 2040.

These targets cover GHG emissions from our buildings, lease cars (scope 1 & 2) and business air travel (scope 3). We intend to realise this through energy-efficient technologies, increased use of renewable energy and reduced business travel.

To help achieve our goals, we have already implemented a hybrid way of work that stimulates colleagues to work from home, and we updated our lease policy in the Netherlands to only allow fully electric lease cars from 2022 onwards. Our aim is to have a 100% electric car fleet in the Netherlands by 2025.

For further information: For more information on our targets and net-zero strategy, refer to the following sections in the NN Group 2021 Annual Report: Creating a positive impact on society (pages 44-47); Our response to the TCFD (pages 66-77); Facts and Figures; Investments in climate solutions (pages 127-128); Facts and Figures; Carbon footprint proprietary assets (pages 131-134)

Northern LGPS (Greater Manchester Pension Fund, Merseyside Pension Fund and West Yorkshire Pension Fund)

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 2019 **Baseline performance:** Each Fund will have a different baseline metric performance relative to their benchmark. For example, the weighted average carbon intensity of GMPF's benchmark was 349 tonnes CO2e/GBPm in 2019 and the corresponding intensity of the portfolio was 283 tonnes CO2e/GBPm in 2019 and 232 tonnes CO2e/GBPm in 2021 (active listed equities only). The weighted average carbon intensity of WYPF's benchmark was 280 tonnes CO2e/GBPm in 2021 and the corresponding intensity of the portfolio was 264 tonnes CO2e/GBPm (active listed equities and corporate bonds). **Target year(s):** 2030 **Target(s):** By 2030, weighted average carbon intensity of funds to be 50% below the carbon intensity of the respective 2019 benchmark (consistent with the target of the major external Asset Managers to the Northern LGPS). **GHG scopes included:** Our service provider currently has limited coverage and includes scope 1, scope 2 and partial scope 3 upstream emissions in its analysis. We will endeavour to incorporate Scope 3 emissions over time, in line with the Net Zero investment Framework. **Asset classes in scope:** Active listed equity and corporate fixed income with a view to expanding across other asset classes expediently as data, methodologies and guidance improves. **Net zero scenarios:** Scenarios used by some of the main external Asset Managers to the Northern LGPS are the P2 emission pathway of the IPCC special report on global warming of 1.5 degrees Celsius, the IPCC RCP 2.6 and IEA SDS (aggressive mitigation) pathways.
Portfolio level – investment in climate solutions target	**Quantitative target:** In April 2015, GMPF and the London Pensions Fund Authority formed a joint venture to invest directly in infrastructure assets, with a focus on the UK. The joint venture is structured as a limited liability partnership and has been named GLIL Infrastructure LLP (GLIL). As part of the Local Government Pension Scheme (LGPS) pooling discussions, West Yorkshire, Merseyside and Lancashire County Council pension funds joined GLIL in December 2016. In March 2018 GLIL was re-structured as an open-ended FCA Regulated fund to facilitate potential new members. Additional commitments made by existing members mean GLIL now has committed capital of approximately £2.5 billion. GLIL began investing in October 2015 and has completed ten transactions with a total value in excess of £1.6 billion. One of GLIL's earliest transactions was the purchase from SSE of a 21.7 per cent stake in Clyde wind farm for £150 million. GLIL invested an additional £30 million in September 2017 with a further £88 million invested in the summer of 2018. Clyde now has a total generation capacity of 522MW, making it one of the largest onshore windfarms in Europe. GLIL's remit includes investment in new build (so-called 'greenfield') infrastructure projects. Alongside GLIL's partnership with Iona to construct £130 million of bioenergy plants around the UK, it has also financed two joint ventures for the build and commissioning of more than a thousand new rail vehicles across two rail franchises in the south of England. The first of these fleets is already entering service on the Greater Anglian network.

Northern LGPS (Greater Manchester Pension Fund, Merseyside Pension Fund and West Yorkshire Pension Fund)

Portfolio level – investment in climate solutions target	Approximately one third of the GLIL assets under management is currently invested in Climate Solutions. Growing GLIL is a key objective for the Northern LGPS pool and investments in Climate Solutions are expected to grow in parallel. **Baseline date:** 2021 **Baseline performance:** $1,070m **Target date:** 2030 **Target:** Additional Climate Solutions as follows: $1,990m (Aggregation of GMPF, WYPF & MPF) **Methodology:** For the baseline, the Funds have estimated the value of carbon solutions within their allocations to Infrastructure. For the target, the Funds have estimated (i) their overall size in the Target Year using actuarial assumptions, (ii) the size of their Infrastructure allocation in the target year based on current strategic allocations. The proportion of the Infrastructure allocation that is invested in Climate Solutions in the Target Year is prudently assumed to be the same proportion as in the Baseline. The methodology used is in line with that used by the Climate Investment Coalition pledge announced at COP26 and of which NLGPS funds were a part. This used SDG7 to classify 'climate solutions', rather than the EU taxonomy.
Asset level alignment – portfolio coverage target(s)	**Baseline date:** 2021 **Baseline performance:** Northern LGPS has mapped its listed equity holdings to Transition Pathway Initiative ratings (GMPF and WYPF only). Northern LGPS held £3.7 billion in shares of the 425 companies analysed by TPI. By value, 25% scored 4* (perfect score), 33% scored 4, 35% scored 3, 5% scored 2, 2% scored 1 and 1% scored 0 (unaware of or not acknowledging climate change as a business issue). **Target:** In partnership with its Asset Managers, Northern LGPS is developing 5 year portfolio coverage targets, recognising the multiple different underlying portfolios of the three Northern LGPS Funds.
Asset level alignment – engagement threshold	Northern LGPS engages with companies directly, and indirectly through either external Fund Managers and/or as active members of the Local Authority Pension Fund Forum. It is estimated that a significant majority of financed emissions in material sectors are currently subject to direct or collective engagement. Northern LGPS is developing its approach to quantifying the proportion of financed emissions engaged across the three Northern LGPS Funds. LAPFF Quarterly Engagement Reports are available here.

Northern LGPS (Greater Manchester Pension Fund, Merseyside Pension Fund and West Yorkshire Pension Fund)

Additional information

Methodology: 50% reductions by 2030 are derived directly from the PAII Net Zero Asset Owner commitment.

Northern LGPS invests in a number of portfolios across a variety of assets classes, each with unique geographic and sector exposures.

Our targets will be reviewed and future iterations may refine the targets to take account of geographic and sector exposures in order to deliver a fair share of the 50% global reduction in CO2 emissions by 2030.

Operational emissions: Tameside MBC is the host authority of the Northern LGPS Joint Committee. Information on Tameside MBC's strategy for the reduction of operational emissions can be found here.

It is anticipated that the Department for Levelling Up, Housing and Communities will consult on TCFD reporting within the Local Government Pension Scheme in due course. The Northern LGPS' approach to climate targets may be informed by the results of any consultation and ensuing guidance or regulations brought in by the Department.

