



Climate Action: Progress Towards Net Zero.

Pension Insurance Corporation plc
TCFD Report 2022



This report was created in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We have set out how we have complied with these recommendations in the TCFD Progress Section.

Our reporting

This report is part of our 2022 reporting suite, which also includes the Annual Report and Accounts and the ESG Report.

For more information visit www.pensioncorporation.com



Download our latest annual report at www.pensioncorporation.com



Download our latest ESG report at www.pensioncorporation.com

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Introduction

Playing a key role in shaping climate change response.



We are all responsible for the short- and long-term impact of climate change and must work together to create a sustainable future. I am proud of the continuous action PIC takes to mitigate climate risks, and of the role we play to identify opportunities to support the global Net Zero transition. We remain committed to doing more to support the transition while continuing to fulfil our purpose of paying the pensions of our policyholders."

Tracy Blackwell
Chief Executive Officer,
PIC

We are pleased to issue our second report aligned with the Task Force on Climate-related Financial Disclosures (TCFD) guidelines. This report outlines the actions we are taking, and progress we have made, to mitigate climate risks and decarbonise our future economy.

At PIC, we invest in secure, long-term investments that generate social value to ensure we are able to back the pensions of our policyholders over future decades, which is central to our purpose.

As an asset owner that predominantly invests in debt investments, we are most concerned with risk management to prevent the loss of value within our investment portfolio, which ensures that we are able to continue paying our pension obligations. This means we take a very long-term investment view and assess potential risks on this basis.

Our purpose helps shape our approach to climate risk, which cuts across our operations, as well as our investment strategy. We are working to factor climate risk even deeper into our investment decisions, and are actively seeking investment opportunities that shift our portfolio towards sustainable assets that have a suitable risk profile.

The latest estimates show that current policy to transition the world's dependency on carbon will still lead to a warming of 2.7°C or above by 2100, well beyond the Paris Agreement target to limit a global temperature rise of 1.5°C above pre-industrial times.¹

PIC has set targets to become carbon neutral across its operations by 2025 and to hold a Net Zero investment portfolio by 2050. These targets anchor our corporate commitments and investment activities. In 2022, we developed a Transition Timeline to guide this process, and focused our efforts on improving the accuracy and reliability of our emissions calculation by developing a robust reporting process.

The understanding of climate risk and the associated investment impact opportunity is advancing quickly, and we have dedicated resources to enhancing the coverage and quality of our climate data. The availability of climate-related data continues to be a challenge, particularly in private markets. That said, we are pleased to share that we have successfully estimated the carbon intensity of 78% of our total portfolio, and 83% of our Matching Adjustment Fund, which is the portfolio of assets directly backing our pension liabilities. If we are to accelerate progress on disclosures, we must engage more with the companies in which we invest to improve the standard of ESG data, while recognising that we continue to operate in imperfect markets.

We must also continue to evolve how we utilise climate data throughout our investment process and broader decision making. Last year, we significantly progressed the integration of ESG data and climate-related factors in our real estate investment process. This included evaluating our property investments by creating a bespoke due diligence process to help us identify and assess the short- and long-term climate risks facing our investments.

It is important that climate-related investment factors are not viewed in isolation when making investment decisions, as there needs to be a balance between investing for positive environmental outcomes and positive societal outcomes. PIC supports a just transition and makes efforts to understand the social impact of its investments.

¹ <https://climateactiontracker.org/global/temperatures/#::-:text=Current%20policies%20presently%20in%20place,C%20above%20pre%20industrial%20levels>.

About PIC

PIC is a specialist insurer that provides tailored pension insurance buyouts and buy-ins to the trustees and sponsors of UK-defined benefit pension funds. We back our policyholders' pensions with investments that are both secure and sustainable. A core part of our investment strategy is finding secure, long-term assets that generate considerable social value for current and future generations, such as renewable energy, social housing and urban regeneration.

c.£40bn

investment portfolio

302,200

policyholders

PIC's Climate Commitments

PIC has made clear commitments to reduce our corporate impact on the climate, as well as the impact deriving from its investments.



Goals:

Carbon neutral (Scope 1 and 2 emissions) as a business by 2025

Net Zero within all emissions including the investment portfolio by 2050



Targets:

Decreasing our investment portfolio's average carbon intensity by 50% by 2030 from a 2019 baseline

Decreasing the average carbon intensity of investments in publicly listed corporate credit by 25% by 2025 from a 2019 baseline¹



2022 Achievements:

14% decrease

The average carbon intensity of our investment portfolio is 175 tons CO₂e which covers 78% of our investment portfolio by market value. This was a 14% decrease in carbon intensity compared with the assets for which we had carbon intensity data in 2021

70% alignment

70% of PIC's public corporate credit portfolio, where data is available, is aligned to a trajectory of 2°C or below, and 41% is aligned to a <1.5°C world²

2.08°C alignment

PIC's public corporate credit portfolio's temperature alignment is currently 2.08°C, with data available for 65.5% of our public corporate credit portfolio

¹ Measure as tons CO₂e/\$M revenue. Taking into account the quality and consistency of available data.

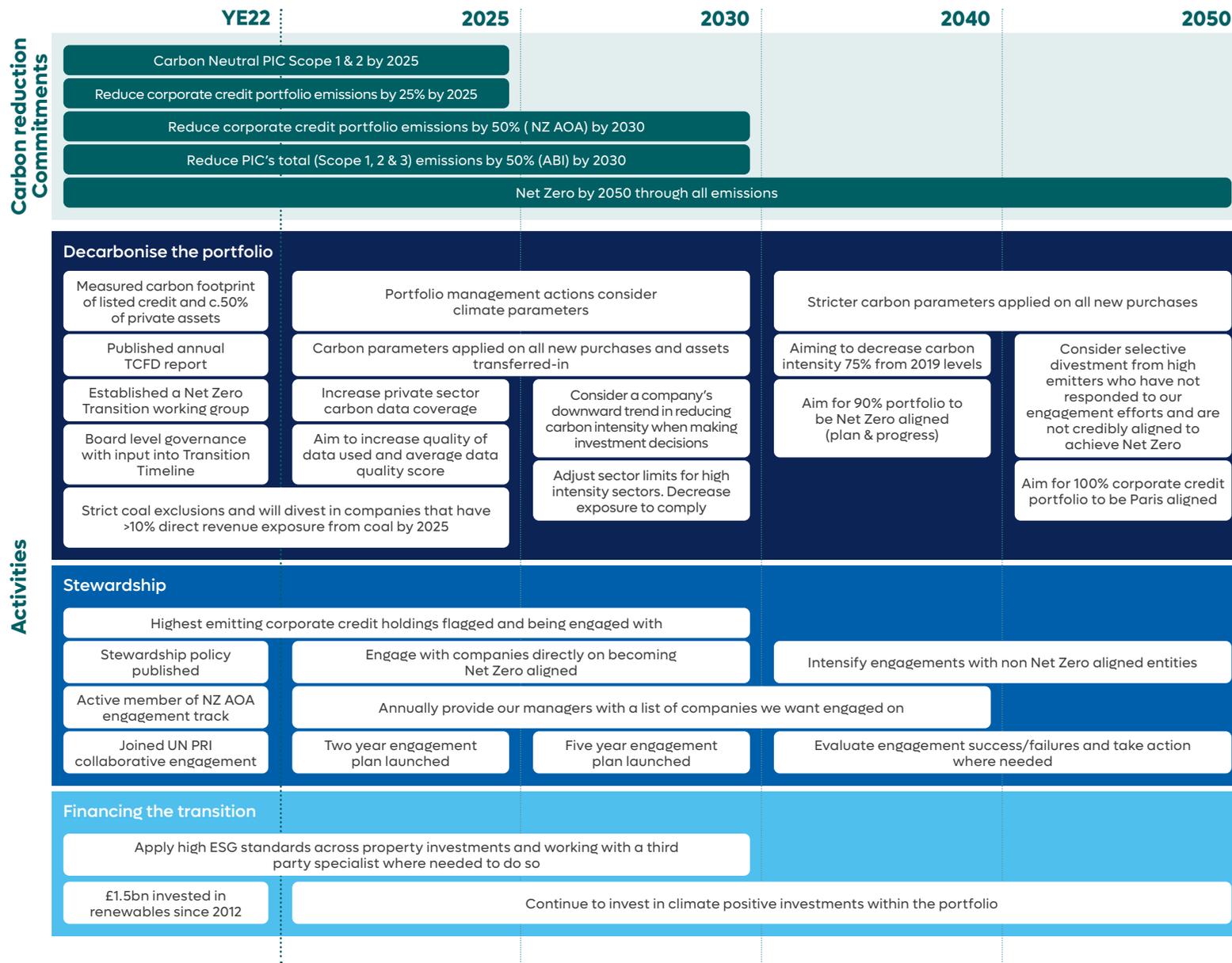
² Temperature alignment is the projected temperature rise by 2100 from pre-industrial levels within PIC's publicly listed credit investments (more detail on temperature alignment on pages 41-42).

Transition Timeline

In 2022, we developed a Transition Timeline outlining the key activities we have taken, and plan on undertaking, to achieve our carbon reduction commitments and transition to a Net Zero organisation.

These are split across our three areas of focus: the decarbonisation of our portfolio, proactive stewardship and engagement, and targeted investments that finance the Net Zero transition. The timeline incorporates the actions we took in 2021 and looks towards 2050. The ESG Committee oversees the setting of and monitoring against targets, and the Board level Investment and Origination Committee is responsible for the delivery of the Transition Timeline. All committees have a role in the execution of ESG as a cross cutting issue. We will continue to progress the timeline as needed to ensure it is appropriately guiding our operations, investment portfolio and overall business model to achieve our goals.

In 2023, we are continuing to deliver this Transition Timeline and are developing a more detailed transition plan that is aligned with the recommendations of the Transition Plan Taskforce.¹



¹ About the Transition Plan Taskforce (transitiontaskforce.net)

TCFD Progress

What is TCFD?

The Financial Stability Board (FSB) established the Task Force on Climate-related Financial Disclosures (TCFD) in 2017 to develop recommendations on the types of climate-related information that companies should disclose to support investors, lenders, and insurance underwriters in appropriately assessing and pricing risks related to climate change. The FCA listing rules have made TCFD reporting a requirement for UK listed companies, banks, insurers, and AIM companies with more than 500 employees, as well as LLPs and non-listed companies with +500 employees and a turnover of +£500m.

TCFD Reporting Recommendations

PIC committed to aligning with the TCFD recommendations in 2021 and the table below demonstrates how we have adhered to the reporting recommendations.



Governance

Disclose the organisation's governance around climate-related risks and opportunities.

- | | |
|--|---|
| a) Describe the Board's oversight of climate-related risks and opportunities. | Pg. 07-08 – Oversight of ESG and Climate Risk |
| b) Describe management's role in assessing and managing climate-related risks and opportunities. | Pg. 07-08 – Oversight of ESG and Climate Risk
Pg. 10-11 – Engagement |



Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.

- | | |
|--|---|
| a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term. | Pg. 14-15 – PIC's Responsible Investment Approach
Pg. 16-17 – Applying our Responsible Investment Strategy Across our Real Estate Portfolio
Pg. 19-21 – Our Sustainable Assets |
| b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning. | Pg. 03 – Transition Timeline
Pg. 13 – PIC's Sustainability Strategy
Pg. 14-15 – PIC's Responsible Investment Approach
Pg. 19-21 – Our Sustainable Assets
Pg. 22 – Corporate Initiatives |
| c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. | Pg. 18 – Scenario Testing
Pg. 29 – Case Study: Physical Climate Risk Exposure of our US Municipal Bond Portfolio |



Risk Management

Disclose how the organisation identifies, assesses, and manages climate-related risks.

- | | |
|--|--|
| a) Describe the organisation's processes for identifying and assessing climate-related risks. | Pg. 10-11 – Engagement
Pg. 24-27 – PIC's Enterprise Risk Management Approach |
| b) Describe the organisation's processes for managing climate-related risks. | Pg. 28-29 – Our Approach to Climate-Risk Assessment
Pg. 30 – Managing Climate-Related Risks
Pg. 31 – Climate Risk Developments and Roadmap |
| c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management. | Pg. 24-25 – PIC's Enterprise Risk Management Approach |



Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

- | | |
|---|--|
| a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process. | Pg. 35-42 – Portfolio Assessment |
| b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks. | Pg. 34 – Reducing our Operational Carbon Footprint
Pg. 35-42 – Portfolio Assessment |
| c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets. | Pg. 35-42 – Reducing our Operational Carbon Footprint |

The disclosures contained within this TCFD report are compliant with the requirements under Chapter 2 of the FCA ESG Handbook.

Industry Collaboration

Collaborative action is essential to successfully assess, mitigate, and manage the short- and long-term impact of climate change. We are members of several industry groups committed to driving action and support globally recognised frameworks and projects, including:



The Purpose of Finance

PIC founded a project called the Purpose of Finance with the aim of facilitating debate from a position of support on how best to repair the disconnect between society and the financial services industry. The project brings together policymakers, regulators, people who work in financial services and others to tackle this deep-rooted problem. This includes a wide-ranging debate about how financial institutions can focus on and be accountable for their purpose. Since the project's inception, PIC has released numerous Purpose of Finance papers including:

- The Purpose of Finance
- The Purpose of Asset Management
- The Purpose of Stock Exchanges

Purpose of Finance podcast topics include:

- How Can We Re-shape Financial Markets to Create Fairer Capitalism?
- The Long-term Consequences of Short-term Thinking
- The Changing World of Stock Markets



United Nations' Principles for Responsible Investment (UN PRI)

PIC is a signatory to the UN PRI, as are all of PIC's key external asset managers who help manage the main public credit portfolio. As a signatory to the UN PRI we are committed to enacting the following six principles, recognising that the large majority of our investments are in credit.

1. To incorporate ESG issues into investment analysis and decision-making processes
2. To be active owners and incorporate ESG issues into our ownership policies and practices
3. To seek appropriate disclosure on ESG issues by the entities in which we invest
4. To promote acceptance and implementation of the Principles within the investment industry
5. To work together to enhance effectiveness in implementing the Principles
6. To report on activities and progress towards implementing the Principles



UN Sustainable Development Goals (UN SDGs)

Also known as the Global Goals, the UN SDGs were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people can enjoy peace and prosperity. The 17 UN SDGs are integrated as they recognise that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability. PIC focuses on ten goals that have relevance to our business and purpose including goal 3 (Good Health and Well Being), 4 (Quality Education), 6 (Clean Water and Sanitation), 7 (Affordable and Clean Energy), 9 (Industry, Innovation and Infrastructure), 10 (Reducing Inequalities), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption & Production), 13 (Climate Action), and 15 (Life on Land).