For further information: Northern LGPS RI policy; Northern LGPS Quarterly Stewardship Reports; Greater Manchester Pension Fund Stewardship Report; Greater Manchester Pension Fund TCFD report; Merseyside Pension Fund TCFD report (p32); West Yorkshire Pension Fund TCFD report

Oxfordshire County Council Pension Fund

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2019 **Baseline performance:** 248tC02e/$mn invested **Target year(s):** 2050 with annual reduction target **Target(s):** 7.6% annual emissions reduction target Net-zero emissions by 2050 **GHG scopes included:** Scope 1, 2 and first tier scope 3 emissions. Desire to use full scope 3 subject to reliable data being available and an acceptable methodology for inclusion. **Asset classes in scope:** Currently reporting is available on listed equities and corporate bonds but the target is intended to apply to all asset classes which will be incorporated as data/methodologies are developed. **Methodology/ net zero scenarios:** Our targets are based on the required level of emissions reductions quantified in the 2019 United Nations Environment Programme Emissions Gap report to limit warming to 1.5°C.
Portfolio level – investment in climate solutions target	**Qualitative goal:** We commit to increasing investment in climate solutions, where possible. **Methodology:** To date the Fund has primarily sought to increase allocations to climate solutions through asset allocation decisions. The Fund has made an allocation to a sustainable equities portfolio that invests in companies that address sustainability challenges and has increased commitments to renewable infrastructure investments. We are hoping to use the Net Zero Investment Framework work on climate solutions to be able to set a quantitative target that is supported by science.
Asset level alignment – portfolio coverage target(s)	**Baseline:** We do not currently receive alignment data or have a target for alignment stages. However, this is being actively considered by the Pension Funds Pool Brunel. **Further work:** The Fund is working on using the alignment guidance issued by IIGCC under the PAII to develop a target-based approach to engagement. This is still in progress and will feed into a Climate Stocktake being run by Brunel this year where an agreed approach between the 10 client funds will be sought. The agreed approach will commence in 2023.
Asset level alignment – engagement threshold	The collective engagement baseline across the whole Brunel Pension Partnership is 47.3% of financed emissions. Please see our Engagement Policy. The Pension Fund's engagement priorities in relation to climate change are to initially focus on CA100+ companies with the aim of them meeting the criteria under the IIGCC NZIF guidance in phases and by set deadlines. Where these are not met the companies will be considered for potential exclusion. Oxfordshire's Policy will form our input into the process currently underway in Brunel to revise their Climate Change Policy alongside the nine other client funds. The new Brunel Policy is expected in early 2023. In addition, the Fund is a member of the Local Authority Pension Fund Forum which engages with companies on behalf of its 85 LGPS Fund members.

Oxfordshire County Council Pension Fund

Additional information	**Methodology:** The annual reduction target adopted by the Fund has been set in line with scientific assessment of the level of reductions required to align with the IPCC 1.5°C scenario. **Operational emissions:** The Fund has a 2030 net-zero emissions target for its own operations.

For further information: Climate Change Policy; Climate Change Policy Implementation Plan; Engagement Policy

Pædagogernes Pension (PBU)

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2019 (where available – otherwise end of 2020) **Baseline performance:** 61 tC02e/$mn invested (EVIC allocation based) **Target year(s):** 2025, 2030, 2050 **Target(s):** -30% CO2e/$mn invested by 2025, -50% CO2e/$mn invested by 2030, -100% CO2e/$mn invested by 2050 **GHG scopes included:** Present emission data covers scope 1 & 2 of approx. 70 percent of our total AUM. We intend to include scope 3 emissions in 2023 in our calculation of financed emissions. **Asset classes in scope:** Reduction targets cover the whole portfolio. Baseline emission calculations include listed equity and corporate bonds, Green bonds, direct owned real estate and listed real estate. Illiquid credit and sovereign bonds are not included. **Net zero scenarios:** IPCC 1.5 degree Celsius. P2
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** 2019/2020 **Baseline performance:** 1 billion USD ~ 7,8% of AUM **Target date:** 2030 **Target year:** 2,8 billion USD ~ 15% of AUM **Methodology:** Alternative green classification system from Danish Insurance & Pension Association (IPA)
Asset level alignment – portfolio coverage target(s)	**Baseline date:** 31 December 2019 **Baseline performance:** PBU plans to undertake a baselining assessment of asset alignment according to the Framework and set targets in due course. As a preliminary step, PBU has gathered data on the proportion of companies that have set carbon reduction targets and companies that use cleaner energy sources. **Asset classes in scope:** Listed equity, corporate bonds **Data sources:** Planned: Listed equity & corporate fixed income: CA100+ benchmark, Transition Pathway Initiative (SBTi) Real estate: CRREM
Asset level alignment – engagement threshold	**Work in progress:** As a first step, we have assessed companies present alignment with the Paris Agreement, and we have selectively divested companies within fossil fuels that we do not believe will be aligned with the Net Zero pathway. As a second avenue, we direct bilateral (external engagement service provider) and collaborative engagement (CA 100+) at the most carbon intensive companies.

Pædagogernes Pension (PBU)

Additional information	**Fossil fuel investment:** PBU has established threshold values for extraction of coal (>20% of turnover), coal-powered electricity (>50% of installed capacity), and oil sands (>5% of turnover). Phase out of thermal coal in OECD countries by 2030 and in developing countries by 2050. See here.

For further information: TCFD Report 2021

PenSam

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2019 **Baseline performance:** 71,9tC02e/$million invested 615.220 tC02e absolute emissions **Target year(s):** 2025, 2030 (2050 - Net Zero) **Target(s):** 2025: -44 % (Measured as Weighted Average Carbon Intensity, WACI) 2030: Not yet determined on portfolio level. 2050: Net zero **GHG scopes included:** Portfolio emissions (baseline 2019 and onwards): Scope 1 and 2 (listed equity, corporate bonds, real estate). Asset level alignment (baseline year 2022): Include Scope 3 emissions where data are available. **Asset classes in scope:** Listed equity, Corporate bonds (European and US High Yield, Emerging Market Corporate Debt), Real estate (Danish properties) **Methodology/ net zero scenarios:** Targets are set in close dialogue with Pensam's stakeholders, IPCC reports on global warming and with an eye toward technology development. Stakeholders include Climate action 100+, IIGCC, Net Zero Investment Framework, Dansif, PRI etc. **Emissions metrics:** With regard to the portfolio emission reference target (-44 % in 2025), Pensam disclose emissions on intensity basis (Weighted Average Carbon Intensity) as recommended by TCDF. WACI is used, since it reduces market volatility effects.
Portfolio level – investment in climate solutions target	**Quantitative target** **Target date(s):** 2025, 2030 **Target:** 2025: 15% invested (of total AUM) in climate solutions ("green investments"). 2030: 20% invested in climate solutions ("green investments"). **Methodology:** PenSam's investments in climate solutions are calculated on a best-effort basis and are defined as renewable energy, energy efficiency and development of related downstream systems such as investments in wind and solar energy, biomass and the like, energy efficiency in buildings, technology solutions, energy transmission of electricity etc. PenSam calculates the green investments on a best effort basis, but later on the method is expected to follow the EU taxonomy, when it is ready.
Asset level alignment – portfolio coverage target(s)	**Baseline date:** 31 April 2022 **Baseline performance:** 25-40% (Best-effort basis due to data limitations) **Target date(s):** 2027, 2032 **Target(s):** 2027: 50% 2032: 70%

PenSam

Asset level alignment – portfolio coverage target(s)	**Asset classes in scope:** Listed equity and corporate fixed income, Danish real estate. **Data sources:** Listed equity & corporate fixed income: MSCI ESG Manager, IIGCC, PAII Net Zero Investment Framework. Real estate: Asset manager, CRREM.
Asset level alignment – engagement threshold	**Baseline:** 40-60% (Best-effort basis due to data limitations)
Additional information	**Further work:** We are currently working on establishing emission/ESG data support for all properties. We plan to include foreign real estate as soon as possible. **Fossil fuel investment:** At PenSam, we work to integrate the Paris Agreement's goal of a maximum temperature rise of 1.75 degrees. Therefore, we have sold a large number of coal, tar sands and oil companies to reduce PenSam's investments in fossil fuels. PenSam currently has 330 companies on the exclusion list, with the largest number being related to controversial weapons as well as companies in coal and tobacco. See Guidelines for responsible investment. **Operational emissions (2021):** 135 tCO2e (include scope 1 and scope 2)

For further information: Pensam's guidelines and policy on responsible investments (including targets). We expect to publish a TCFD-report in 2023.