THE NET-ZERO ASSET OWNER ALLIANCE

Net Zero Asset Owner Alliance (NZAOA)

PIC is proud to be a member of the NZAOA. The NZAOA was convened by United Nations Environment Programme and UN PRI in recognition of the important role institutional investors collectively have to play in fostering the Net Zero transition the world needs. Members have committed:

1. To transitioning their investment portfolios to Net Zero GHG emissions by 2050 consistent with a maximum temperature rise of 1.5°C above pre-industrial levels
2. To establishing intermediate targets every five years and to regularly report on progress



Association of British Insurers (ABI) Climate Change Working Group & Roadmap

PIC is an active participant in the ABI Climate Change Working Group. The ABI developed this working group in partnership with Boston Consulting Group, and the Climate Change Roadmap has set industry targets to address climate change and help the UK reach Net Zero by 2050. The ABI plan has several consumer-facing elements alongside a host of behind-the-scenes suggestions on investment and underwriting. The roadmap is reviewed and refreshed every year in line with scientific evidence to ensure it stays in line with the Government's Net Zero 2050 strategy. The ABI Climate Change Work Group helps facilitate the implementation of the Roadmap by the industry.



Governance.

PIC operates within the highly regulated insurance framework and is authorised by the Prudential Regulation Authority (PRA) and regulated by the Financial Conduct Authority (FCA) and PRA. Strong governance of all risks, including those related to climate, enables us to deliver our purpose while ensuring the stability of our business and investments.

07-08 Oversight of ESG and Climate Risk

09 Stewardship

10-11 Engagement

Oversight of ESG and Climate Risk

PIC’s management of climate risk is incorporated into the Group’s overall approach to ESG matters. PIC views climate risk as a cross-cutting risk for our business operations and stakeholders. A Board level ESG Committee was established in September 2021, and is responsible for ensuring that the Board and its Committees provide oversight in relation to the Group’s ESG strategy and activities.

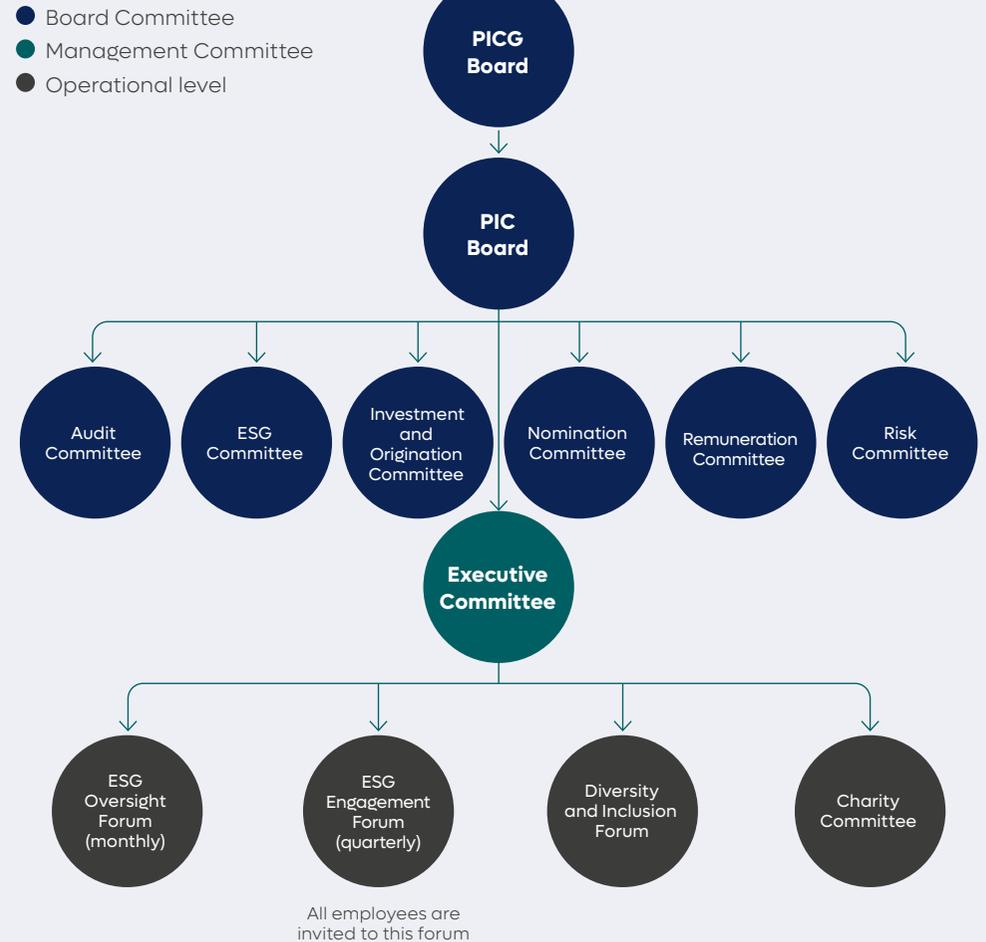
ESG Committee responsibilities

The ESG Committee discharges its duties and responsibilities in accordance with its terms of reference. The ESG Committee provides oversight and reviews matters within its remit and considers recommendations from executives and management. The ESG Committee’s terms of reference permit the Committee to:

1. Oversee the development of and make recommendations to the Board regarding the Group’s ESG strategy;
2. Oversee the establishment and effective implementation of ESG policies and codes of practices, as well as monitor and review their relevance, effectiveness and further development;
3. Identify the relevant ESG matters that do, or are likely to, affect the operation of the Group and/or its strategy;
4. Ensure that the Group monitors and reviews current and emerging ESG trends, relevant international standards, and legislative requirements, and identify how these are likely to impact on the strategy, operations and reputation of the Group. As well as determine whether and how these are incorporated into the Group’s ESG policies and objectives;
5. Set appropriate strategic goals, targets and ongoing monitoring and reporting of ESG related matters and KPIs;
6. Work in conjunction with the other Board Committees to oversee the identification and mitigation of ESG risks and the identification of ESG opportunities;
7. Make recommendations to the Board in respect of required resourcing and funding of ESG-related activities, and on behalf of the Board, oversee the deployment and control of any resources or funds;
8. Oversee the Group’s engagement with its broader stakeholder community; and
9. Ensure that the Group provides appropriate information and is transparent regarding its ESG related policies with the investment community.

The ESG Committee includes five Non-Executive Directors who also serve as Chairs for PIC’s other Board level committees, including the Audit, Investment and Origination, Nomination, Remuneration, and Risk Committees. The ESG Committee works closely with the Board and other committees to oversee the identification and mitigation of ESG risks, including climate risks, as well as evaluate ESG opportunities. The ESG Committee currently meets on a quarterly basis at a minimum. In Q4 2022, PIC’s new Chairman David Weymouth took over the role of Chairman of the ESG Committee from our previous Chairman, Jon Aisbitt.

Corporate governance structure



Oversight of Climate Risk continued

ESG responsibilities

Accountability for integrating ESG throughout our investment strategy sits with the Chief Investment Officer, while the Chief Risk Officer is responsible for the climate change risk framework and general oversight of climate change risks. Several members of the PIC Executive Committee have ESG Business Function objectives, and each relevant member is asked to specify detailed KPIs based on their roles and responsibilities within the organisation. Three members of the Executive Committee also sit on the management-led ESG Oversight Forum, formed in 2021 and comprised of 15 members in total, which meets monthly to discuss ESG-related issues and embed ESG across the business.

The Head of Responsible Investing, who Chairs the ESG Oversight Forum, coordinates ESG efforts across the business and integrates ESG into the overall investment strategy. The Head of Responsible Investing also updates the ESG Committee at the quarterly meeting on items such as PIC's ESG strategic positioning, ESG risks in the portfolio and progress towards climate commitments. More information about our governance structure can be found in our ESG Policy. The Responsible Investing team now comprises of three full time individuals and is part of the Investment Team.

Employees are informed of climate-related progress and updates via the quarterly ESG Engagement Forum. External stakeholders are updated on the strategy via our public reporting, including the Annual Report and Accounts, our ESG report and this annual TCFD report.

ESG Committee activities during 2022

In 2022, one of the ESG Committee priorities was to focus on PIC's strategic positioning toward climate change and the actions we are taking to achieve our Net Zero goals. Some of the Committee's activities are listed below:

- Considered a number of company policies that are vital to achieving the company's climate goals;
- Reviewed PIC's Transition Timeline, including the proposed actions to decarbonise the investment portfolios;
- Reviewed and challenged the proposed methodology, targets, and ambitions of the transition approach before it was supported for approval by the Investment and Origination Committee (IOC) in September 2022; and
- Supported the development of PIC's entity-level Sustainability Strategy and ESG policy, which were approved by the Board in September and October 2022, respectively.

CIO and CRO climate-related business objectives

Rob Groves, the Chief Investment Officer at PIC, has objectives to ensure the integration of ESG factors alongside financial factors in the investment decision making process. This is measured through KPIs such as:

- Meeting Net Zero commitments and transition strategy actions
- Establishing ESG integration frameworks for all asset and sub-asset classes

Giles Fairhead, the Chief Risk Officer at PIC, also has as objectives to own the approach to climate risk management and embed this throughout the organisation.



The risks posed by climate change are very clear. At PIC, we believe that action is needed to ensure an orderly transition to Net Zero. We have therefore set our own Net Zero targets and continue to integrate climate actions throughout our investment strategy. We are a long-term business and firmly believe that companies that integrate sustainability within their business strategy are best placed to deliver long-term value, but it is also the right thing to do for our planet and our future."

David Weymouth
Chairman,
PIC



Case study: Establishing PIC's Transition Timeline

In 2022, PIC developed a Transition Timeline to ensure that we meet our climate commitments. The ESG Oversight Forum, alongside the Investment Team, was responsible for ensuring various parts of the portfolio were included in the Transition Timeline proposed activities. The group shared relevant quantitative metrics which formed baseline parameters for our public credit holdings, which are now used when considering the climate implications of investment decisions. These include metrics on an investment's carbon intensity, implied temperature rises or downward trends, as well as forward-looking metrics such as a company's alignment to the Paris Agreement and carbon transition scores. For our private sector holdings, we have focused our strategy on enhancing the robustness of our carbon estimates and attaining a higher quality level of data. The timeframe for executing the timeline was supported by the Board level ESG Committee and approved by the Board's Investment and Origination Committee.



Stewardship

Responsible stewards of the capital we invest.

PIC sees value in setting high stewardship standards when investing and this is key to PIC's purpose, business strategy and investments.

PIC has a standalone Stewardship Policy which is aligned with our investment process, wider business purpose and philosophy. The Stewardship Policy applies to all our investments across public credit and private debt. Our stewardship activities are executed either directly by PIC or indirectly via our key managers.

Our Stewardship Policy is updated on an annual basis, or more frequently if required, and any changes to policies are approved by the Board's Investment and Origination Committee. Our Stewardship policy can be found on our website www.pensioncorporation.com



Engagement

Engagement is an integral part of our approach to ESG to help ensure that short-, medium- and long-term climate risks have been accounted for within the issuer's operations, as any climate risk may influence an investee's ability to meet its financial obligations. Across the company, we have proactively increased engagement across our portfolio by communicating our expectations to external managers and focusing on specific ESG issues, including climate-related risks.

We are pleased to share that we exceeded our climate-related engagement target in 2022 of engaging with 20 counterparties in the most carbon intensive sectors of our portfolio. With the help of our external managers, over 50 climate-specific engagements were held with over 35 different portfolio companies within carbon intensive sectors such as Utilities, Basic Materials, Industrials and Energy.

For our private market investments, we engage directly with organisations both at the point of capital raise and during the tenure of the investment. We expect our investee companies to respond to our engagement requests and to openly discuss any concerns. Our credit analysts try to include ESG topics into all direct discussions with companies and record the details and outcomes of the engagement on our newly formed Engagement Platform.

Climate-related topics discussed both via managers and directly during 2022 include:

- Climate alignment and strategy
- Decarbonising and minimising emissions
- Net Zero and climate-relevant commitments
- Transition plans and timeframes to meet climate commitments
- Climate risk and oversight

- Disclosures and reporting of carbon emission metrics
- Transparency around year-on-year progress against climate commitments
- Carbon efficiency of real estate assets
- Circular economy
- Pollution and waste

Engagement strategy – 2023 roll out

During 2022, PIC received Board-level support for a two-year engagement strategy which includes engagement targets across 'E' & 'S' topics through four specific engagement channels:

- Directly by our credit analysts
- Outsourced investments engagements via our key external managers
- Engagements assisted by selected third parties for specialty asset classes
- Collaborative engagement initiatives

A key part of our engagement strategy will be to measure progress year-on-year of our portfolio companies on the agreed topics and desired outcomes. Our Engagement Platform is available to our investment teams and will act as a central database for engagement records including measured outcomes and tracked progress. For example, a successful outcome would be if a company makes climate disclosures in line with our expectations,

reduces its carbon intensity in a meaningful way or implements certain recommended energy efficiency measures. We are rolling out our engagement strategy at the beginning of 2023, and we look forward to providing an update in next year's TCFD report.

Working with our key external managers

PIC works with asset managers to help manage a portion of our portfolio. We have Investment Management Agreements in place that outline their investment mandates and govern the stated objectives. We have a dedicated member of the Public Credit Team who closely manages the liquid credit external manager relationships and the portfolios they manage on our behalf. We also have important manager relationships within our private credit and our Diversified Capital Fund. The relevant PIC teams meet with the managers monthly to review the portfolio and investment universe. ESG and stewardship activities are discussed on a quarterly basis, including what climate issues the managers have engaged with investee companies on and any material outcomes. We require bespoke reports from our managers quarterly, which includes climate disclosure summaries. On occasion we have asked our managers for follow up calls with their analysts on certain high risk or controversial areas in their reports.

Schroders



Case study: Working with Schroders to better understand transition plans

We have worked with Schroders, one of our key external managers within the public corporate credit portfolio, to engage with investee companies on ESG topics, including a company's transition to Net Zero and approach to decarbonisation. Schroders takes action to understand how investments are adequately prepared for the risk climate change poses and will interrogate the ambition level of a company's transition plan, governance processes, progress and performance measurements, as well as any risks or uncertainties around their proposed actions. Schroders also uses proprietary research to identify global and sector relevant transition plan trends, and we will increasingly use these insights to inform our own direct engagements.