PensionDanmark

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2018 **Baseline performance:** 109 tC02e/$mn **Target year(s):** 2024 **Target(s):** -45% CO2e/$mn invested by 2024 **GHG scopes included:** Our target setting covers financed scope 1 and 2 emissions. On a portfolio level, we track scope 3 emissions, but currently only include them in our sector-based target setting in order to overcome issues related to double-counting, see below. **Asset classes in scope:** Listed equities and corporate bonds. We have not set reduction targets for our real estate portfolio, as it is already ahead of 1.5 C pathway according to CRREM (2 tC02e/$mn) **Methodology:** In PensionDanmark, we continuously work to improve the completeness and accuracy of our data. We also try to implement changes to our calculation methods retrospectively to ensure the comparability of individual years where possible. The data coverage below is calculated as per end-2021. • Listed equities: 98.5 pct. • Corporate bonds: 80.7 pct. CO2 emissions from the remaining portfolio is estimated based on the carbon footprint distributed by geography and sector (according to the Global Industry Classification Standard) based on the data available for the respective asset. We assume that the carbon footprint on average is the same for all corporate bonds/listed equities within the same sector and geography. The average is subsequently applied for that part of the portfolio for which observations are not available. The distribution has been made based on 12 sectors and 2 geographical segments. Real estate coverage is some 93 pct. **Net zero scenarios:** Our targets imply a maximum 1.5°C warming above pre-industrial levels. We use both TPI and OECM scenarios based on IPCC P1-P3. **Emissions metrics:** PensionDanmark has not set absolute carbon emission reduction targets because of strong positive net cash flows into the investment portfolios from our members. Our overall aim is to reduce our carbon footprint going forward to 2025.
Portfolio level – investment in climate solutions target	**Quantitative target:** Baseline date: 31 December 2019 **Baseline performance:** USD 6.2 $bn (end-2019) **Target date:** 2025 **Target:** By 2025, PensionDanmark aims to own 1,300 MW of green power capacity. Furthermore, we aim our green infrastructure to avoid Co2 emissions of more than 2 mio. Tonnes by 2025. Currently, 16 pct. of our AuM (including commitments) is invested in climate solutions. **Methodology:** PensionDanmark has been investing in green infrastructure for the past ten years and had, by the end of 2021, investments equivalent to just below 900 MW of operating green power capacity.

PensionDanmark

Portfolio level – investment in climate solutions target

PensionDanmark has allocated more than 3.3 $bn to renewable energy infrastructure all over the world by the end of 2021 based on wind, biomass, solar cells and new technologies as P-t-X. Almost half of the allocation has not been deployed yet. For the projects already in operation, the derived CO2 savings for 2021 amounted to just above 1.5 million tonnes.

Just over half of PensionDanmark's infrastructure investments contribute towards phasing out fossil energy sources from the global energy mix. Among others we invested in CIP's Energy Transition Fund I that support projects that develop carbon-neutral green fuels and raw materials for industries for which transition is difficult. Furthermore, we invested in the Danish cleantech business, Stiesdal, which is engaged in the development of four different climate technologies: floating offshore wind foundations, energy storage technology, Power-to-X technology and pyrolysis plants for atmospheric carbon capture and storage, and biofuel production for the airline industry.

PensionDanmark is inclined to participate in minimum three roundtables with development finance institutions to enhance blended finance of climate solutions in the Least Developed Countries and hence support Just Transition on a global scale.

Asset level alignment – portfolio coverage target(s)

Baseline date: 31 December 2019

Baseline performance: One of our main goals is to invest in companies that embark on a green transition or produce solutions to global climate challenges. Due to these goals, we have chosen to focus on sectors with a substantial negative climate footprint:

- Oil and Gas
- Utilities
- Cement
- Shipping

By the end of 2019 only a few companies in oil and gas and the shipping sector had Paris aligned business models. Some 50 pct. of the listed equity investments in utilities were Paris aligned. While none in the cement industry.

Target date: 2024

Target: Our ambition is that 50 pct. of our investments in the material sectors Oil and Gas, Shipping and Cement to be at least "aligning" towards a net zero pathway by 2024. This should also be the case for 80 pct. of our investments in the utilities sector.

By the end of 2024, we aim to reduce our climate footprint, scope 1+2+3, within our focus sectors, see above.

Our reduction targets for climate footprint in our listed equities portfolio are as follows:

- Oil and Gas by 20%
- Utilities by 35%
- Cement by 10%
- Shipping by 15%

These sector targets are developed with input from the OECM model and TPI on sector pathways.

PensionDanmark

Asset level alignment – portfolio coverage target(s)	**Asset classes in scope:** Listed equities and corporate bonds We have not set reduction targets for our real estate portfolio, as it is already ahead of 1,5 C pathway (2 tC02e/$mn) **Data sources:** Listed equity and corporate bonds: CA100+ benchmark, Transition Pathway Initiative, OECM, IPCC scenario decarbonisation curve consistent with a 1.5C scenario Real estate: assessment based on CRREM
Asset level alignment – engagement threshold	**Target:** 70 pct. PensionDanmark has set engagement targets that include supporting collaborative and single engagements, backing SBTi approved targets and net-zero commitments to make a real world change. For instance, PensionDanmark has committed to execute 200 (baseline end-2019) collaborative engagements before 2025 supported by asset owners, among others CA100+. During the same period, we also strive to have 350 investees with either SBTi aligned targets/commitments to net-zero before 2050 following engagement or having SBTi approved targets following engagement. PensionDanmark also engages in dialogue with authorities and other stakeholders regarding societal issues, particularly how private investors can become involved in creating new and innovative solutions.
Additional information	**Methodology:** PensionDanmark has in our capacity as investor, endorsed working towards a world economy with Net-Zero Green House Gas emissions before 2050 in order to limit the global rise in temperature to 1.5°C. Measures to achieve this include active ownership and investments in climate-friendly technologies, according to the above. In 2020 we sat interim targets on the way to fulfil our net-zero commitment; targets that require change well before the decade has ended. These interim goals imply a maximum 1.5°C warming above pre-industrial levels – the most ambitious target defined in the 2015 Paris Agreement. **Fossil fuel investment:** PensionDanmark excludes all mining companies involved new (thermal) coal projects from the investment universe. Also companies with more than 5 per cent of revenues from production of (thermal) coal or oil sands are on our exclusion list. Finally, Oil and Gas companies with a low transition score in PensionDanmark's internal model are also excluded. See exclusions list here. **Operational emissions:** We have set absolute targets regarding our scope 1 and 2 emissions. By 2025, we aim to have scope 1 emissions of 20.3 tonnes and scope 2 emissions of 61.5 tonnes (market-based method) corresponding to a fall of 55 and 13 pct. respectively compared to 2021 levels.

For further information: Corporate Social Responsibility Report 2021

PKA Ltd.

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2019 **Baseline performance:** 1,638,043 tC02e (absolute emissions) 13.4 tC02e/DKKmn invested (financed CO2e emissions), equivalent to 89.32 tC02e/$mn invested **Target year(s):** 2025; 2050 **Target(s):** -29% CO2e/DKKmn invested by 2025 Net-zero GHG emissions by 2050 **GHG scopes included:** Scope 1 & 2 for all equities, scope 3 to be included in due course. **Asset classes in scope:** Listed equity, corporate fixed income and real estate **Methodology:** Methodology and calculations are based on IIGCC's Net Zero Investment Framework combined with NZAOA and Finance Denmark's CO2e-model. To set PKA's CO2e reduction target for 2025, we simulated scenarios based on future expectations to AUM, returns and asset allocations. **Emissions metrics:** All calculations are based on EVIC. PKA discloses emissions on absolute and intensity basis (total carbon emissions, financed carbon emissions (carbon footprint), carbon intensity and weighted average carbon intensity (WACI)) in accordance with the TCFD recommendations. PKA's CO2e-reduction target for 2025 is based on financed emissions (carbon footprint).
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** 2015 **Baseline performance:** 10% of AUM in 2020, equivalent to USD 4.9 bn (DKK 33 bn) at the time **Target date:** 2025 **Target:** Total USD 7.4 bn (DKK 50 bn) to be invested in green assets **Methodology:** PKA is a part of the Danish pledge of investing USD 52 bn (DKK 350 bn) by 2030. As part of the initiative, the Danish trade association for insurance companies and pension funds, Insurance and Pension Denmark has developed a methodology for investors to identify and calculate green investments. The methodology is currently based investments supporting SDG 7 about 'affordable and clean energy' and covers all asset classes. Insurance and Pension Denmark will phase in the EU taxonomy in 2023.
Asset level alignment – portfolio coverage target(s)	PKA is considering how to develop a more detailed implementation plan for the asset level alignment and what targets we may set.

PKA Ltd.

Asset level alignment – engagement threshold	PKA has set an engagement target of evaluating and divesting from those companies involved in the global initiative Climate Action 100+ that have not established a robust plan for its business to become Paris-aligned by the end of phase 1 of the initiative in 2023. PKA is currently considering how to develop a more detailed implementation plan for engagement threshold. **Approach:** PKA is an active asset owner and aims to influence companies to commit to becoming Net Zero through resolutions, voting and engagements. PKA's support of the Paris agreement and the 1.5°C goal is incorporated in our policy of active ownership and exercised by PKA and PKA's partner EOS at Federated Hermes. With EOS Federated Hermes, we are engaging with additional companies throughout the year concerning their Net Zero transition. PKA is also engaging with external asset managers on their climate change policies. PKA is an active asset owner and has since 2018 been an active member of the global investor initiative Climate Action 100+ engaging with 167 companies on their Net Zero transition.
Additional information	**Methodology:** Combining our green target (USD 7.4 bn or DKK 50 bn) and CO2e-reduction target (-29% CO2e/$mn invested) for 2025, we are consistent with delivering a fair share of the 50% global reduction in CO2e-emissions by 2030. In 2022, we expect to set CO2e-reduction target for 2030 for listed equity, corporate fixed income, real estate and infrastructure (scope 1+2). **Fossil fuel investment:** PKA's fossil fuel policy includes zero tolerance for coal mining and oil sand unless the companies are committed to a Paris-aligned transition. PKA also has a restriction on utility companies, excluding those with more 20% revenue from coal unless the companies are committed to a Paris-aligned transition. Based on engagements with oil and gas companies, PKA has previously excluded 50 oil and gas companies that did not show sufficient commitment to a Paris-aligned transition. PKA has also set an engagement target of evaluating and divesting from those companies involved in the global initiative Climate Action 100+, which have not established a robust plan for its business to become Paris-aligned by the end of phase 1 of the initiative in 2023. See PKA's climate strategy 2022. **Operational emissions:** PKA measures its operational emissions, which is published in PKA's annual report. In 2022, PKA is planning to set its first sub target for operational emissions for 2030.

For further information: PKA's climate strategy 2022; Press release: PKA will cut almost a third of the CO2 footprint from investments up to 2025; PKA's TCFD report 2022

PKA is also reporting on its net zero strategy in its annual report. The annual report is available on our website.

Railpen UK

Portfolio level – emissions reduction reference target	**Baseline:** 31 March 2020 **Target Year(s)**: 2025, 2030, 2050 **Target(s)**: -25-30% CO2e/£m invested by 2025, -50% CO2e/£m invested by 2030, net zero by 2050 or sooner **Baseline year performance for the target metric(s):** 70tC02e/£m invested GHG scopes included: Scope 1 and Scope 2 emissions currently. As data quality and availability improves for Scope 3 GHG emissions, we will look to include this in future iterations of the Net Zero Plan for the future emissions footprint, engagement and alignment targets. **Asset classes in scope:** Listed Equities and Corporate Fixed Income.
Portfolio level – investment in climate solutions	Railpen has committed to increasing investment in climate solutions, where possible. Railpen has not set a quantitative target but is actively reviewing opportunities in renewable energy and energy efficient technologies and solutions, especially in infrastructure and private markets. Railpen will continue to monitor developments in data and the evidence base in defining climate solutions as we increase investments in the space.
Asset level alignment – portfolio coverage target	**Target**: 100% of AUM in 'material' sectors either already net zero, aligned to net zero, or aligning by 2040.
Asset level alignment – engagement threshold	**Target:** 70% of financed emissions in material sectors that are either already net zero "aligned" criteria or that will be subject to direct or collective engagement & stewardship actions, increasing to 90% by 2030.
Additional information	**Methodology:** IIGCC Net Zero Investment Framework (NZIF). **Scenario(s) used:** OECM Model trajectories used to determine target levels. **Additional info:** Targets are primarily based on a reduction in absolute emissions.

For further information: Railpen Net Zero Plan

Royal London Mutual Insurance Society (RLMIS)

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2020 **Baseline performance:** 9.3MtC02e (associated with listed equity and corporate fixed income holdings which make up just over 60% of RLMIS assets as at 31/12/2020). **Target year(s):** 2030, 2050 **Target(s):** -50% CO2e/$mn invested by 2030 Net zero by 2050* * Royal London's climate targets are based on the expectation that governments and policy-makers will deliver on commitments to achieve the 1.5°C temperature goal of the Paris Agreement, and that the actions it takes does not contravene its fiduciary duties. **GHG scopes included:** Data monitoring and disclosure is currently focused on Scope 1 and Scope 2. Scope 3 emissions are included in Royal London's assessment of transition readiness and informs engagement priorities. **Asset classes in scope:** As at 31/12/2020: 95% of £114bn RLMIS assets are managed by Royal London Asset Management (RLAM) and are in scope for the purposes of climate target setting, this includes all asset classes. The funds managed by external managers are currently out of scope but are monitored and assessed regularly. **Methodology/ net zero scenarios:** RLMIS has adopted the Net Zero Investment Framework developed by the IIGCC and its targets are informed by the illustrative pathways (P1-P3) from the IPCC 1.5C Report.
Portfolio level – investment in climate solutions target	**Qualitative goal:** This target is currently qualitative only. • As an Asset Owner, RLMIS is committed to developing solutions that will enable its customers to invest in low carbon assets. • Where appropriate RLMIS will seed and invest in the development of climate solutions created by RLAM.
Asset level alignment – portfolio coverage target(s)	**Baseline date:** 31 December 2020 **Baseline performance:** Not defined due to data limitations. RLMIS will set an alignment target following a review of all holdings. **Target date:** 2030 **Target:** RLMIS has committed to engaging with companies on their ability and willingness to transition to inform its "alignment assessment". Where a company is unwilling or unable to take action to align, RLMIS will consider disinvestments, consistent with its overall net zero targets.