Engagement continued



Case study:

Discussion on our outlook for oil with Schroder analysts

We discussed the outlook of oil across our portfolio with Schrodgers Oil & Gas analyst to assess how comfortable we were with our exposure. The discussion reinforced our view that we did not want to hold a significant weight in the oil sector and where we did have exposure, to ensure it was of a short- or mid-term duration.



Case study:

Supporting burgeoning green agenda in South America with JP Morgan

We had an in-depth discussion with JP Morgan about their interaction with the Chilean government on a green bond that was being issued and we were looking to invest. The Chilean government has enhanced its green bond framework as well as applied strict governance over the use of proceeds. We were encouraged by the wider efforts the Chilean government is taking, such as publishing 'the Climate Act' which includes a binding goal of Net Zero emissions by 2050 and follows IPCC recommendations. As a result, we went forwards with the green bond investment.



Stewardship escalation policy

It is crucial to escalate stewardship activities where engagement or influence does not prove effective. Our Stewardship Policy specifies that if improvements by issuers are not made despite multiple engagement efforts within a period of 18 months, we and our asset managers will consider forms of escalation. We require that our asset managers escalate the ESG concern in a proactive and effective way and they are mandated to report back any new information or evidence to PIC.

We will also consider escalating a matter by collaboration with groups such as the ABI's Climate Change group or NZAOA engagement groups. Divestment will be considered if escalation measures have not been successful, as we believe divestment in isolation will not solve the global, long-term climate change challenges we face.

Collaborative engagements Solvency II reform

PIC values the importance of working closely with policymakers and regulators, as well as our industry and society more generally, to manage risks and maintain an open, proactive dialogue. We actively participate in public policy debates affecting the financial services sector and wider economy.

We responded to the Treasury's call for evidence on Solvency II reform, as well as the future regulatory framework and subsequently participated in the PRA's review of Solvency II. We are supportive of reform that incentivises tens of billions of pounds of long-term investment into the levelling-up agenda and the race to Net Zero, whilst maintaining strong policyholder protection.

UN PRI

PIC has been a signatory to the UN PRI since 2019,, and from 2021 we have required all external asset managers who manage a segregated mandate on our behalf to also be signatories to the UN PRI. All our managers have maintained an A+ or equivalent rating.

We have also joined a group of 120 investors within a UN PRI-led collaborative engagement whose objective is to engage on Social and Human Rights related issues mostly within the metals and mining, utilities and renewables sectors. We were particularly drawn to this collaborative engagement given the need for a just transition. Most industry engagements with high emitting sectors are focused on environmental issues, which certainly have their merit. However, we feel that outcomes on these engagements, even if positive, should not be at the expense of social factors. We will be one of six participating investors within a small group and given a focus list of companies to engage with. We look forward to starting this engagement in 2023.



Strategy.

We support the global transition through our long-term investment approach by embedding climate-related risks into our purposeful investment strategy.

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- 14-17 PIC's Responsible Investment Approach
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PIC's Sustainability Strategy

In 2022, PIC launched its firm-wide sustainability strategy, which aims to create long-term value as we fulfil our purpose, and subsequently leads to sustainable benefits for the economy, the environment, society and all our stakeholders.

Defining and launching our sustainability strategy has helped us articulate the key aims, principles and areas of focus across our key stakeholders – including the people who rely on us. Our mission through communicating this strategy is to give our pension partners, policyholders and employees a sense of community and engagement as we all continue to transition to a more green and sustainable way of working.

We recognise that asset owners have a responsibility to be drivers of long-term change, and this includes mitigating climate change through responsible business and investment practices. Our sustainability strategy helps align PIC's company-wide sustainability efforts with our sustainable investments, including setting the long-term goal to create social value and a transition to a low carbon economy.

As part of our sustainability strategy, we seek to invest in climate positive solutions, such as green energy innovations and regeneration projects that transform high emitting brownfield assets to green alternatives. We have also implemented investment restrictions across coal and oil sectors and have set targets to be carbon neutral in our operations by 2025 and for our investment portfolio to be Net Zero by 2050.

PIC's sustainability strategy



See our ESG report for more detail www.pensioncorporation.com

PIC's Responsible Investment Approach

Our philosophy and approach

Given the purpose of PIC is to pay the pensions of our current and future policyholders, it is our responsibility to protect our investment portfolio from the impact of all types of risks. ESG risks and opportunities have always been an inherent part of PIC's approach to assessing the suitability of long-term investments. We recognise that environmental factors and issues, specifically climate change, have social and financial implications across all time horizons. We are committed to reducing the carbon intensity of our portfolio by transitioning our investments towards companies and projects that contribute to a less carbon-intensive economy.

PIC's investment time horizons

Given the long-term nature of our liabilities, we must set appropriate time frames that provide secure and stable cash flows that can pay our policyholders over multiple decades. As a result, we define our investment timeframes as:

Short-term	0 - 7 years
Mid-term	7 - 15 years
Long-term	15+ years

PIC's responsible investment approach

Responsible investor

PIC portfolio

ESG integration

Within all investment processes including within manager selection

ESG reporting

Manager bespoke quarterly ESG reporting, yearly PIC ESG report, TCFD, UN PRI transparency report, Net Zero Progress Report

Stewardship & Engagement

Standalone Stewardship Policy, Engagement strategy, Engagement database on online platform

Industry participant:

UN PRI signatory, Net Zero Asset Owners Alliance member, ABI Climate Change Working Group participant

Climate Change

decarbonisation to Net Zero, TCFD reporting, Climate Risk management, Climate scenario testing

PIC's Responsible Investment Approach continued

ESG integration

We ensure that ESG factors are considered across our direct and indirect investments, and this starts with due diligence and manager selection.

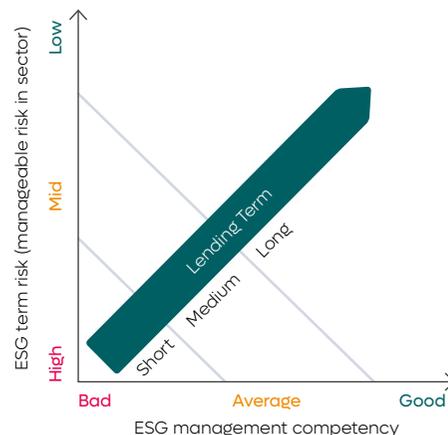
Internally managed investments

PIC manages a portion of its public credit portfolio internally, as well as most of its private credit portfolio. In both cases, ESG is considered at the early stages of the credit analysis and investment process. Our analysts engage directly with the management of underlying companies to understand their ESG capabilities, competencies and resilience, especially as data is less readily available in the private portfolio due to the nature of these investments. We have developed sector specific questionnaires which are now used in our due diligence process to understand the potential risks facing the businesses. So far, our due diligence questionnaires incorporate ESG factors for the following sectors: Real Estate, Student Accommodation, Infrastructure, Utilities, Housing Associations, Education, and Not for Profit. These highlight ESG-specific risks or opportunities, including climate, that should be considered as part of the investment proposal, internal risk ratings and ultimately the final bid price.

We invest for the long-term, so the investment team is responsible for identifying forward-looking material environmental risks and liaising with our Head of Responsible Investing about any concerns. We also integrate MSCI Climate Data into our investment decisions. We apply a set of climate-related parameters to flag investments that should be avoided given their climate position. This climate position is influenced by factors such as GHG emissions, commitments to decarbonise, as well as forecasted competitiveness in a low carbon economy.

In terms of assessing publicly listed corporate credit, we work with our credit analysts to conduct a detailed risk assessment across our credit-investment decisions. We also work with Sustainalytics to rate industry risks.¹ They provide us with an Average Exposure Score, which is their view of the total ESG risks in that sector, and an Average Manageable Risk score, which is their view of what portion can be managed and therefore how resilient the company is to the sector exposure. Our analysts then apply their own analysis to Sustainalytics' management score, which acts as an assessment of the firm's capability to manage the identified sector risks. These findings guide us when setting lending timeframes for investees, as depicted in the following graph.

PIC's propriety ESG assessment at a glance



Outsourced investments via managers

The management of the remaining portion of our public credit portfolio and selected mandates within our private credit portfolio is outsourced to external managers. Climate risks are integrated at the very beginning of our process whereby managers' ESG and sustainability capabilities, resources, and track record are assessed within our selection process and on an on-going basis. It is important that the managers who run our portfolios are good stewards of our capital as they indirectly represent PIC through their stewardship actions with companies invested into on our behalf. Through these working relationships, we leverage their capabilities and are often able to apply their knowledge to some of our internally-managed investments.



I am incredibly proud of the progress PIC has made over the last two years in integrating climate risk and steering capital towards assets aligned with our Net Zero commitment. As an asset owner, we have a responsibility to ensure the long-term value of our investments is protected, which is why ESG and climate change form an important part of our corporate and investment approach. There is always more progress to be made and I am looking forward to continuing to develop our responsible investment strategy."

Cléo Fitzsimons
Head of Responsible Investing,
PIC



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PIC's Responsible Investment Approach continued



Applying our Responsible Investment Strategy Across our Real Estate Portfolio.

One of the major challenges of the Net Zero transition is the built environment, and the value of our real estate portfolio is reliant on its ability to adapt to the changing environmental conditions and ultimately contribute to a low carbon economy. PIC is committed to helping the property sector transition to be more environmentally friendly as we consider this a forward-looking investment opportunity and the right thing to do for our society.

To support this commitment, last year we strengthened our environmental design and construction standards across our real estate portfolio. We partnered with Buro Happold, built environment consultants, to bolster our due diligence process and have created an in-depth ESG due diligence assessment that we use to benchmark all incoming real estate investments against.

Real estate due diligence approach

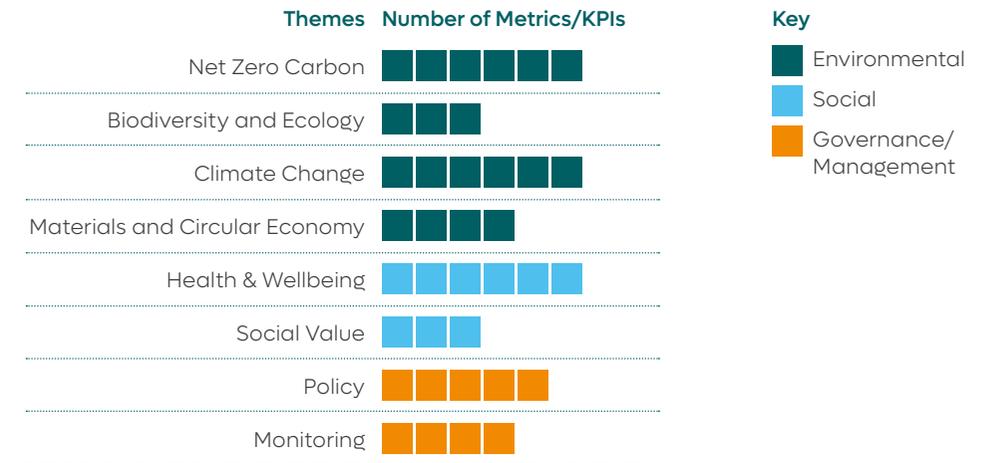
An important part of this assessment includes a deep dive analysis into environmental topics impacting this sector, including climate change mitigation and adaptation. We review a range of environmental and climate-related risks and opportunities as part of our process when considering asset selection, acquisition, and development.

We have set minimum ESG Baseline Credentials that go above and beyond current regulatory standards. The key environmental metrics we measure include climate change, ground flooding, construction, energy in-use and embodied carbon. Through our due diligence process we allocate a Net Zero carbon rating to each project using relevant KPIs such as:

- Embodied emissions
- Net Zero carbon in construction
- Offsetting
- EPC rating of building
- Percentage carbon reduction
- Modelling undertaken
- Percentage demand from electricity
- On-site energy generation
- Renewable energy procurement

The Net Zero carbon rating is then combined with a range of other ESG rating themes to form an overall ESG rating for the project. So far, we have assessed the majority of our existing real estate investments and we are planning on working with all our investments to achieve a minimum baseline score of B, which is two ratings below the top score of A+ as depicted in the following graph.

ESG real estate scorecard



PIC's Responsible Investment Approach continued



Case study: **Championing Brownfield Site Development at Miller's Quay**

We also value the importance of investing in brownfield site developments to reduce 'urban sprawl' and leave greenfield and rural areas intact. An example is our £130 million investment in the Miller's Quay residential development. The cornerstone project in the largest regeneration project in the UK, which will kickstart the broader development of Peel L&P's Wirral Water scheme, a 500-acre brownfield site and former dockland.

Energy efficient and low carbon technologies are embedded throughout the design, including solar power systems and air source heat pumps to reduce carbon emissions. Miller's Quay will also be surrounded by parks, green spaces, dockside walkways and cycle routes, so residents will have access to cycling storage and electric vehicle charging points to reduce localised pollution. Sustainable urban drainage solutions have also been put in place to direct surface water and mitigate climate risks. Drainage solutions include the installation of rain gardens, climate tolerant planting and tree pits designed to accommodate a one in 100-year storm.

In addition, all buildings across the Wirral Waters regeneration project, including Miller's Quay, are designed to achieve BREEAM "Excellent" standards. These sites are also required to put in place significant bio-diversity improvements, and so far, more than 1,600 trees have already been planted.

Following our due diligence practices, we awarded this site a 'B' rating. The scheme was awarded the 'Deal of the Year' Award at Insider's North West Residential Property Awards in January 2023.



500
acre brownfield site

1,600
trees planted



Case study: **First Street Manchester a Net Zero Investment**

We applied this due diligence process to the First Street Manchester project, an office development let to the UK Government's Department of Levelling Up, Housing and Communities. The development plans for this building will allow it to become Net Zero in operation, and our due diligence process awarded this project an 'A' rating. We determined that the project meets our investment criteria and aligns with our responsible investment strategy, so have invested nearly £105 million in the development.

To meet the project's Net Zero target and achieve a low carbon footprint, the building has been designed with the following features:

- A solid façade to reduce solar gain and reduce energy demand for internal cooling;
- Additional insulation in the façade to improve the thermal performance of the building and reduce heating losses; and
- Natural open panel ventilation by using opening panels within the façade and reducing the energy requirement of the office ventilation system.

£105m
invested



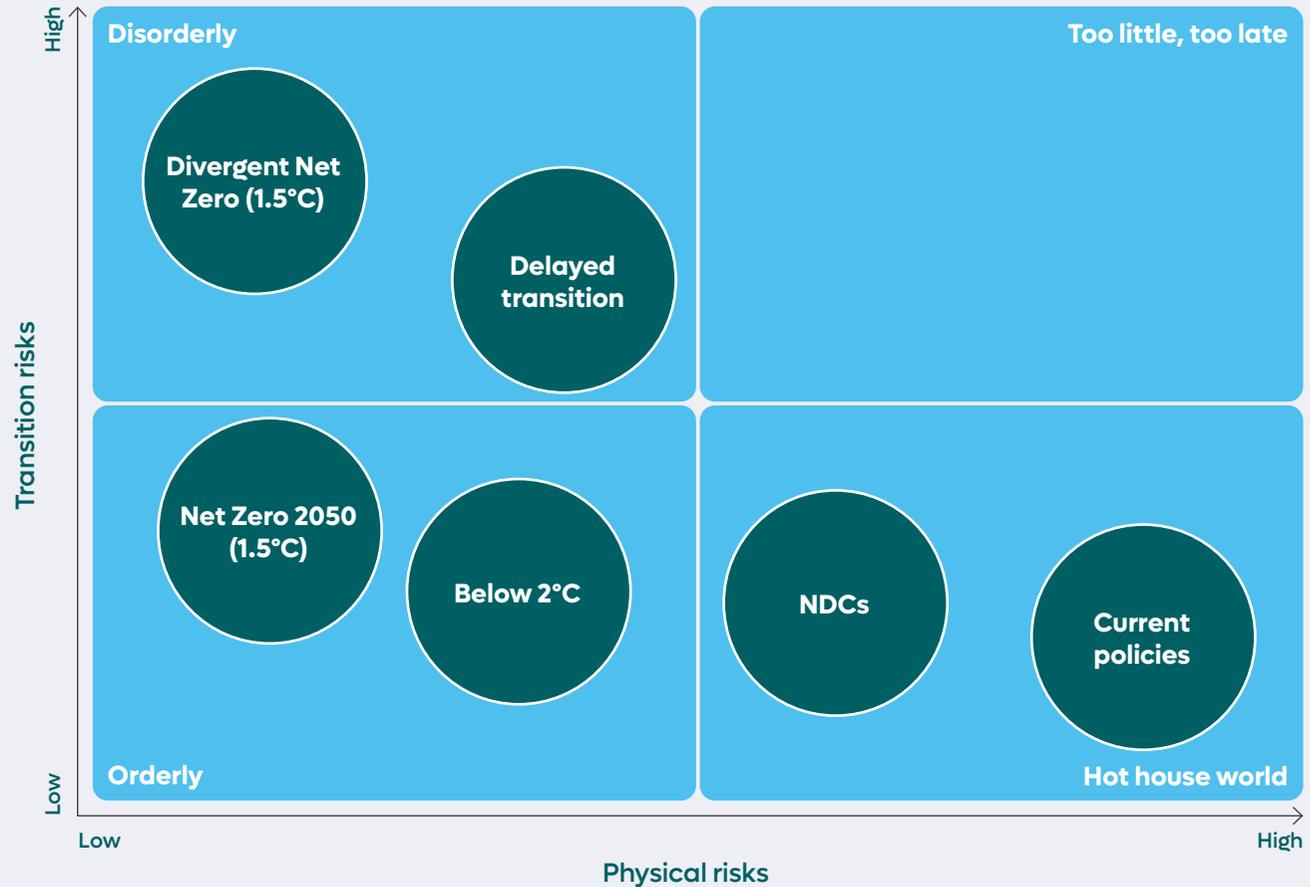
Scenario Testing

In 2022 we performed a Climate Change Stress and Scenario Test (SST) to identify our asset classes most materially exposed to climate risks and qualitatively understand how they may be impacted. The Climate Financial Risk Forum (CFRF) Narrative Tool was used to apply the Network for Greening the Financial System Scenarios (NGFS) of Orderly Transition; Disorderly Transition; and Hot House on our business and investment portfolio exposures.

The output of the assessment highlighted that our highest risk exposures are within the investment portfolio, as opposed to our liability exposure. The latter is likely to be neutral or slightly positive in the majority of climate scenarios. Our three highest sectoral risk exposures on a materiality basis were linked to consumer products, transport and utility sectors. Further understanding these exposures has assisted in developing our risk appetite statements and risk identification. The qualitative information provided has helped us define areas of focus for climate-related SST in the future and developing this further is a priority for PIC in 2023.

We were also able to assess our US Municipal Bond portfolio exposure to various climate scenarios through a proprietary tool created by Wellington Management, who manage a segregated mandate on our behalf. An example of the assessment performed is found in our Risk Management section (pg. 29) where a map helps visualise geographic locations with higher climate risk exposure.

Network for Greening the Financial System Scenarios



Source: Climate Financial Risk Forum Guide 2021: Scenario Analysis (fca.org.uk)

Our Sustainable Assets

Supporting a just transition

We believe that careful consideration needs to be made to ensure that positive environmental impacts are not made at the expense of negative social impact. We support a just transition and our responsible investment strategy attempts to maximise investments in climate action opportunities, while attempting to avoid or minimise any negative social externality.

To fully understand the relative environmental and social impact of our investments, we discuss each asset on a case-by-case basis across multiple groups, including within the ESG Oversight Forum, Credit Committee and Investment Committee. We focus on the total net social or environmental benefit created including carbon emissions saved, jobs and apprenticeships created, and the wider social value of the investment. An example of this is the inclusion of 'Regulated Utilities' in our Sustainable Assets categorisation. Although this sector can be relatively carbon intensive, it also plays a vital role in providing the basic necessities of heat and electricity to households.

At the end of 2022, PIC had £10.3 billion assets categorised as 'Sustainable Assets' and each year we evaluate how these assets help to create positive impact, such as for the environment and the communities in which the company operates. This includes assessing how a company promotes economic growth, environmental care, and social well-being objectives. We also map the impact created by our Sustainable Assets to the UN SDGs, as we believe a sustainable company's business model must be meaningfully linked to solving one or more of the UN SDGs, and demonstrate positive ESG credentials, such as a reduction in GHG emissions.

PIC's total investments in sustainable assets



Housing Associations/Social Housing	21%
Regulated Utilities (Water, Electric and Gas)	21%
Education	18%
Healthcare	12%
Renewable Energy	10%
Municipals (education, health, social activities, local authorities)	7%
Not for profit	5%
Green or Sustainable buildings including Build-To-Rent	3%
Sustainable Transport	2%
Project Finance (funding sustainable initiatives)	1%



Our Sustainable Assets continued



Emissions avoided through our £1 billion renewable energy portfolio

As of 31st December 2022, our renewable energy portfolio was valued at c.£1 billion. Investments in the portfolio include UK offshore wind projects as well as solar assets. Given the large size of investments PIC makes in renewables, we often have to look outside of the UK to find projects with large enough funding requirements and demand. As a result, we have frequently helped finance a number of solar projects in Spain.

During 2022, our c.£1 billion renewable portfolio provided enough power to heat approximately 45,500 UK homes. At the same time, this investment, assuming it would otherwise have been invested in a traditional fossil fuel, helped avoid 152,421 tons CO₂e from being emitted into the atmosphere. This is the equivalent of taking almost 100,000 petrol engine cars off the road for a year.¹



Incorporating ESG objectives and climate reporting into a private lending covenant

In October 2022, PIC completed a £102 million debt financing deal to support the delivery of new rolling stock to Corelink Rail Infrastructure Ltd, which included two new electric multiple unit fleets and one new diesel multiple unit fleet. The two new electric rail fleets are being built to help the UK's rail system transition towards an energy efficiency rail service, as the optimised fleet of electric trains will produce significantly lower levels of noise and exhaust gas pollution. The transaction represents PIC's first rolling stock infrastructure deal. The trains will be leased to the West Midlands rail services. As part of the investment, Corelink has committed to ongoing reporting on a comprehensive list of ESG criteria which will allow us to better track the environmental and social impact of our investment portfolio.



Sustainability-linked private placement into Umicore

In November 2022, PIC invested €57 million into a 12-year sustainability-linked private placement with Umicore, a leading multinational sustainable technology company. Umicore specialises in recycling metal-based materials and has very high standards and a strong sustainability track record. Umicore's operations are divided into three segments:

- 1. Catalysis:** development and production of catalyst formulations and systems used to abate harmful emissions from combustion engines, for use in fuel cells and chemical and life science applications
- 2. Energy and surface technologies:** development and production of materials that power rechargeable lithium-ion batteries and enable the transition to electromobility
- 3. Recycling:** recovery of precious and other metals from a wide range of waste streams and industrial residues

Umicore has committed to achieving Net Zero GHG emissions by 2035, with intermediate milestones of a 20% reduction by 2025 and 50% reduction by 2030 versus a 2019 baseline. The company has also established a sustainability framework which these targets are based upon, and the sustainability-linked feature of this issuance has a coupon adjustment if the company's Sustainability Performance Targets are not achieved.



Safeguarding nature for years to come

PIC has a meaningful and longstanding investment in The National Trust – one of the UK's largest charities and Europe's largest conservation body. PIC lent £100 million to the Trust in 2018, structured as two tranches of £50 million, with the first having been paid in 2020 and the second being drawn last year in 2022 to match the Trust's requirements. The debt is long-term and matures in 2063, enabling the funds to be used strategically to maintain and invest in existing heritage assets and conservation. The National Trust is one of the most respected, trusted and recognised charitable brands in the UK, it was founded in 1895 by three people with the aim of protecting the UK's heritage and open spaces for everyone to enjoy.

¹ Avoided emissions calculated using a GHG conversion factor from BEIS/DEFRA, average car mileage from Average Car Mileage UK (2023) | NimbleFins and a UK household figure based on the domestic emissions and number of households for each local authority in the UK, from the UK Government's Office of National Statistics.

Our Sustainable Assets continued

Investment restrictions:

Given the long-term nature of our investments and the increasingly tight parameters that regulate our industry, we have given careful consideration to how we implement investment restrictions coupled with engagement practices. Therefore, we have imposed the following climate-related restrictions:

- Coal extraction and burning and Tar Sands:** No new purchases in companies that derive more than 10% of turnover from coal extraction and burning, and Tar Sands. We aim to divest from all of our holdings breaching the 10% limit in these areas by 2025.
- Oil sector:** No new purchases in companies in this sector, including exploration and production, drilling and field services. We are committed to divesting from these holdings over time. Since putting this restriction in place, we have sold over £500 million of our oil and gas holdings so that this sector now represents less than 1% of our portfolio.

In 2022, we tightened the wording specifically around **coal exclusion** within our Investment Management Agreements (IMAs) and performed an intensive review of any portfolio holdings that broke this threshold. We have put the following process in place for our managers to engage with a company that does not comply with our coal and Tar Sands investment restrictions:

1. Engage directly in-person or over the phone with those companies who could credibly make the 2025 deadline and continue to encourage dismantling or divesting of coal assets
2. Sell any assets whereby the company management was not willing to engage on the topic of decreasing their coal holdings
3. Sell any assets that do not have a credible plan to meet our threshold

In 2021, we sold several portfolio holdings that were unable to align with our 10% coal threshold by 2025 and we entered 2022 with only a handful of portfolio holdings which had some coal exposure. From those companies we have engaged with four of them over the course of last year. All except one have credible plans in place that should align them with our 2025 target, and in many cases the company no longer has any coal exposure.



Coal policy in action



Case study:

At the start of 2022, we identified that our holding in Anglo American's EUR 10-year bond met our coal investment criteria as the company was on track to derive less than 10% of their revenue from coal by 2025, and the company has specific decarbonisation plans in place.

However, because of the ongoing war in Ukraine and the subsequent spike in coal prices, Anglo American's revenue from steelmaking coal in H1 2022 was c.11%. As a result, and in line with our policy, we have not invested further in this company. This case was brought to the ESG Oversight Forum for discussion as it was identified that the company does exhibit credible plans to continue to decrease its coal exposure. It was agreed that we should not buy new holdings, but we could keep our existing ones and monitor the situation as we progress towards our 2025 deadline.



Case study:

We were presented with the opportunity to invest in a Comision Federal de Electricidad Bond issued by the government in Mexico. As part of our due diligence, we consulted our partner analyst JP Morgan to assess the bond. Even though the bond's revenue exposure from coal was below our 10% parameter, we decided not to invest as the company did not have ambitious or proactive plans to decarbonise any further and did not align with our decarbonisation investment objectives.

Corporate Initiatives

Effectively managing climate risk starts with long-term commitments which must be matched by our business operations and actions. We are making a series of small changes to our behaviour to realise our ambitious targets. These help promote awareness of climate change across the firm and improve our environmental performance. We are proud of the strong climate engagement of our employees, who also share our values for sustainable change. Our Head of Responsible Investing hosts a quarterly company-wide ESG Engagement Forum to ensure all employees are kept abreast of PIC’s ESG and climate initiatives.

To raise awareness of the implications of climate change and improve our sustainability credentials we have taken the following actions



No single-use plastic utensils in kitchen areas since 2021



Increased number of recycling bins, strategically located across each floor



Use of Forest Stewardship Council (FSC) certified paper in our ‘follow-me’ printers



Use of energy-efficient LED lights throughout our office space



Switch off air conditioning during evenings and weekends



Partnered with a charity to hold a conservation management day on Hampstead Heath for PIC employees



Risk Management.

Delivering on our purpose requires sound risk management and a strategy that builds climate resilience through investments with a lasting positive impact for current and future generations. As a part of this, PIC continued to embed climate change risks into our overarching risk appetite framework in 2022.

24-27 PIC's Enterprise Risk Management Approach

28-29 Our Approach to Climate-Risk Assessment

30 Managing Climate-related Risks

31 Climate Risk Developments and Roadmap

PIC's Enterprise Risk Management Approach

In our strategy section of this report (pgs. 12-22), we have set out our Net Zero activities and sustainability ambitions that support the management of climate risks. Executing an effective sustainability strategy, coupled with our sound risk management practices, means we are able to manage our exposure to the physical and transition risks associated with climate change.

Our Enterprise Risk Management (ERM) Framework is designed to support our business ambitions and includes the following core objectives:

- To set out the risks that we are able, and willing, to accept and give PIC sustainable returns that pay our policyholders. While also identifying risks which may damage our business, and therefore require close management and mitigation;
- To ensure we have appropriate capital to deliver our strategy and remain resilient through periods of stress;
- To provide a framework within which authority for taking risks can be appropriately delegated and controlled throughout the organisation. This enables the Board to draw assurance that the risks to which we are exposed are being appropriately identified, managed and where necessary minimised; and
- To ensure we remain forward-thinking in assessing what could happen to the business and what actions could be taken now and/or in the circumstances to manage or mitigate the risks.