Royal London Mutual Insurance Society (RLMIS)

Asset level alignment – portfolio coverage target(s)	**Asset classes in scope:** RLMIS is focused on listed equity and corporate fixed income. RLMIS has identified the key sectors which contribute to its financed emissions and have set engagement targets covering greater than 70% of emissions. These include RLMIS' Top 10 holdings (as an Asset Owner) which equate to 50% of its emissions as at 31 Dec 2020 and engagement with the Utilities sector as a key driver of wider economic decarbonisation.
Additional information	**Methodology:** RLMIS' targets are informed by the illustrative pathways (P1-P3) from the IPCC 1.5C Report. RLMIS has adopted the 50% reduction by 2030 as a starting point and has translated this into shorter term management targets to incentivise action in the near term. The fairness concept and the impact on targets will be reviewed annually. **Further work:** RLAM has undertaken extensive work to assess its property holdings and has developed a net zero strategy. Royal London will begin incorporating this information into its disclosures as soon as is practicable, consistent with its overall net zero targets. Royal London has also re-framed its Purpose and supporting Strategy to include: 'Playing our part in moving fairly to a sustainable world'. **Operational emissions:** Royal London has committed to achieving net zero direct operational emissions by 2030 (Scopes 1 and 2).

For further information: RLMIS' targets and the progress it has made are detailed in its 2021 annual report and accounts (p.30-40).

Scottish Widows Group Limited

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2019 **Baseline performance:** 116 t CO2e/£m invested **Target year(s):** 2030, 2050 **Target(s):** Halve the carbon footprint (i.e. t CO2e/£m invested) by 2030. Net zero by 2050 or sooner. **GHG scopes included:** Scope 1 & 2 only for all in-scope emissions. Robustness and coverage of scope 3 data is not yet sufficient for use in target-setting. While we do not believe it's yet appropriate to set targets in relation to scope 3 emissions, we are beginning to disclose scope 3 emissions for oil, gas and mining sectors in our portfolio, as per PCAF guidance, in our TCFD report. We will add new sectors in the future reports and will consider extending our portfolio targets to cover scope 3 of our underlying holdings when there is market consensus on the appropriateness of available data. **Asset classes in scope:** Full portfolio is covered by overall targets, but emissions are currently available and reported only on listed equity and corporate fixed income, real estate, and loans (for assets where PCAF methodologies exist). **Methodology:** Targets and levels were set in line with Paris Aligned Investment Initiative's Net Zero Investment Framework guidance. **Net zero scenarios:** The baseline year from which the targets track progress is 2019. This year was selected in line with the recommendation of the Institutional Investors Group on Climate Change, which aligns with the Intergovernmental Panel on Climate Change (IPCC) timeframe to limit global warming to 1.5C in their P1-P3 scenarios. **Emissions metrics:** Due to the fast-growing nature of our Defined Contribution pension investment portfolio, we set decarbonisation targets on a relative emission basis. However, we will disclose annually both absolute and relative emissions (i.e. carbon footprint) of our full portfolio, and briefly comment on progress made on our targets.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** 2021 **Baseline performance:** n/a; targets are considered as new money, beginning at baseline date **Target date:** 2025 **Target year:** • £20-25bn in 'climate-aware' strategies • With at least £1bn of the above into climate solutions investments **Methodology:** • 'Climate-aware' definition: funds with a bias towards companies adapting their businesses to be less carbon intensive and/or developing climate solutions; • Climate solutions approach: use MSCI Environmental Impact Revenue classed as 'climate change' and 'natural capital'

Scottish Widows Group Limited

Asset level alignment – portfolio coverage target(s)	**Baseline:** This is outsourced to our asset managers. Please see p14 of our Climate Action Plan **Target:** Specific targets for alignment have not been set, therefore there is no baseline level to measure from. Scottish Widows outsources to appointed managers the day-to-day management of all our funds. This includes stock selection and asset allocation (whilst taking into account exclusions to thermal coal and tar sand extraction on climate grounds). Our key appointed managers have also committed to achieving net zero in their portfolios by 2050. Our active stewardship activities include oversight of our appointed managers. As part of our annual operational due diligence review process we intend to monitor the progress being made by investment managers in implementing and achieving emission reductions goals on fund-by-fund and aggregate basis. This will allow us to identify any laggards requiring closer monitoring and engagement, whilst at the same time recognising those funds and managers who are leading. Additionally, we have recently developed our own voting guidelines on ESG matters; we will actively monitor our appointed managers' implementation of these guidelines.
Asset level alignment – engagement threshold	**Baseline:** 79% of equity and bond assets in high impact sectors (per the GICS sub-industry classification mapping of TPI's high impact sectors in Appendix B in the Net Zero Investment Framework (NZIF), plus banks and insurers are under active engagement by our key appointed managers and directly by Scottish Widows. **Target:** Whilst Scottish Widows has not yet set a specific target, this is in excess of the NZIF recommended initial target of 70%. We will review this in the next iterations of the Climate Action Plan.
Additional information	**Methodology:** Reducing the carbon footprint of our investments by 50% by 2030 is a key milestone within our Net Zero mission. Scottish Widows' investment portfolio is a well diversified one – across regions, asset classes and industries – so is representative of the global investable universe. We believe it is appropriate to set decarbonisation target on this portfolio in line with the IPCC's recommended pathway of 50% reduction by 2030 with aiming for net zero by 2050 or sooner. **Fossil fuel investment:** Thermal coal and tar sands are specifically detailed in the Scottish Widows Exclusion Policy; Coal is the most CO2-intensive power source and a significant contributor to climate change. We believe companies that fail to amend their business models to be less carbon-intensive pose an investment risk. Therefore, we don't invest in companies where 5% or more of their revenue is derived from thermal coal extraction and/or tar sand operations. We review the thresholds regularly and expect to reduce it over time in line with the global ambition on exiting coal. Scottish Widows, together with its parent company Lloyds Banking Group are also members of the Powering Past Coal Alliance. Scottish Widows Exclusions Policy; Scottish Widows Stewardship Policy **Operational emissions:** Lloyds Banking Group, of which Scottish Widows is part, has operational climate pledges, including to achieve net zero by 2030. Our operational climate pledges - Lloyds Banking Group plc

For further information: See here for more information on our Responsible Investment Framework & net zero strategy, including Climate Action Plan 2022; Our Climate Change Approach; Responsible Investment & Stewardship Framework; Scottish Widows 2022 TCFD report

South Yorkshire Pensions Authority

Portfolio level – emissions reduction reference target	**Baseline date:** 31 March 2019 **Baseline performance:** Total portfolio: 169 tCO2e/$mn invested Listed Equity: 172 tCO2e/$mn invested Investment Grade Credit: 133 tCO2e/$mn invested **Target year(s):** 2025 and 2030 **Target(s):** Total portfolio reductions: • 2025: -52% tCO2e/$mn invested • 2030: -65% tCO2e/$mn invested Listed equity: • 2025: -52% tCO2e/$mn invested • 2030: -65% tCO2e/$mn invested Investment Grade Credit: • 2025: -54% tCO2e/$mn invested • 2030: -66% tCO2e/$mn invested **GHG scopes included:** Initially, scope 1 and 2. The availability and reliability of scope 3 data will be kept under review with a view to include once data is available in sufficient quantity and quality which may require a restatement of targets. **Asset classes in scope:** • Listed Equity (includes UK, Overseas, Emerging Market and listed alternatives portfolios) • Investment Grade Credit Combined these assets represent 51.1% of the total portfolio as at 31 March 2022. **Net zero scenarios/methodology:** The overall approach to setting targets is in line with the Paris Aligned Investment Initiative's Net Zero Investment Framework, adopting the self-decarbonisation approach due to the complexity that arises with different benchmarks for different portfolios when aggregating at asset class level. We have also adopted point in time targets as they are easier to understand. The science based pathway used to set the specific targets is the IEA NZE 2050 Pathway based on the IPCC P2 scenario. **Emissions metrics:** Financed emissions is the primary metric for which targets are set. The published figure is normalised as tCO2e/value invested. Carbon intensity and weighted average carbon intensity are subsidiary measures which are calculated and disclosed but for which no targets are set.
Portfolio level – investment in climate solutions target	**Qualitative goal** **Baseline date:** 31 March 2018 Baseline performance: £25.9m **Target:** At this stage, the target is qualitative. The aim is to commit at least a further £80m p.a. to specific climate solutions investments by 2025 in addition to a 2018 baseline of £25.9m. At this stage given the lack of a widely accepted industry methodology it is not proposed to set a formal target.