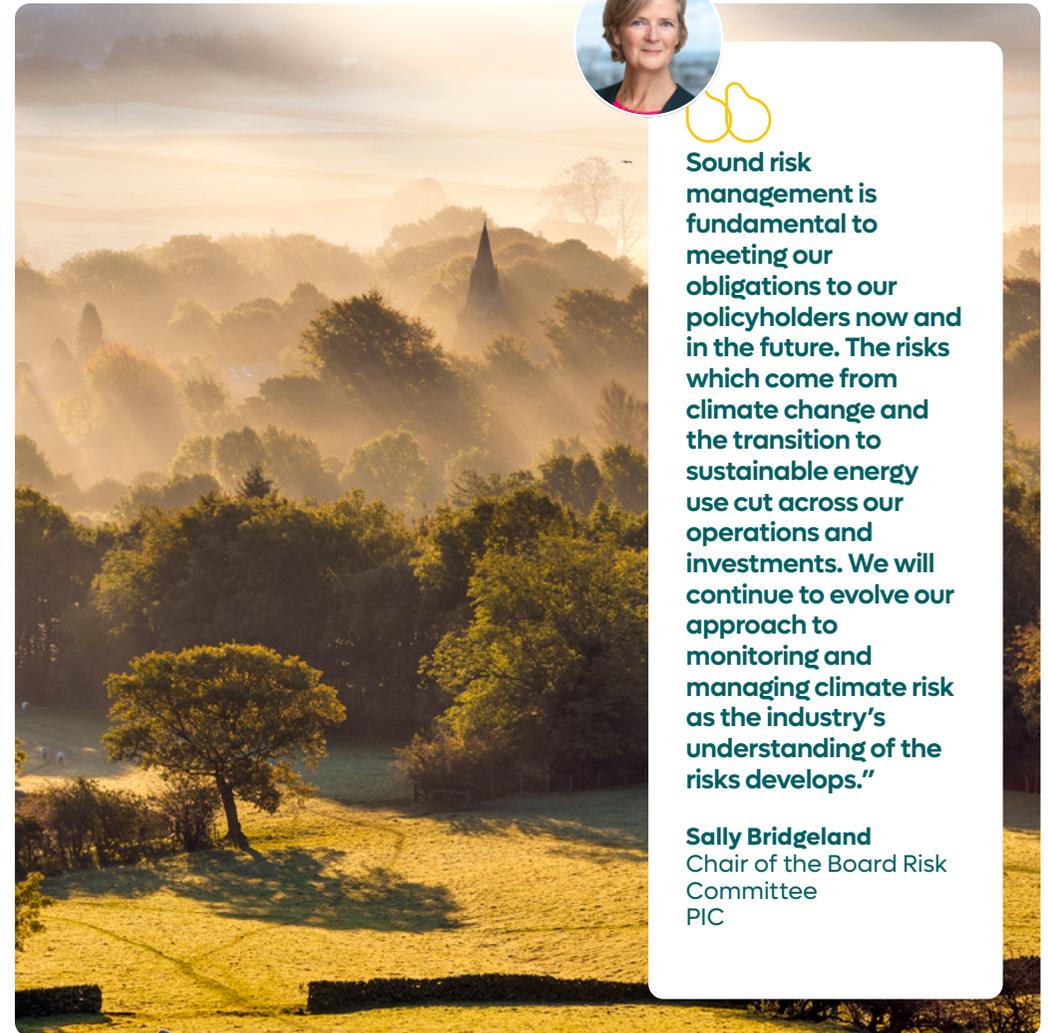
Within the ERM Framework, we have a risk management cycle and Risk Taxonomy that help the business assess the sufficiency of our financial resources, the effectiveness and resiliency of our operations, and the ability to meet external expectations. The framework defines a consistent approach to managing all risks. Our work has defined climate change as a cross-cutting risk, meaning that climate change related impacts will drive risk events in our current risk profile.

Our forward-looking approach to managing climate change risks focuses on resilience across a range of potential climate-related outcomes. Our overarching ERM approach helps us to deliver on PIC's strategic objectives to drive long-term value growth, be a responsible corporate citizen, and develop a secure and sustainable business.



Sound risk management is fundamental to meeting our obligations to our policyholders now and in the future. The risks which come from climate change and the transition to sustainable energy use cut across our operations and investments. We will continue to evolve our approach to monitoring and managing climate risk as the industry's understanding of the risks develops."

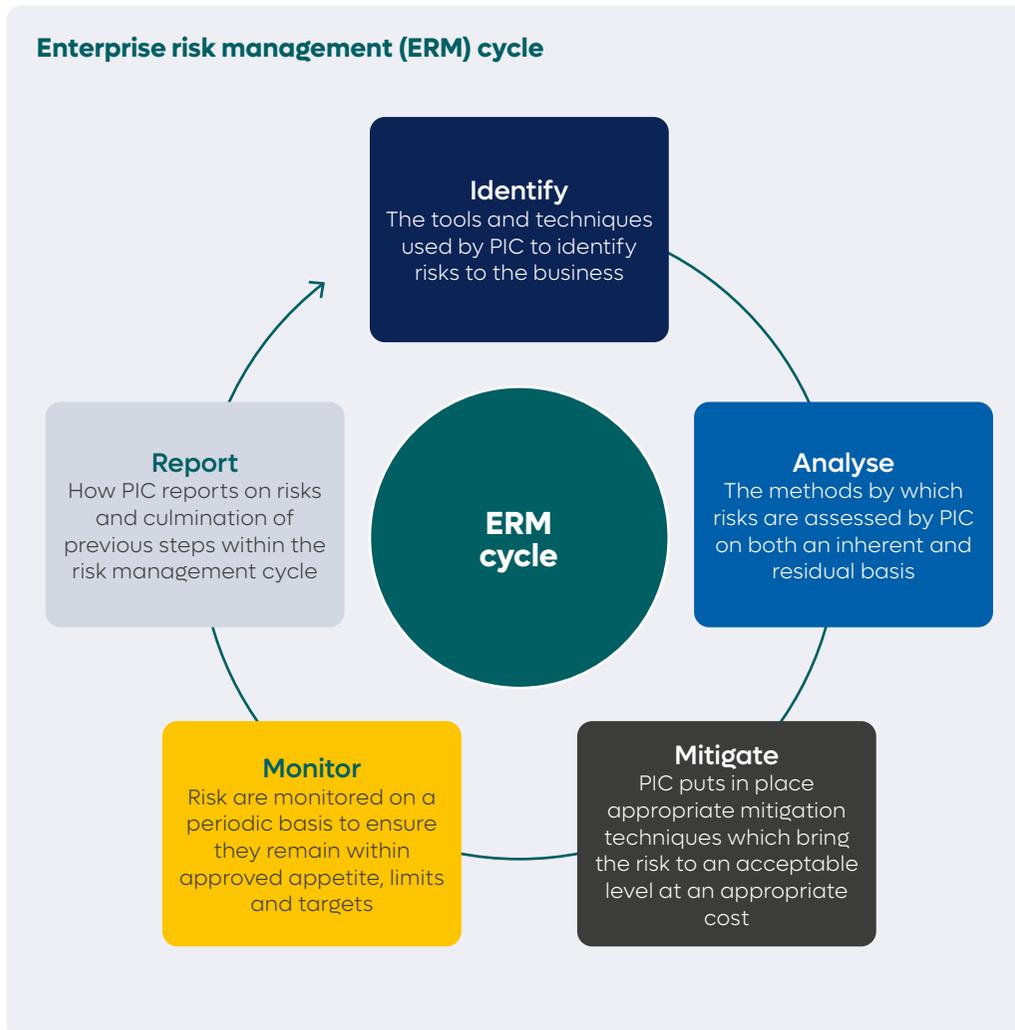
Sally Bridgeland
Chair of the Board Risk Committee
PIC



PIC's Enterprise Risk Management Approach continued

Risk Management in action

PIC's ERM Framework sets out the processes by which risks are identified, analysed, mitigated, monitored, and reported on.



When it comes to assessing climate change-related risks we use a number of approaches aligned to each element of the risk cycle.

- **Identify:** conduct climate risk assessments and identify immediate actions to manage any physical or transition risks. For example, the analysis provided by our third parties, or due diligence performed on potential assets we are considering for investment.
- **Analyse:** use our sector specific dashboards and due diligence to analyse the key risks facing an investment, such as using flood risk assessments.
- **Mitigate:** alongside short-term portfolio changes, establish long-term goals and action plans that are aligned to our Net Zero targets and Transition Timeline, and take into consideration engagement and divestment actions. Noting our short-term actions taken to date including introducing covenants and reviewing new private assets.
- **Monitor and report:** provide qualitative reporting through appropriate governance channels to ensure best practice action is being taken in line with PIC's business goals.



PIC's Enterprise Risk Management Approach continued

In 2022, we conducted a bottom-up risk assessment to ensure that subsequent risk management activities and developments are focused on the most material risks to the business from a climate change perspective.

The summary below is the result of a qualitative risk assessment and identifies the risks that sit within PIC's Risk Taxonomy, as defined by the Board which will continue to be reviewed annually. The assessment shows the potential impact on PIC's risk profile if climate-related risk drivers increase, and the significance of the impact should be considered in the context of other climate risks only.

PIC's Risk Taxonomy and summary of qualitative impact arising from climate related risks

Lead Taxonomy Risks	Sub Taxonomy risks driving the impact	Impact of Physical Risks	Impact of Transition Risks
Solvency	Market, credit, counterparty	Significant	Significant
Liquidity	Asset liquidity, collateral	Significant	Significant
Operational	People and resources, processes, physical infrastructure, systems and technology	Moderate	Low
Legal and regulatory	Legal, regulatory compliance	Low	Moderate
Conduct	Culture, market interactions	Low	Moderate
Strategy	Business strategy, implementation, reputation	Moderate	Moderate

What is transitional climate risk vs physical climate risk?

Transition risks are the risks associated with transitioning to a lower-carbon economy. This could include extensive policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change. Depending on the nature, speed, and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organisations.

Physical risks are the risks associated with the direct impacts of climate change. These risks can be acute, meaning driven by events, or chronic, resulting from long-term shifts in climate patterns. Physical risks can have financial implications for organisations, such as direct damage to assets and indirect impacts from supply chain disruption. An organisation's financial performance may also be affected by changes in water availability, sourcing, and quality; food security; and extreme temperature changes affecting an organisation's premises, operations, supply chain, transport needs and employee safety.

We also include the consideration of litigation risks arising from climate-related issues, and this is an area we will continue to monitor.

PIC's Enterprise Risk Management Approach continued

Our approach to risk assessment

As part of PIC's risk identification processes there are a number of climate-related risks which remain on the emerging risk dashboard to ensure oversight is given while these are not actively managed within the ERM Framework. The results and summary of both backward- and forward-looking risks are included within the Own Risk and Solvency Assessment (ORSA) report.

As previously mentioned, we define climate change related risks as a cross-cutting risk. Below we have highlighted the key climate risk drivers across physical and transition risks aligned to PIC's Risk Taxonomy, and how we consider these may impact our existing risk profile. Identification of these risks has been embedded within the risk appetite framework and has been informed by qualitative analysis:

High level risk driver	Climate risk related drivers	Risk preference	Potential impacts on PIC's risk profile
Physical	<p>Acute physical risks: refer to those that are event-driven, including increased severity of extreme weather events, such as cyclones, hurricanes, or floods.</p>	Minimise	<p>Exposure to asset values reducing as a result of actual or expected climate risk impacts. This includes:</p> <ul style="list-style-type: none"> • Direct damage to or loss of value in our real estate investments (e.g. property) • Lack of coverage for insurance of investments • Disruption to operations through increasingly occurring and severe weather impacts • Reinsurer increased catastrophe losses and climate-related concentration risks lead to increased claims and potential impacts on balance sheet and credit quality • Exchange rate devaluation or fluctuation due to local adverse weather
	<p>Chronic risks: refer to longer-term shifts in climate patterns such as sustained higher temperatures that may cause sea level rise or chronic heat waves.</p>		<p>Exposure to asset values reducing as a result of actual or expected climate risk impacts. This includes:</p> <ul style="list-style-type: none"> • Damage to our physical asset investments through rising water levels • Increased operating cost caused by increasing temperatures • Lack of reinsurance availability if mortality rates improve • Permanent supply chain issues that materially impact third parties • Climate migration impact labour and talent availability
Transition	<p>Policy and legal risks: Policy actions around climate change continue to evolve. Their objectives generally fall into two categories – policy actions that attempt to constrain actions that contribute to the adverse effects of climate change or policy actions that seek to promote adaptation to climate change.</p>	Accept	<p>Regulatory landscape in relation to climate change is continuously evolving leading to the following risks:</p> <ul style="list-style-type: none"> • Increased compliance costs • Requirement to divest at a loss due to changes in legislation • Increased building regulation and standards for the Build-to-Rent and other infrastructural assets • Increase scrutiny around climate and ESG related reporting
	<p>Market risk: While the ways in which markets could be affected by climate change are varied and complex, one of the major risks is of shifts in supply and demand for certain commodities, products, and services as climate-related risks and opportunities are increasingly considered.</p>		<p>Exposure to asset values reducing as a result of actual or expected climate risk impacts. This includes:</p> <ul style="list-style-type: none"> • Losses through stranded assets with high carbon intensity • Credit risk exposure through credit spreads and downgrades • Opportunity to increase returns from assets held in companies supporting the transition to a low carbon economy
	<p>Technology risk: Technological improvements or innovations that support the transition to a lower-carbon, energy efficient economic system can have a significant impact on organisations. For example, the development and use of emerging technologies such as renewable energy, battery storage, energy efficiency will affect the competitiveness of certain organisations, their production and distribution costs, and ultimately the demand for their products and services from end users.</p>		<ul style="list-style-type: none"> • Required investment in new technologies that support the Net Zero transition. These include risks around the choice of new technology, as well as its price and availability • Write off of investment in old technologies that support high carbon intensity assets, or in technologies which no longer meet the needs of PIC, such as carbon capture solutions
	<p>Reputation risk: Climate change has been identified as a potential source of reputational risk tied to changing customer or community perceptions of an organisation's contribution to or detractor from the transition to a lower-carbon economy.</p>		<ul style="list-style-type: none"> • Reputation or brand value damage from future litigation, such as not meeting published Net Zero targets or for not transitioning to a low carbon economy fast enough to contribute to a sustainable future, regardless of set targets

Our Approach to Climate-Risk Assessment

Building climate change risks into PIC’s risk management process allows the business to continue to identify, analyse, mitigate, monitor, and report on climate risks to which the business could be exposed to. This ensures that climate-related risks and opportunities are built into the day-to-day decision making of the business.