South Yorkshire Pensions Authority

Asset level alignment – portfolio coverage target	**Baseline date:** 31 March 2019 **Baseline performance:** 48% of assets meeting at least "aligning" criteria, made up as follows: • 43% for listed equity and • 78% for Investment Grade Credit **Target years:** 2025, 2030 **Target:** • 55% of AUM by 2025 • 70% of AUM by 2030 **Asset classes in scope:** Listed equity portfolios and investment grade credit. Note the largest emitters by weight in the equity portfolios are concentrated in developed markets with good coverage through TPI and CA100+. Companies in these markets tend to be leaders compared to those in emerging markets. In addition the focus in fixed income only on sterling corporate bonds means that it is likely these figures will reduce when other asset classes such as sovereign and emerging market debt are introduced. **Data sources:** Listed equity & corporate fixed income: CA100+ benchmark, Transition Pathway Initiative, SBTi Aligning is defined as meeting IIGCC's Net Zero Investment Framework criteria 2, 4 and 5: • Criteria 2: We have taken the more conservative view of companies having to meet short- **AND** medium-term targets. Otherwise, it is hard to explain companies that do not meet criteria 2 but meet the definition of "aligning". • Criteria 4: Taken from TPI question 5 (scope 1 & 2) and question 8 (scope 3) and needs both to meet criteria for NZTP4 • Criteria 5: Taken from CA100+ indicator 5.1 (decarbonisation strategy)
Asset level alignment – engagement threshold	**Baseline date:** 2019 **Baseline performance:** 73% **Target date:** 2025, 2030 **Target:** 80% of financed emissions to be subject to engagement by 2025 90% of financed emissions to be subject to engagement by 2030
Additional information	**Methodology:** Rather than try to 'optimise' a fair share of the 50% reduction, the Authority aims to achieve more than its fair share of the reduction through accelerated decarbonisation of the portfolio and significant targets for investment in climate solutions **Operational emissions:** Being developed, but, while important, is very small relative to portfolio emissions. **Fossil fuel investment:** We have a policy of not investing in "pure coal or tar sands" stocks, which is set out in our Responsible Investment Policy available here.

For further information: Information available on our website: climate (sypensions.org.uk), Annual Reports (sypensions.org.uk), Annual Report 21-22.pdf (sypensions.org.uk)

Tesco Pension Trustees Limited, as trustee of the Tesco Plc Pension Scheme (the "Trustee")

Portfolio level – emissions reduction reference target

Baseline date: Portfolio holdings as of 30 September 2021, FY 2019 emissions data.

Baseline performance:

- Corporate bonds (internally managed): 190 tCO2e/£million revenue
- Fixed income investment benchmark: 246 tCO2e/£million revenue
- Global Equity (internally managed): 92 tCO2e/£million revenue
- Global Equity investment benchmark: 200 tCO2e/£million revenue

Target year(s): 2030

Target(s): Corporate bonds (internally managed): A target of 50% reduction of the annual WACI "carbon budget" by 2030 starting at the 2019 WACI of the Bloomberg Barclays benchmark.

Listed equity (internally managed): A target of 50% reduction of the WACI "carbon budget" by 2030 starting at 25% below the 2019 WACI of the FTSE All World benchmark.

GHG scopes included: Scope 1 and 2 emissions across all reported asset classes. Tenant use of properties (a scope 3 emissions category) is included in the emissions of properties.

Asset classes in scope: Internally managed listed equity and corporate bonds.

Methodology/ net zero scenarios: The Trustee has set a portfolio level alignment target in line with the NZIF methodology, and asset class level targets for emissions intensity reduction, covering those asset classes that are feasible at this stage. A number of factors have influenced the choice of targets:

- The Scheme is currently expected to undergo significant changes in asset allocation over the coming decade. The change in asset allocation will change the emissions of the portfolio without the effect being related to real-world emissions.
- The Trustee therefore considers that the most appropriate Scheme-wide target is an asset level alignment target. Emissions reduction targets have been set for individual asset classes rather than setting a Scheme-wide emissions reduction target.

The Trustee has set emissions reduction targets for internally managed assets in Fixed Income and Equities. For externally managed assets, Tesco Pension Investment Limited (**"TPI"**) continues to engage with managers, on behalf of the Trustee, to encourage them to set targets of their own which align with Net Zero and are appropriate to the manager. The majority of the public market exposure is internally managed (see climate report).

For the public markets portfolios' emissions reduction targets, the proposed method is to set an annual carbon "budget" that the portfolios aim to stay within, using the weighted average carbon intensity (WACI) as the metric.

Corporate bonds: Starting point at 2019 WACI of the benchmark, reducing by 50% by 2030 (see baseline field).

Listed Equity: Due to the Scheme's portfolio having a low baseline of emissions, the starting point of the budget will be set at 75% of benchmark emissions, to make the target suitably ambitious. A 50% reduction by 2030 is then applied. The equity portfolio's starting point is significantly lower than the investment benchmark. Therefore, the equity portfolio will aim for a more ambitious target.

Tesco Pension Trustees Limited

Portfolio level – emissions reduction reference target	The targets will be reviewed every three years, although re-baselining the target is currently expected to happen if any of the following occur: • Substantial changes to data coverage, availability, or quality; • Significant shift in the fund's sectoral or industry exposure; and • New money or portfolio growth, requiring attribution for targets (not applicable for emissions intensity targets). **Emissions metrics:** The Trustee will disclose three emissions metrics annually in its TCFD disclosure; absolute emissions, carbon footprint and WACI. Absolute emissions and carbon footprint are being disclosed for internally and externally managed listed equity, corporate bonds and property where available and reasonably complete (without the disproportionate time or cost being incurred by the Scheme). WACI is being disclosed for internally and externally managed listed equity and corporate bonds. Sovereign-specific WACI metrics are being disclosed for sovereign bonds. For direct and externally managed (indirect) property, emissions per m2 is being disclosed.
Portfolio level – investment in climate solutions target	**Approach:** The Scheme's principal investment manager, TPI, considers (on behalf of the Trustee) climate opportunities as well as risks when making new investments. The Trustee has multiple investments in climate solutions and the ability to provide a climate solution is considered as a positive when TPI makes a new investment on behalf of the Trustee. The focus in the first year of setting targets has been on collecting climate data and setting alignment, engagement and emissions reduction targets. Climate solutions is on the 2022-23 agenda for research and discussion. In Q1 2023, the Trustee will also be undertaking training from its advisors on climate solutions.
Asset level alignment – portfolio coverage target	**Baseline date:** Portfolio holdings as at 30 September 2021, using 2019 emissions data **Baseline performance:** • 33% aligning or aligned • 25% committed to align During the year, the Trustee considered an assessment of the Scheme's current position against the above target, based on the portfolio as of 31 December 2021, with target setting data from January 2022. TPI has estimated that 34% of the assets within scope for the target are classified as 'aligning or better'. In addition to this, a further 28% have taken steps towards this status. **Target year:** 2030 **Target:** 70% of assets under management of the "in-scope" asset classes meeting at least "aligning" criteria (see below). **Asset classes in scope:** Internally and externally managed corporate bonds, listed equity and property. Information will also be collected for the sovereign bond exposure. In addition, the Trustee collects data for whether external managers in private market investments (property and non-property) have made net zero commitments and whether the fund that the Trustee is invested in is within scope of the commitment. TPI (on behalf of the Trustee) will continue to monitor and engage with managers on this topic even though it is currently not included in the alignment target.