In addition to reviewing the Level 1 and Level 2 risk appetite statements and including climate-related considerations for those that are most material, we have set climate specific preferences and appetite statements for climate risk, physical risk and transition risk to support the cross-cutting nature of the risk type within PIC’s Risk Taxonomy.

The taxonomy of these risks are set out in a table within the Risk Management in Action sub-section of this report on pg. 25.



Level 1 risk	Climate change	Level 2 risk	Physical climate change	Transitional climate change
Risk definition	The potential for adverse consequences arising from the impacts of climate change, including physical risks arising from climate driven events, and transition risks arising from the process of adjustment to a low-carbon economy.	Risk definition	The potential for adverse consequences arising from acute (event-driven) and chronic (long-term shifts in climate patterns) risks associated with climate change.	The potential for adverse consequences arising from the process of adjustment towards a low carbon economy, with drivers including policy, technological innovation, market factors and reputational.
Risk preference	Minimise	Risk preference	Minimise	Accept
Risk appetite statement	PIC has limited appetite for the impacts arising from climate change risk. We aim to manage our operations and portfolio in such a way as to reduce climate change risk whilst continuing to generate returns from our core operations. PIC is committed to supporting the objectives of the 2015 Paris Agreement and as such will take steps to decarbonise our portfolio and reduce our GHG emissions in line with our Net Zero commitments.	Risk appetite statement	PIC has limited appetite for the impacts arising from physical climate change risk. We aim to minimise our exposure to physical climate change risk through techniques such as regional due diligence, lending decisions and the purchase of insurance.	PIC has a limited appetite towards negative transition climate change risks whilst embracing the opportunities afforded through climate change transition. We aim to manage our exposure to transitional climate change risks through maintaining oversight of changing policy and regulations, whilst divesting in certain sectors and companies to avoid stranded assets.

Our Approach to Climate-Risk Assessment continued

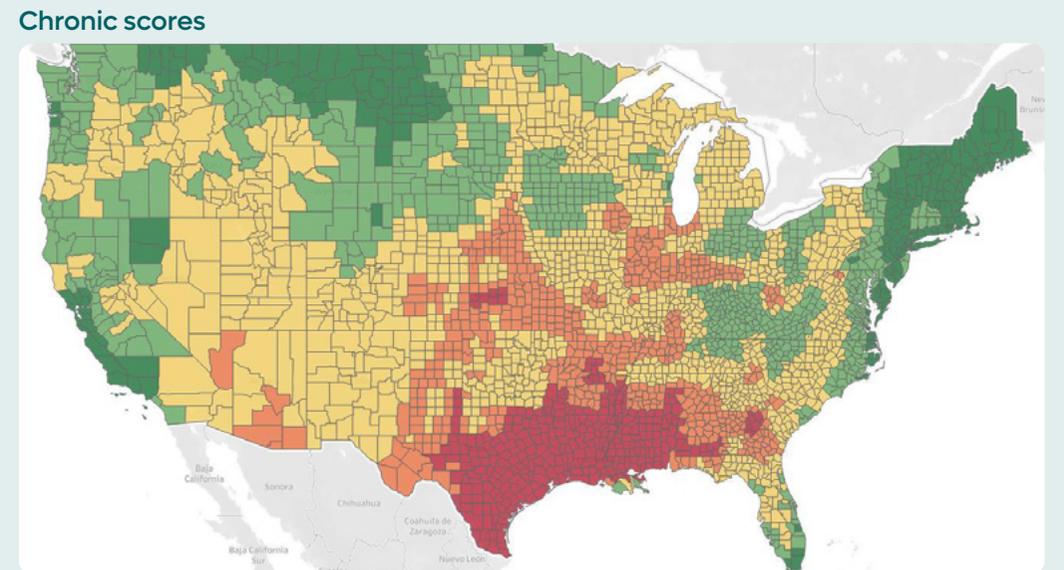
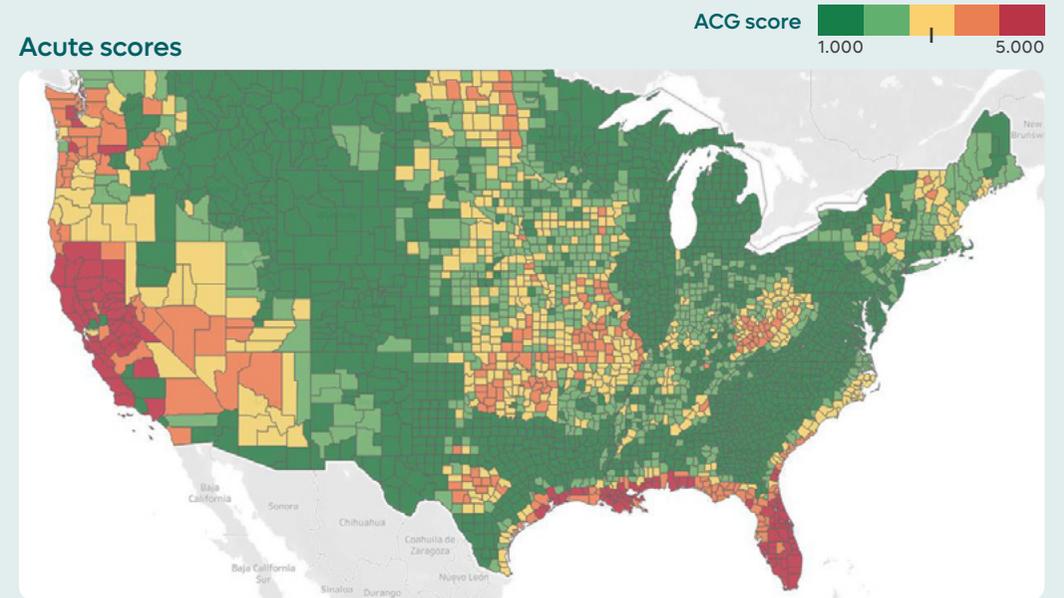


Case study: Physical Climate Risk Exposure of our US Municipal Bond Portfolio

PIC's US Municipal Bond Portfolio is managed by Wellington Management. They provide data to assist in the identification of physical climate risk exposure in our portfolio by analysing chronic and acute physical risks of climate on a geographic basis. This tool helps us identify areas and assets that could require additional considerations from a physical risk perspective and allows us to consider the impact on broader risk types. The data is used by both Wellington and our credit analysts for their individual credit assessment to evaluate the issues that are relevant to a specific credit and/or geography.

Each credit is assigned a geographic level and climate risk factors are mapped to that specific geography. Risk factors considered include heat, drought, hurricane, wildfire, and inland flood. These factors are grouped into chronic risk factors (heat and drought) and acute risk factors (hurricane, wildfire and flood). Chronic risks are averaged to create one chronic risk score, while acute factors are each scaled to penalise negative outliers in any one category and combined together. The chronic and acute scores are then averaged to create the combined score. The acute score is weighted higher based on the more immediate impact to Muni credit.

Wellington Management use these scores to better understand which of our individual credits are most exposed to certain physical climate risks and do a deeper dive to establish if those risks are being mitigated appropriately by the issuer. The tool is also used for portfolio level reviews to monitor geographic concentration in vulnerable regions. It can also be used to assess various climate change scenarios with the Intergovernmental Panel on Climate Change (IPCC)'s RCP8.5 scenario used for an initial assessment of our exposures. The mapping of that scenario can be found in the illustrations opposite.



Source: Wellington Management

Managing Climate-Related Risks

Both our assets under management and our insurance liabilities will grow as we engage in more pension risk transfer business, so it is vital that we continue to proactively manage climate change risks. At PIC, we have taken a number of steps to manage the risks starting with the identification of the material exposures below.

Material risk areas	Risk management actions	PIC Risk Taxonomy: risks impacted	Time horizon*
Climate risk drivers impact the value and availability of current and future investment values	<p>Decarbonisation targets for 2030 to support our broader Net Zero ambition including metrics developed and investment decisions made to support meeting the Net Zero strategy.</p> <p>Development and pursuit of engagement strategy and stewardship.</p> <p>Enhanced climate risk assessment introducing ESG sector scorecards and formally assessing flood and other climate-related risks in our built asset investments.</p>	<p>Market risk</p> <p>Credit risk (counterparty default, downgrades and defaults)</p> <p>Solvency / liquidity related risks</p>	Short, medium and long term (linked to physical risk events, and potential disorderly transition)
The impact on PIC's reputation	<p>Continuous monitoring of UK and broader global climate and ESG related requirements within existing horizon scanning processes, which are reported to the ESG committee.</p> <p>Work with industry bodies to identify and manage sources of climate risk and support appropriate market initiatives and forums.</p> <p>Continue to engage with our key stakeholders to monitor climate-related exposures.</p>	<p>Legal and regulatory risks, which may lead to further financial risks</p> <p>Strategy risk</p>	Short to medium term
Operations	Enhancements to business continuity and operational resilience frameworks to consider climate-related risks.	<p>Physical infrastructure risks</p> <p>Systems & technology risks</p> <p>Process related risks</p>	Medium to long term

* (see Strategy section / Responsible Investment Approach pg. 14 for PIC's definition of time frames)

Climate Risk Developments and Roadmap

In 2022, we continued to enhance our capabilities to assess and manage climate-related risks, and we continue to develop and refine our approach.

We have identified the below priorities to bolster our climate risk assessment and subsequent actions, including:

- 1 Consider how to develop future-proof climate change metrics to monitor the risk profile of the business and ensure we remain within our risk preferences.

- 2 Continue to develop robust climate scenario testing capabilities and process, as well as new models to assess climate specific risk within investment decision making processes.

- 3 Embed climate-related risks into PIC’s Risk and Control Self Assessment process.





Metrics and Targets.

In this section we set out the metrics framework we use to measure, manage, and mitigate the climate impact of our business including our investment portfolio and own operations.

- 33 Metrics and Targets
- 34 Reducing our Operational Carbon Footprint
- 35-42 Portfolio Assessment

Metrics and Targets

We share how we measure the emissions of PIC’s operations and our portfolio and outline the actions we are taking to reach our Net Zero targets. As our approach evolves, we will adopt additional portfolio metrics relevant to our stakeholders, and we continue to monitor regulatory data transparency guidance and requirements.

We remain committed to our four corporate and portfolio targets which are aligned with a maximum temperature rise of 1.5°C above pre-industrial levels as outlined in the Paris Agreement.

- Carbon neutral (Scope 1 and 2 emissions) as a business by 2025
- Net Zero through all emissions by 2050
- Decreasing our investment portfolio’s average carbon intensity by 50% by 2030 from a 2019 baseline
- Decreasing the average carbon intensity of investments in publicly listed corporate credit by 25% by 2025 from a 2019 baseline¹

These targets are reflected in the 2021-2050 Transition Timeline on pg. 3.



We set targets against what we can measure. This is why we have invested in measuring the footprint of our investment portfolio and our own operations. Climate and wider ESG considerations are embedded into our investment decision making process, and we seek specific climate data on the underlying assets we invest in. We focus on the quality, robustness and comparability of the data in which we base these decisions, and we are committed to working with the industry to improve the availability and quality of climate-related data.”

Rob Groves
Chief Investment Officer,
PIC

¹ Measure as tons CO₂e/\$M revenue. Taking into account the quality and consistency of available data

Reducing our Operational Carbon Footprint

We are working across the business to calculate the emissions we use in line with the Greenhouse Gas Protocol Corporate Standard, along with the UK Government GHG Conversion Factors for Company Reporting standards.

We operate within a leased building, so we have limited control over the emission and energy saving actions we can take within our facilities.

However, when possible, we have taken efforts to reduce the impact of our own operations, including installing LEDs and Passive Infrared Sensors throughout our offices and using energy efficient laptops. Given our continued efforts, our CO₂e emissions per full time employee (FTE) has reduced by 18% from 2021. On an absolute basis, however, our CO₂e emissions have risen by 9%, given various factors such as increased headcount by 26% and a general 'return to work' trend following various COVID-19 related work from home guidelines in 2021.

Streamlined energy and carbon reporting disclosure for the period January to December 2022

Material risk areas	2020 (UK & offshore)	2021 (UK & offshore)	% change from 2020 -2021	2022 (UK & offshore)	% change from 2021 -2022
Total energy consumption used to calculate emissions in kWh	1,012,564	893,748	-11.7%	974,288	+9.0%
Emissions from combustion of gas in tons CO₂e (Scope 1)	94.3	81.9	-13.1%	81.7	-0.2%
Emissions from purchased electricity in tons CO₂e (Scope 2, location-based)	116.5	94.8	-18.6%	101.9	+7.5%
Total gross tons CO₂e based on above	210.8	176.7	-16.2%	183.6	+3.9%
Intensity ratio: gross tons CO₂e/ floor area	0.044	0.042	-4.5%	0.044	+4.8%
Intensity ratio: gross tons CO₂e/FTE	0.678	0.471	-30.5%	0.386	-18.0%

Portfolio Assessment

In 2022, we continued our efforts to understand the total impact of our business, including calculating the Scope 3 carbon emissions of our investment portfolio. We worked with an independent third party on a consulting basis to estimate the carbon intensity of 78% of our total portfolio.

Where possible, we have adjusted our private markets emissions calculation methodology to align with the Partnership for Carbon Accounting Financials (PCAF) so that we adhere with industry best practice. PCAF also provides guidance on data quality scoring per asset class, facilitating data transparency and encouraging improvements to data quality in the medium and long term.

The reporting landscape continues to evolve, and with this comes increased access to transparent public information and data. We have maintained our efforts to consistently report the coverage of the carbon metrics across the public debt portion of our portfolio. However, the industry faces significant data limitations when sourcing information from privately sourced debt markets and is therefore less easily covered in comparison. Please see our appendix for an overview of the methodology we use to estimate our portfolio's emissions metrics.

We have aligned our calculation methodology with PCAF as far as possible. However, there are a small number of assets within our portfolio for which PCAF have not explicitly produced a measurement methodology including Sub-Sovereign bonds and Supranational bonds. For the purposes of our calculations, we have aligned our approach for Sub-Sovereign bonds to the PCAF approach for Sovereign Debt and aligned our approach for Supranational bonds to the PCAF approach for Corporate bonds and listed equity. Further detail on the methodology for each asset class can be found in the appendix on pg. 45.



What is Partnership for Carbon Accounting Financials (PCAF)?

PCAF is a global partnership of financial institutions that work together to develop and implement a harmonised approach to assess and disclose the GHG emissions associated with their loans and investments.¹

In order to drive consistent emission reporting for financial services firms, PCAF provides the following for a range of asset classes:

- **Attribution factor** – the proportion of the emissions of the underlying asset that should be attributed to the investor. This factor is applied to the reported, or estimated, emissions of the asset to produce PIC's Scope 3 emissions.
- **Data quality score** – a scoring system based on the level of accuracy and reliability of the data used to calculate the emissions attributed to the investor. For example, emissions data that is publicly reported by a company and verified by an independent third party would achieve a high data quality score of 1. Whereas estimated emissions data based on the average emissions of a company in a sector would achieve a low data quality score of 5.

¹ <https://carbonaccountingfinancials.com/about>

Portfolio Assessment continued

Portfolio targets and metrics

We have committed to decreasing our portfolio average carbon intensity, on a Scope 1 and 2 basis, by 50% by 2030, where data is available. To achieve this, we have set an interim target, in line with guidance from the NZAOA target-setting protocol, to decrease our public corporate credit portfolio (worth c.£18.6 billion) average carbon intensity by 25% from 2019 levels by 2025.

Our focus during 2022 has been on improving the accuracy and reliability of our emissions calculation and developing a robust reporting process. All of our portfolio metrics are as of 31st December 2022.

Total portfolio metrics as of 31 December 2022

There are a range of metrics that can be calculated and disclosed in relation to the investment portfolio. For the convenience of users of this report, the following tables summarise the full suite of metrics that we have calculated for both the full portfolio, and the Matching Adjustment portfolio which backs policyholder liabilities. Further detail on each of the metrics and a more granular breakdown can be found in the following sections.

We have also calculated the climate value at risk on our public credit portfolio based on the MSCI methodology. However, given the uncertainty in the underlying methodology over the timescales in question, and the lack of coverage of our private assets, we have decided not to disclose this metric at year-end 2022 as it is potentially misleading. We are working to improve our scenario analysis capability in 2023, and we are developing methodologies that can be applied to our private assets as well as our public credit portfolio.

Total portfolio

Disclosure	Value	Unit	What % of portfolio holdings are covered?	What % of the emissions is from actual company reported data?
Total financed GHG emissions (Scope 1 and 2)	2,515,706	tons CO ₂ e	61%	96%
Total financed GHG emissions (Scope 3)	4,495,997	tons CO ₂ e	27%	70%
Carbon footprint (Scope 1 and 2) £	103	tons CO ₂ e/£M invested ¹	61%	96%
Carbon footprint (Scope 1 and 2) US\$	85	tons CO ₂ e/\$M invested ²	61%	96%
Carbon footprint (Scope 3) £	423	tons CO ₂ e/£M invested ¹	27%	70%
Carbon footprint (Scope 3) US\$	352	tons CO ₂ e/\$M invested ²	27%	70%
Weighted Average Carbon Intensity (WACI) (Scope 1 and 2) £	211	tons CO ₂ e/£M revenue ¹	78%	70%
Weighted Average Carbon Intensity (WACI) (Scope 1 and 2) US\$	175	tons CO ₂ e/\$M revenue ²	78%	70%
Weighted Average Carbon Intensity (WACI) (Scope 3) £	1,055	tons CO ₂ e/£M revenue ¹	33%	56%
Weighted Average Carbon Intensity (WACI) (Scope 3) US\$	877	tons CO ₂ e/\$M revenue ²	33%	56%
Implied temperature rise/portfolio alignment³	2.08	°C	31%	N/a
Science Based Targets exposure⁴	4.2%	% of portfolio (weighted av. basis)	N/a	N/a

¹ £1 = \$1.2029 as at 31/12/2022

² £1 = \$1.2374. For revenue, conversion has been based on average exchange rate over the year.

³ Temperature pathway the mandate aligns to, expressed as a projected increase in global average temperature. This should capture projected Scope 3 emissions for sectors where these are significant.

⁴ Exposure to companies with carbon emission reduction targets listed on the Science Based Targets Initiatives (SBTi) database.

Portfolio Assessment continued

Matching Adjustment fund

Disclosure	Value	Unit	What % of portfolio holdings are covered?	What % of the emissions is from actual company reported data?
Total financed GHG emissions (Scope 1 and 2)	2,021,592	tons CO ₂ e	63%	95%
Total financed GHG emissions (Scope 3)	4,387,879	tons CO ₂ e	32%	70%
Carbon footprint (Scope 1 and 2) £	100	tons CO ₂ e/£M invested ¹	63%	95%
Carbon footprint (Scope 1 and 2) US\$	83	tons CO ₂ e/\$M invested ²	63%	95%
Carbon footprint (Scope 3) £	425	tons CO ₂ e/£M invested ¹	32%	70%
Carbon footprint (Scope 3) US\$	353	tons CO ₂ e/\$M invested ²	32%	70%
Weighted Average Carbon Intensity (WACI) (Scope 1 and 2) £	219	tons CO ₂ e/£M revenue ¹	83%	67%
Weighted Average Carbon Intensity (WACI) (Scope 1 and 2) US\$	182	tons CO ₂ e/\$M revenue ²	83%	67%
Weighted Average Carbon Intensity (WACI) (Scope 3) £	1,065	tons CO ₂ e/£M revenue ¹	40%	56%
Weighted Average Carbon Intensity (WACI) (Scope 3) US\$	886	tons CO ₂ e/\$M revenue ²	40%	56%
Implied temperature rise/portfolio alignment ³	2.08	°C	36%	N/a
Science Based Targets exposure ⁴	5.0%	% of portfolio (weighted av. basis)	N/a	N/a

¹ £1 = \$1.2029 as at 31/12/2022

² £1 = \$1.2374. For revenue, conversion has been based on average exchange rate over the year.

³ Temperature pathway the mandate aligns to, expressed as a projected increase in global average temperature. This should capture projected Scope 3 emissions for sectors where these are significant.

⁴ Exposure to companies with carbon emission reduction targets listed on the Science Based Targets Initiatives (SBTi) database.

Portfolio Assessment continued

Weighted Average Carbon Intensity (WACI) breakdown

The table below shows a granular breakdown of the WACI by sector. We have defined carbon intensity as the GHG emissions per US\$ million of revenue generated. The WACI of the overall portfolio is 175 tCO₂e / US\$ million revenue with a 78% data coverage. This is a 14% decrease compared to 2021 where data was available.

By normalising US\$ million revenue, we can compare like-for-like metrics across different assets and economic sectors using the carbon intensity measure. It also gives a clear indication of the progress in decarbonising the portfolio over time.

Total Portfolio - Scope 1 and 2 Emissions WACI as of 31 December 2022

Asset class	WACI (tons CO ₂ e / \$m revenue)	Contribution to portfolio WACI (tons CO ₂ e / \$m revenue)	% of portfolio WACI	Market value (£m) covered by WACI	Market value (£m) total portfolio
Sovereigns, Sub-Sovereigns and Municipals	147	52	30%	13,354	13,848
Property	155	14	8%	3,478	5,382
Telecoms, Media and Technology	29	2	1%	3,149	3,167
Utilities	1,049	87	49%	3,097	3,725
Financials	5	0	0%	2,551	2,981
Other corporate bonds	40	2	1%	1,960	2,944
Industrial	361	12	7%	1,292	1,454
Renewable energy	57	2	1%	1,014	1,014
Education	44	1	1%	812	877
Infrastructure	156	2	1%	464	736
Other assets	34	0	0%	20	3,736
Total¹	175²	175	100%	31,191	39,865

¹ Apparent discrepancies resulting from rounding

² This represents the WACI of our overall portfolio, which we would not expect to be a sum of the individual economic sectors as it is a weighted average.

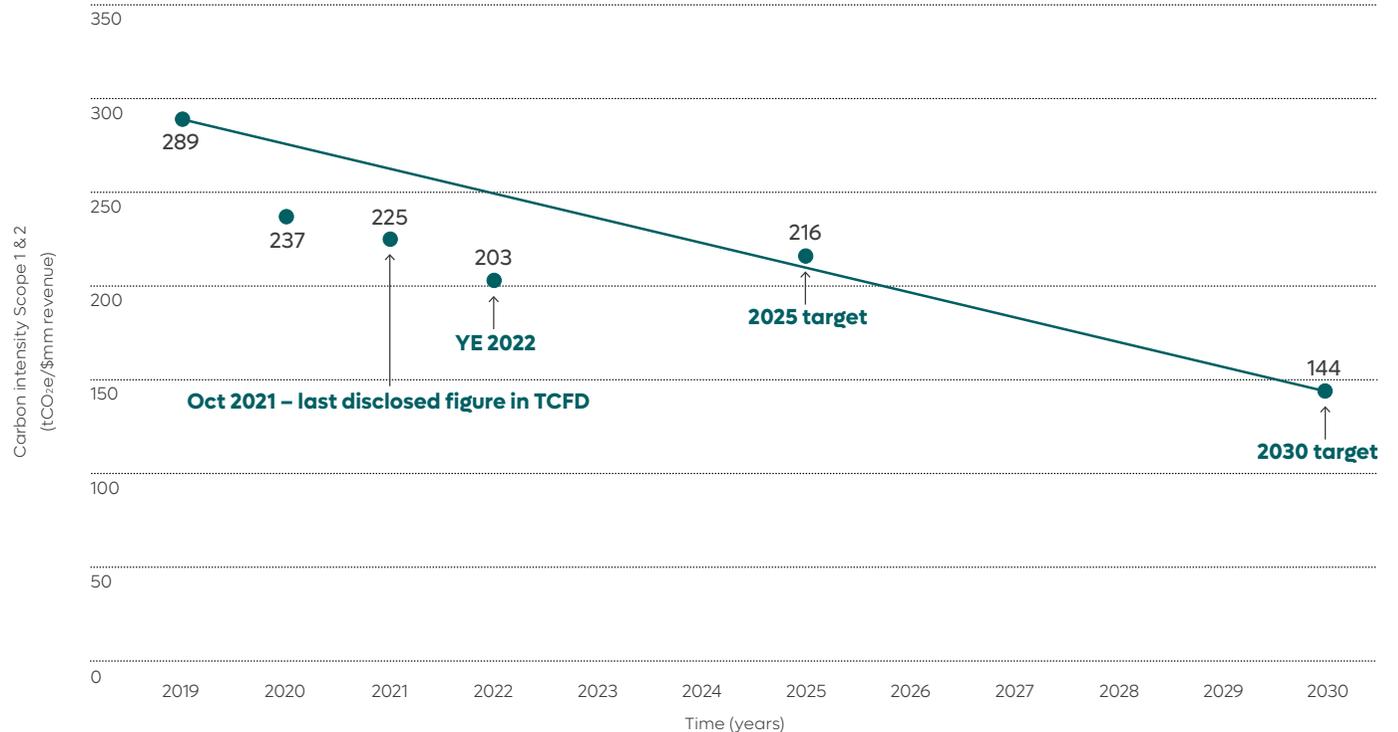
Portfolio Assessment continued

Whilst carbon intensity is a useful measure to compare like-for-like between different assets and economic sectors, it is important to understand the potential drawbacks to this approach:

- Changes in revenue** – an increase in revenue intensity, with no real-world impact in terms of emissions reduction. This is not necessarily desirable, as the reduced carbon intensity would initially suggest that emissions had in fact reduced, which may be misleading.
- Foreign exchange rates** – given that carbon intensity is based on the emissions per US\$ million revenue, there could be significant changes in the carbon intensity of assets with revenue in other currencies driven by changes in exchange rates. For example, a UK-based company may have consistent emissions and revenue from year-to-year, but a change in the exchange rates between GBP and USD could lead to a change in carbon intensity. This is particularly relevant for our portfolio given our focus on UK-based investments.
- Inflation** – in the long term, we would expect revenues to increase with inflation. This would lead to a reduction in carbon intensity, with no reduction in emissions.

PIC Public Corporate Credit WACI*

* Data is from MSCI with a coverage of 86% for the 2022 year data. This represents £18.6bn (or 46.7%) of our total portfolio.



Portfolio Assessment continued

Carbon footprint breakdown – total portfolio as of 31 December 2022

Given the limitations discussed above, it is also important to measure absolute financed emissions, as per the PCAF methodology. Financed emissions represent the proportion of the emissions from the underlying asset that we are responsible for as a result of our investment. The proportion of the emissions that are attributed to PIC is set by PCAF, and further detail on the asset class specific attribution factors can be found in the appendix. To compare asset classes and economic sectors within the portfolio, we consider the financed emissions per £ million invested of the total portfolio with data coverage of 61%. The breakdown of this can be found in this table:

Carbon footprint by economic sector (Scope 1 and 2)

Asset class	Carbon footprint (tons CO ₂ e / £m invested)	Contribution to portfolio carbon footprint (tons CO ₂ e / £m invested)	% of Portfolio carbon footprint	Market value (£m) covered by carbon footprint	Market value (£m) total portfolio
Sovereigns, sub-sovereigns and municipals	152	63	61%	10,061	13,848
Property	12	1	1%	2,846	5,382
Telecoms, media and technology	10	1	1%	3,149	3,167
Utilities	368	22	21%	1,449	3,725
Financials	1	0	0%	2,201	2,981
Other corporate bonds	20	2	1%	1,836	2,944
Industrial	256	12	12%	1,149	1,454
Renewable energy	6	0	0%	1,014	1,014
Education	56	2	2%	685	877
Infrastructure	68	0	0%	83	736
Other assets	40	0	0%	13	3,736
Total	103¹	103	100%	24,486	39,865

For calculating our carbon footprint, we have a lower coverage of our portfolio due to challenges in accessing Enterprise Value Including Cash data, which is used in the attribution factor for corporate bonds.

¹ This represents the carbon footprint of our overall portfolio, which we would not expect to be the sum of the individual economic sectors as it is normalised by £million invested.