Tesco Pension Trustees Limited

Asset level alignment – portfolio coverage target	**Data sources:** The Trustee and TPI use the five levels of alignment from the IIGCC Net Zero Investment Framework to assess the level of alignment. The climate report (see link below) includes the interpretation of how the levels apply across asset classes. To collect data, the following sources were used: • Listed equity & corporate bonds: SBTi and data from ISS • Property: CRREM • External managers: questionnaires and interviews with managers
Asset level alignment – engagement threshold	**Target:** A target of 70% of the financed emissions of the portfolio (asset classes within scope) under engagement or aligned with net zero in 2022/23.
Additional information	**Methodology:** The IPCC research shows that a 47-58% absolute emissions reduction is required by 2030 compared to 2015, to be on track for net zero by 2050 and in line with 1.5°C in the two 'no to low' overshoot scenarios. This is the basis for the 50% reduction in annual "carbon budget" towards 2030 for public market investments. The IPCC report refers to global absolute emissions, whereas the target is based on emissions intensity. To ensure alignment, TPI (on behalf of the Trustee) will monitor investments' absolute emissions as well as sector-specific metrics and progression towards targets. **Operational emissions:** The Scheme's principal investment manager, TPI, has a workstream focusing on measuring its operational emissions. The Trustee company and TPI are part of the Tesco Group of companies. The Tesco Pensions Team are also employees of a Tesco Group company. As such, they all fall with the remit of the operations, scopes 1 and 2, emissions reduction targets set up Tesco Plc. [Tesco Plc's target: a commitment to reduce scope 1 and 2 GHG emissions by 60% by 2025, using a 2015 baseline.] **Fossil fuel investment:** TPI has identified certain areas as potentially "Controversial", and discussed those with the Trustee. They include companies engaged in exploration for, or extraction and production of, fossil fuels. Rather than exclude these areas entirely the nature of any exposure is considered, along with the steps being taken to manage risks and impacts. TPI investment teams are required to have an engagement plan in place for these exposures and to discuss their approach with the TPI Head of RI and CIO. If TPI considers the issue relating to a company in this area particularly controversial it will report it to the Trustee as part of its reporting processes.

The Church Pension Fund, Finland

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2020 Our Climate Strategy update in 2021 used the most recent positioning as a reference target point. **Baseline performance:** 109,2 tC02e/EUR Mn revenue (WACI) **Target year(s):** 2025, 2035 **Target(s):** 2025: -25% CO2e/EURMn revenue; and direct real estate heating fossil-free 2035: Net zero **GHG scopes included:** Scope 1 & 2. Current interim target does not consider scope 3 emissions, but they are disclosed annually. The plan is to phase in scope 3 emissions over time. **Asset classes in scope:** 2025: Listed equity and corporate fixed income; direct real estate investments (heating fossil-free) 2035: The whole fund **Methodology:** The Church Pension Fund's Climate Strategy published in 2021 was developed based on the Net Zero Investment Framework recommendations. **Net zero scenarios:** Current emissions already approximately 50% of that of the benchmark, whereas per IEA SDS scenario, the portfolio emissions will exceed its budget in 2042. The Church Pension Fund wanted to set a short-term interim target that will continue to take us in the right direction and reassess in 2025 our decarbonization pace as the methodologies continue to develop across asset classes. **Emissions metrics:** We disclose emissions both in terms of intensity as well as absolute emissions. We will continue to monitor both and reassess the targets if necessary.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** 31 December 2020 **Baseline performance:** 4.4% of AUM in green investments **Target year:** 2025 **Target:** 10% of AUM allocated to green investments **Methodology:** Qualitative assessment of thematic investments by using the EU Green Taxonomy and SFDR Article 9 to support the classification. No scenarios used to determine the target level as of today.
Asset level alignment – portfolio coverage target(s)	**Baseline date:** To be determined in the next Climate Strategy update. However, the Pension Fund annually monitors the percentage of listed equity and corporate fixed income holdings that have set Science-based targets under the SBTi. In addition, the Church Pension Fund annually tracks the Carbon Risk Rating score (CRR, developed by ISS ESG) for its listed equity and corporate fixed income issuers. The CRR assesses how an issuer is exposed to climate risks and opportunities, and whether these are managed in a way to seize opportunities, and to avoid or mitigate risks. It provides the Church Pension Fund with critical insights into how issuers are prepared for a transition to a low carbon economy and is a central instrument for the forward-looking analysis of carbon-related risks at portfolio and issuer level.

The Church Pension Fund, Finland

Asset level alignment – portfolio coverage target(s)	**Baseline performance:** To be determined in the next Climate Strategy update. Percentage of listed equity and corporate fixed income holdings that have set Science-based targets under the SBTi as of 31 December 2021: • committed SBT 14% • approved SBT 21%. • ambitious target accounts for 14%, non-ambitious 14% and no target 36%. The average CRR score (scale 0-100, 100 being the highest score) for the portfolio was 53 as of 31 December 2021. **Target:** To be determined in the next Climate Strategy update. **Asset classes in scope:** The current assessment covers listed equity and corporate fixed income. **Data sources:** Science-based targets under the SBTi ISS ESG Carbon Risk Rating score (CRR)
Asset level alignment – engagement threshold	**Target:** To be determined in the next Climate Strategy update. **Approach:** Currently supporting engagement through CA100+ and the CDP's Science Based Targets Campaign. In addition, the Church Pension Fund focuses especially on the CRR scores of the highest emitters in the portfolio and use this information as a basis for engagement dialogue with external fund managers responsible for selecting the companies.
Additional information	**Further work:** The Church Pension Fund plans in due course to explore and research climate data opportunities and availability in illiquid asset classes. **Fossil fuel investment:** The Church Pension Fund avoids companies that have a significant financial risk because of climate change and whose activities are not in line with the net zero trajectory. For fossil fuels, the Church Pension Fund has defined the exclusion criteria used to manage direct investments. Most of the asset managers and funds used by the Church Pension Fund have excluded coal mining companies and electricity companies that significantly benefit from coal power from their investment portfolio. Some have even more extensive exclusion criteria in place for fossil fuels. The Church Pension Fund monitors the exclusion criteria of asset managers and funds and their development through an annual ESG survey. The Pension Fund favours funds and asset managers that comply with and report transparently on climate change principles. In addition, the public commitment of asset managers to a net zero target has been highlighted as an important criterion in the selection of funds. See Climate Strategy of the Church Pension Fund (2021), page 9 on Exclusion Criteria. **Operational emissions:** Carbon Neutral Church by 2030

For further information: Climate Strategy of the Church Pension Fund (2021)

The National Trust for Places of Historic Interest or Natural Beauty

Portfolio level – emissions reduction reference target(s)	**Baseline date:** 31 December 2019 **Baseline performance:** 177,050 tons CO2e 109 tons CO2e/$mn invested **Target year(s):** 2030 **Target(s):** 50,000 tons CO2e gross or zero emissions net of carbon credits generated by investments in reforestation **GHG scopes included:** Coverage for now is scope 1,2 only. Zero fossil fuel policy limits the amount of scope 3 emissions, however. It is our intention to include Scope 3 emissions when we can rely on sufficiently robust data. **Asset classes in scope:** Listed equity, corporate fixed income, multi-asset/absolute return & PE/VC **Net zero scenarios:** The aggressive target has been set well in excess of any Paris aligned scenario in acknowledgement that some investors will fail in that goal, so those able to show leadership and go further should do so.
Portfolio level – investment in climate solutions target	**Quantitative target** **Baseline date:** 31 December 2020 **Baseline performance:** $70.4m of assets **Target year:** 2030 **Target:** $350m 13% of assets, assuming 2.5% inflation 2021 onwards **Methodology:** Assets meet MSCI definition of Climate Solutions, specifically 'Alternative Energy', 'Energy Efficiency', 'Green Building', and 'Sustainable Agriculture'
Asset level alignment – portfolio coverage target(s)	**Baseline date:** 30 September 2021 **Baseline performance:** 33% of assets meeting at least "aligning" criteria **Target date:** 2025 **Target:** 70% meeting least "aligning" criteria **Asset classes in scope:** Listed equity and corporate fixed income Data sources: CA100+ benchmark, Transition Pathway Initiative, SBTi
Asset level alignment – engagement threshold	**Target:** 70% of financed emissions (in material sectors) that are either already meeting net zero "aligned" criteria or that will be subject to direct or collective engagement & stewardship actions.