Portfolio Assessment continued

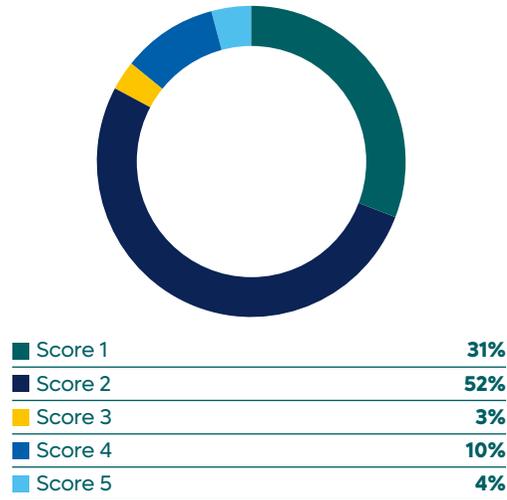
Data quality

High quality data is essential to ensuring emissions are accurately calculated and are therefore a useful metric for key decision-makers. Our own reporting is reliant on our investee companies accurately sharing their emission calculations. We support the call for increased data transparency and encourage others to do the same. For example, we continue to request that Housing Associations disclose all data in accordance with the voluntary Good Economy Sustainability Reporting Standards for Social Housing.

Scores	Definitions
Score 1	Audited GHG emissions data or actual primary energy data
Score 2	Non-audited GHG emissions data, or other primary data
Score 3	Averaged data that is peer/ (sub)-sector specific
Score 4	Proxy data on the basis of region or country
Score 5	Estimated data with very limited support

Source: PCAF

Split of PIC's investment portfolio's 2,515,706 tons CO₂e by data quality



As shown in the above chart, 10% of the financed emissions have a data quality score of '4', which implies they have been calculated based on proxy data. This refers to sector-based proxies on private and public corporate bonds, where no emissions data is available for the underlying corporate. An emissions factor per US\$ of revenue is calculated for companies in a specific sector and extended to companies for which no emissions data is available in the same sector. An approximate emissions figure can then be calculated based on the revenue of the company. Currently, the entirety of our Score 5 data (estimated data with very limited support) is our ERM portfolio which is based on regional average emissions per property.

Global temperature levels

What is considered pre-industrial temperature levels?

The Intergovernmental Panel on Climate Change (IPCC) refers to pre-industrial temperature increases when compared with the 30-year global average of combined air temperature over land and water temperature at the ocean surface. The 30-year timespan accounts for the effect of natural variability, such as the El Niño and La Niña phenomenon.¹

Current temperature records

2022 was the fifth warmest year on record since 1959, with the average global temperature almost 1.2°C above pre-industrial levels. Europe registered its hottest summer on record, despite the La Niña phenomenon which is proved to have a cooling effect, repeating for a third year in a row. Instead, carbon dioxide concentrations in the atmosphere averaged around 417 parts per million last year, the highest level for over 2 million years.²

According to the European Union's Copernicus Climate Change Service the last eight years have been the eight warmest on record. The annual average temperature was 0.3°C above the reference period of 1991-2020, which equates to approximately 1.2°C higher than the period 1850-1900. Atmospheric carbon dioxide concentrations increased by approximately 2.1 parts per million, similar to the rates of recent years, but methane concentrations in the atmosphere increased by close to 12 parts per billion. This is higher than average but below the last two years' record highs.

¹ https://www.ipcc.ch/site/assets/uploads/sites/2/2018/12/SR15_FAQ_Low_Res.pdf

² <https://climate.copernicus.eu/copernicus-2022-was-year-climate-extremes-record-high-temperatures-and-rising-concentrations>

Portfolio Assessment continued

Implied temperature rise

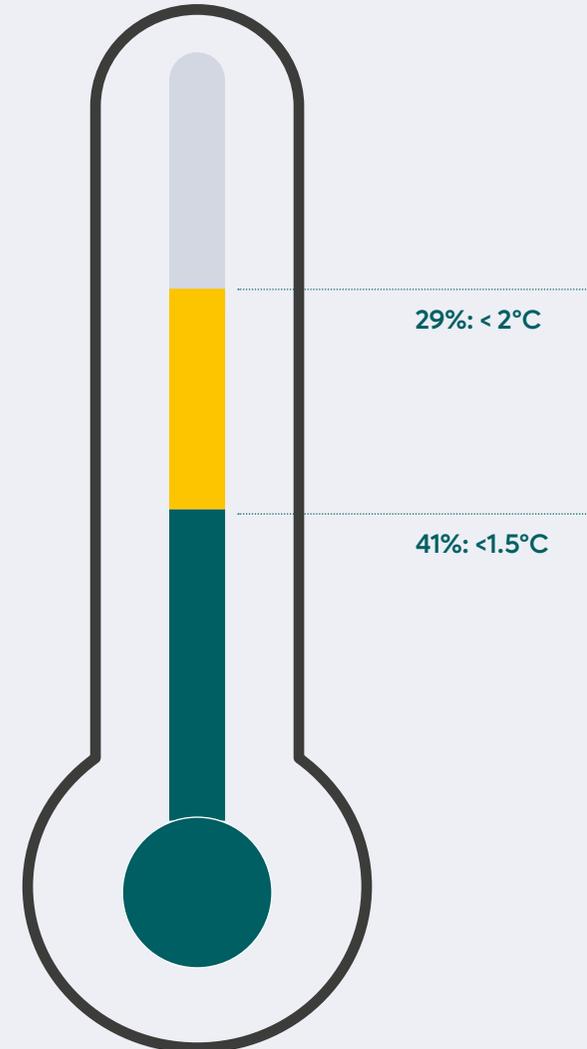
While the carbon intensity and the financed emissions give us an understanding of the existing emissions in the portfolio, we should also consider how the emissions are expected to change over time. For example, an oil and gas company may heavily invest in renewable energy and reduce its reliance on carbon intensive operations as part of a credible public transition plan. It is likely that the oil and gas company would have high emissions intensity at the end of 2022, but this does not present a complete picture given the commitment to transition. To allow for this, we need a forward-looking metric such as an implied temperature rise metric.

We have assessed the implied temperature rise of our corporate credit holdings, where data is available, using MSCI's implied temperature rise model and based on the issuer's most recently reported Scope 1 and 2 emissions and estimated Scope 3 emissions. An implied temperature rise considers the existing and expected future emissions of the issuer and compares the emissions to Paris-aligned pathways for the specific economic sector and region of the issuer. Where the current and future emissions are above the 1.5°C pathway, the overshoot is converted to an implied temperature rise caused by that company.

Given the complexity in calculating this metric, we only have coverage for a subset of our publicly listed portfolio from MSCI. There is data available for 65.5% of our public corporate credit, which is 46.7% of the total portfolio. This means that there is temperature alignment data for 30.5% of the total portfolio.

For the assets where data is available, 41% of our exposure is aligned to a <1.5°C world, with a further 29% aligned to a <2°C world. We use this data to inform our climate-related engagement strategy and activities, detailed on pgs. 14-17, to encourage climate action and Paris-alignment within our portfolio companies. Currently, our weighted average implied temperature rise for the assets where data is available is 2.08°C, which we are pleased to report is a decrease from our 2021 figure of 2.37°C. Some of the drivers of this decrease include our portfolio decarbonisation efforts, a natural decarbonisation of the companies we invest into and having access to more data on companies with lower temperature alignment.

Public corporate credit temperature alignment – where data is available



(note 29% + 41% = 70% for which we have data of our corporate credit portfolio)

Key Initiatives for 2023.

1

We will action activities outlined in our Transition Timeline and draft our first PIC Transition Plan that includes Board level support in the second half of the year.

2

We commit to progress our climate risk assessment priorities and subsequent actions as outlined in the Risk Management section of this report. This includes enhancing scenario testing capabilities and embedding climate-related risks into PIC's Risk and Control Self-Assessment process.

3

Our stewardship actions, including the roll out of our engagement strategy, will be a key initiative. We plan to step up our engagement with investees through our specific engagement channels to encourage them to decarbonise.

4

We will look to increase the quality of our reported data, and where possible implement automated data collection mechanics, as well as work to increase the coverage of carbon metrics across our investment portfolio.

5

We commit to further embed ESG across all aspects of our business to help achieve our short- and long-term sustainability goals, such as expanding our climate-related due diligence assessments to new sectors.

Annex.

[45 Emissions Metrics Methodology](#)

[46 Summary of our
Calculation Methodology](#)

[47 Disclaimer](#)

Emissions Metrics Methodology

GHG emissions

To calculate the GHG emissions Metrics and Targets section of our report, the following data is required for each asset:

- Absolute GHG emissions – the total GHG emissions arising from the asset in 2022.
- Attribution factor – the proportion of emissions from the asset that should be attributed to the investor in order to calculate financed emissions and the carbon footprint. PCAF sets the attribution factors by asset class. Full detail on the PCAF methodology can be found here.
- Revenue – revenue arising from the asset in 2022, in order to calculate the carbon intensity.

For the majority of our exposure, the above information was sourced from MSCI, which itself sources data from company disclosures. Where material asset classes and sectors were not covered by the MSCI database, we have manually estimated the required information to calculate the GHG emissions metrics. Our estimation approach by asset class is as follows:

Sovereign bonds

Absolute GHG emissions are provided by MSCI, which in turn sources emissions from the Emissions Database for Global Atmospheric Research (EDGAR). Carbon intensity is calculated as tons CO₂e / PPP-adjusted GDP (\$m).

UK universities

For universities, data coverage by MSCI is limited. Therefore, we have manually sourced data for emissions, revenue, and total equity and debt outstanding of UK based universities from the Higher Education Statistics Agency.

UK local authorities

As noted in the main body of this report, we have treated Sub-Sovereign debt in the same way as Sovereign debt. For UK local authorities, GHG emissions data and GDP is sourced from UK government statistics. No PPP-adjusted GDP is available at a local authority level, and we have therefore applied an adjustment factor in line with the adjustment factor between the UK wide GDP and the PPP-adjusted GDP. In line with the PCAF methodology for Sovereign debt, this PPP-adjusted GDP is used for both the financed emissions and the carbon intensity calculation.

Equity release mortgages (ERM)

We have taken an approximate approach to measuring the emissions in the ERM portfolio. We have sourced the domestic GHG emissions for each local authority and the number of households by local authority, both from UK Government statistics, to calculate the average emissions per household in each region. Similarly, we sourced average rent per household by region from UK Government statistics for the carbon intensity calculation.

Renewable energy

Whilst intuitively one may expect that emissions associated with renewable energy projects would be zero, there are in fact emissions associated with operating and maintaining projects. To estimate the emissions associated with these projects, we have used public studies on the operational emissions per kWh of energy produced, combined with our own data on the energy production capacity of the projects in which we have invested. Emissions per kWh of energy produced were sourced from the National Renewable Energy Laboratory (NREL). For the carbon intensity calculation, we have estimated the revenue of the projects based on the average day ahead price of electricity over the year, sourced from OFGEM.

Student accommodation

There are two types of assets within the student accommodation sector in the PIC portfolio: publicly traded corporate bonds held with student accommodation companies and private debt instruments secured against specific student accommodation buildings. The corporate bonds are treated in line with the remaining corporate bonds in the portfolio, with calculations based on MSCI data. However, given the private debt is secured against the specific underlying properties, these assets are aligned to the Commercial Real Estate asset class within the PCAF methodology.

For those assets, emissions are calculated based on the actual electricity and gas used in the student accommodation buildings over the academic year 2021/22, which has been provided by the building landlords. The revenue has been estimated based on the average rent in private student accommodation blocks by region, sourced from Unipol / NUS's University Accommodation Costs Survey.

No data is available for the value of the student accommodation buildings and these assets are therefore not included in the financed emissions calculation.

Housing associations

Where housing association data is not available from MSCI, we have manually collected data from the reporting of the individual housing associations, which is typically aligned with the Good Economy Sustainability Reporting Standards for Social Housing. Where revenue data is available but emissions data is not available for a specific housing association, we have used a sectoral average emissions intensity to estimate the emissions for that housing association.

Summary of our Calculation Methodology

PIC asset class	PCAF asset class mapping	Financed emissions formula		WACI formula	
Corporate bonds	Corporate bonds and listed equity	$\sum \frac{\text{Par value}}{\text{Issuer EVIC}}$	X Issuer emissions	$\sum \frac{\text{Market value}}{\text{Portfolio market value}}$	X $\frac{\text{Issuer emissions}}{\text{Issuer revenue}}$
Sovereign bonds	Sovereign debt	$\sum \frac{\text{Par value}}{\text{PPP-adjusted GDP}}$	X Sovereign emissions	$\sum \frac{\text{Market value}}{\text{Portfolio market value}}$	X $\frac{\text{Sovereign emissions}}{\text{PPP-adjusted GDP}}$
Supranationals	Corporate bonds and listed equity	$\sum \frac{\text{Par value}}{\text{Issuer EVIC}}$	X Issuer emissions	$\sum \frac{\text{Market value}}{\text{Portfolio market value}}$	X $\frac{\text{Issuer emissions}}{\text{Issuer revenue}}$
UK Local Authorities (LA)	Sovereign debt	$\sum \frac{\text{Par value}}{\text{PPP-adjusted LA GDP}}$	X LA emissions	$\sum \frac{\text{Market value}}{\text{Portfolio market value}}$	X $\frac{\text{LA emissions}}{\text{PPP-adjusted LA GDP}}$
UK universities	Business loans and unlisted equity	$\sum \frac{\text{Par value}}{\text{Total equity+debt outstanding}}$	X Issuer emissions	$\sum \frac{\text{Market value}}{\text{Portfolio market value}}$	X $\frac{\text{Issuer emissions}}{\text{Issuer revenue}}$
Equity-release mortgages	Mortgages	$\sum \frac{\text{Outstanding loan balance}}{\text{Property value at last valuation}}$	X Household emissions	$\sum \frac{\text{Market value}}{\text{Portfolio market value}}$	X $\frac{\text{Household emissions}}{\text{Available rent on property}}$
Housing associations	Business loans and unlisted equity	$\sum \frac{\text{Par value}}{\text{Total debt+equity outstanding}}$	X Issuer emissions	$\sum \frac{\text{Market value}}{\text{Portfolio market value}}$	X $\frac{\text{Issuer emissions}}{\text{Issuer revenue}}$
Renewables	Project finance	$\sum \frac{\text{Par value}}{\text{Total project debt outstanding}}$	X Project emissions	$\sum \frac{\text{Market value}}{\text{Portfolio market value}}$	X $\frac{\text{Project emissions}}{\text{Project revenue}}$
Student accommodation (secured on underlying building)	Commercial real estate	No data available		$\sum \frac{\text{Market value}}{\text{Portfolio market value}}$	X $\frac{\text{Issuer emissions}}{\text{Issuer revenue}}$

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