The National Trust for Places of Historic Interest or Natural Beauty

Additional information	**Methodology:** Rather than try to 'optimise' a fair share of the 50% reduction, the NT aims to achieve more than its fair share of the reduction through accelerated decarbonisation of the portfolio and significant targets for investment in climate solutions. **Fossil fuel investment:** The NT avoids any investment in businesses with material production of coal or other fossil fuels. See how we're changing our investment policy. **Operational emissions:** Operational emissions are targeted to be net zero by 2030.

For further information: Tackling Climate Change Together

TPT Retirement Solutions

Portfolio level – emissions reduction reference target	**Baseline date:** 31 December 2019 **Baseline performance:** DB listed equity and corporate fixed income portfolio: 88.35 tCO2e/£m invested DC listed equity and corporate fixed income portfolio: 98.28 tCO2e/£m invested DB real estate portfolio (scope 3)*: 47.61 kgCO2e/m2 *TPT's scope 1 and scope 2 emissions for real estate are landlord controlled areas of the assets. These areas are very small and therefore the intensity is close to zero. Scope 3 emissions are tenant controlled areas; this is consistent with the PCAF operational control approach. Note that real estate emissions are measured in kilogrammes as opposed to tonnes and normalised by owned area (m2). **Target year:** 2025, 2030, 2050 **Target(s):** 2025: At least 25% reduction in portfolio emission intensity 2030: 50% reduction in portfolio emission intensity 2050: Net zero **GHG scopes included:** For listed equity and corporate fixed income, scope 1 and scope 2 emissions are currently included, with scope 3 emissions being considered in due course as far as we are able. **Asset classes in scope:** Listed equity, corporate fixed income, real estate and sovereign bonds **Methodology/net zero scenarios:** TPT intends to rely on the Net Zero Investment Framework developed by the IIGCC TPT will measure the carbon intensity of our portfolio to see where to focus our engagement efforts and to ensure we are on the right trajectory in order to meet our net zero commitment. Ultimately the reduction of absolute emissions at asset level will be the driver in meeting our net zero goals. We will report both the carbon intensity of the investment portfolio and the absolute level of emissions. TPT intends to use IPCC P1-P3 scenarios to guide portfolio decarbonisation which are consistent with a 1.5ºC scenario.
Portfolio level – investment in climate solutions target	**Approach:** We commit to increasing investment in climate solutions, where possible, for both schemes, but have only set a quantitative target for the DB scheme. We use an external asset manager for the management of our DC funds who is a signatory of the Net Zero Asset Managers initiative. The manager is responsible for strategic asset allocation decisions relating to climate solutions so we have therefore set a qualitative target. **Quantitative target** **Target year:** 2030 **Target:** DB: At least 6% of AUM (return-seeking assets) invested in climate solutions by 2030 **Methodology:** In line with best practices and current methodologies with the view of integrating emerging frameworks as applicable

TPT Retirement Solutions

Asset level alignment – portfolio coverage target	**Target year:** 2040 **Target:** 100% of AUM in 'material' sectors either already net zero, aligned to net zero, or aligning by 2040 **Asset classes in scope:** Listed equity, corporate fixed income, real estate and sovereign bonds **Data sources:** Transition Pathway Initiative (TPI), MSCI, SBTi. For real estate Climate Risk Real Estate Monitor (CRREM) and asset managers
Asset level alignment – engagement threshold	**Target:** By 2030 at least 90% of financed emissions in material sectors are either assessed as net zero, aligned with a net zero pathway or the subject of engagement activities.
Additional information	**Methodology:** TPT recognises that emission reductions should be primarily achieved through the reduction of emissions in our investment portfolio. This is achieved by investing in climate solutions, engaging with high carbon assets to encourage speedy transition and if engaging fails then reducing exposure to high carbon assets. Our asset level targets are therefore crucial for ensuring a real-world decarbonisation. TPT will measure the carbon intensity of our portfolio to see where to focus our engagement efforts in order to meet our net zero commitment. Ultimately the reduction of absolute emissions at asset level will be the driver in meeting our net zero goals, the role of the portfolio targets is to act as an accountability mechanism to ensure we are on the right track. **Operational emissions:** TPT commits to having net zero scope 1 and scope 2 operational emissions by 2050. **Fossil fuel investment:** In terms of exclusions, TPT works with investment managers who demonstrate best in class net zero approaches therefore exclusions are not currently considered necessary. We retain the ability to modify our exclusion approach if evidence shows negative long-term alignment with net zero through our investments. **Additional information:** We also have regular dialogue with the investment community and policymakers, official bodies and other financial participants to progress net zero methodological assessments for those assets not covered by existing frameworks. We are part of IIGCC working groups and in ongoing dialogue with the PAII.

For further information: Please see TPT's Climate Action Plan and Climate Change Policy within TPT's Responsible Investment Framework

Wiltshire Pension Fund

Portfolio level – emissions reduction reference target	**Baseline:** 31 December 2020 **Target Year(s):** 2025, 2030, 2050 **Target(s):** For the whole fund, all portfolios will be net zero by 2050, and we will target a reduction of 50% by 2030. For listed equity portfolios, we target a reduction of 43% by 2025 and 69% by 2030. **Baseline year performance for the target metric(s):** 49tC02e/$mn invested **GHG scopes included:** Target setting currently only includes scope 1 & 2, with plans to include scope 3 over time, in line with the Net Zero Investment Framework recommendations. **Asset classes in scope:** As specified above
Portfolio level – investment in climate solutions	**Target:** We commit to allocating 30% of the Fund to sustainable/low carbon assets by 2025, and 35% by 2030 (as measured by the long-term strategic allocation). We have set a strategic allocation of 5% of the Fund to renewable infrastructure, which will include climate solutions. We will refine and make this target more specific in the future.
Asset level alignment – portfolio coverage target	**Target:** No target currently set – a more granular implementation plan is in progress **Baseline:** 31 December 2020 **Baseline year performance for the target metric(s):** 6.2% (of listed equities) meeting at least "aligning" criteria in baseline year. **Asset classes in scope:** Listed equity
Asset level alignment – engagement threshold	The collective engagement baseline across the whole Brunel Pension Partnership is 47.3% of financed emissions.
Additional information	**Methodology:** The methodology used is "accelerated 1.5 degree decarbonisation curve". **Fair share:** Our whole fund target is consistent with delivering a fair share of the 50% global reduction in CO2 emissions by 2030, and our listed equity target is more ambitious, which increases our chances of success. Some of our highest emitting holdings are in utilities companies, but we monitor whether these are setting ambitious decarbonisation targets, so believe that our holdings are in companies which are leaders in this space and will be able to reduce emissions ahead of the overall fund target.

For further information: Our Wiltshire Pension Fund - Climate page sets out our strategy, action plan and net zero roadmap.

ASIA INVESTOR GROUP ON CLIMATE CHANGE

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The Institutional Investors Group on Climate Change