

UK Power Networks Group of the ESPS

TCFD Report (For year to 31 March 2025)



This report has been prepared to meet the UK Power Network Group's obligation under the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations (2021) to prepare a report in line with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

This report covers the period 1 April 2024 to 31 March 2025, in line with our financial reporting year. Some of the data presented relate to calendar year 2024 (i.e. 1 January 2024 to 31 December 2024), as data for our financial reporting year were not available at the time of preparing this report.

The Group Trustee wants to thank Chronos Sustainability Limited for its assistance in writing this report, and BlackRock Investment Management (UK) Limited for contributing data as noted in the 'Metrics and Monitoring' and 'Risk Management and Scenario Analysis' sections of the report.

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OVERVIEW: UK POWER NETWORKS GROUP

UK Power Networks Group (the 'Group') is part of the Electricity Supply Pension Scheme (ESPS), an industry-wide pension scheme formed when the UK electricity industry was privatised in 1990. With £2.7 billion in assets under management, the Group operates for the sole purpose of providing retirement benefits and death benefits to eligible participants and beneficiaries. It is principally a defined benefit pension arrangement. Membership has been closed to new employees since March 1994.

The UK Power Networks Group Trustee (the 'Group Trustee') operates as a corporate trustee with a Board of Directors. The Group Trustee sets the Group's general investment policy and ensures that investments are managed in line with the Group's funding objectives.

The Group Trustee has delegated day-to-day investment decisions and asset allocation to BlackRock (the 'Fiduciary Manager'). BlackRock, and any underlying managers appointed by BlackRock, are responsible for conducting stewardship, voting and engagement activities in respect of the Group's assets in line with the Group's Statement of Investment Principles.

SUMMARY AND KEY FINDINGS

The Group Trustee holds ultimate responsibility for the management of climate risks and opportunities and engages with the Fiduciary Manager, BlackRock, on a quarterly basis to ensure that climate risks and opportunities are adequately considered and managed within their investment approach. The Group Trustee monitors climate risks through its climate risk register which considers the impact of various physical and transition risks and opportunities over the short, medium and long term and documents the steps being taken to mitigate against the risks and to capture the opportunities. The Group Trustee also monitors climate risks and opportunities through annual climate scenario analysis, conducted by its Fiduciary Manager. Based on the most recent scenario analysis conducted by the Fiduciary Manager, the Group Trustee has concluded that climate change-related risks do not currently present a significant risk to the resilience of the covenant.

In 2024 the Group Trustee received training on (a) how climate change and ESG matters are built into the capital market assumptions, strategic asset allocation and portfolio construction advice provided by BlackRock, and (b) how BlackRock engages with companies regarding their ESG and climate change records to seek improvements.

In terms of climate change and ESG matters and risks, in late 2023 the Group Trustee approved the creation of a joint ESG Working Party, together with the UK Power Networks Pension Scheme (a separate registered Pension scheme which is not part of the ESPS), to monitor the climate-related activities of the Fiduciary Manager and to oversee its compliance with the ESG Policy. The ESG Working Party is not a decision-making body but will make recommendations to the Board for it to take the ultimate decisions. The first meeting of the ESG Working Party was held in July 2024.

One of the aims of the ESG Working Party is to allow more time to be spent by the Group Trustee to better understand how BlackRock integrates climate considerations in its portfolio management, stewardship and voting activities and to oversee BlackRock's implementation of the Group Trustee's ESG Policy.

In its first meeting in July 2024, the ESG Working Party requested that BlackRock present to the Board regarding changes to the TCFD targets set for data quality. Recognising the importance of improving data quality, the Group Trustee has set a target to improve data availability for Scope 1, 2 and 3 carbon emissions for the overall portfolio to at least 50% over the medium term (3-5 years). These updated targets, which were adopted by the Board in September 2024, acknowledge that the LDI portfolio represents 72.5% of the total portfolio and will make the most meaningful change to the Group's data and ability to manage climate change risks and opportunities. As such, the new targets focus on the LDI portfolio, aiming to maintain the current

scores for Scope 1 and 2 emissions and to improve Scope 3 data quality in the medium term once the industry wide methodologies have been finalised.

The Group Trustee is pleased to note that data coverage continues to improve, with Scope 1 & 2 emissions now at 77.6% which is a slight improvement from last year. The Group Trustee expects BlackRock to continue to engage with underlying investment managers to improve the data quality across the total portfolio. The Group Trustee hopes to see an improvement in Scope 3 emissions data (currently at 9.4%, at the total portfolio level) over the next 3-5 years, but notes this may prove difficult due to industry concerns about the measurement of Scope 3 emissions for sovereign debt. The improvement in Scope 3 data quality is because BlackRock is now reporting data from the AXA portfolio separately to the LDI portfolio. BlackRock is working closely with the LDI portfolio manager to understand the steps it is taking to meet this target and will report back regularly to the Trustee with their progress. Further detail is available in the Metrics and Targets section of this report.

GOVERNANCE AND MANAGEMENT

Governance and Management Structure

The Group is part of the Electricity Supply Pension Scheme (ESPS). The ESPS is a two-tiered pension scheme with a Scheme Trustee, Electricity Pensions Trustee Limited ('EPTL'), and currently has 22 Group Trustee Boards where each Group is an actuarially independent section in respect of each of the companies participating in the ESPS. The Group Trustees are primarily responsible for their own Group's investment strategy decisions as well as governance, administration (including responding to member questions) and monitoring activities.

The UK Power Networks Group Trustee (the 'Group Trustee') operates as a corporate trustee with a Board of Directors. Within this structure, the Group Trustee retains decisions that are strategic in nature. The Group Trustee is, therefore, accountable for the management of its investment arrangements, for setting the Group's general investment policy, for managing risks to the Group's investments and for ensuring that investments are managed in line with the Group's funding objectives. The Group Trustee is expected to establish processes to satisfy itself that parties undertaking governance activities (other than trustees) are taking steps to identify assess and manage climate related risks and opportunities.

The Group Trustee has appointed BlackRock (the 'Fiduciary Manager') to manage the Group's assets in line with the terms of the Fiduciary Management Agreement (the 'FMA') that has been agreed between the Group Trustee and the Fiduciary Manager. The Fiduciary Manager is responsible for the selection of investments, including ensuring investments are appropriately diversified and suitable for the Group. The Fiduciary Manager and any underlying managers appointed by the Fiduciary Manager are also responsible for conducting stewardship, voting and engagement activities in respect of the Group's assets in line with the Group's Statement of Investment Principles (SIP) (see below).

UK Power Networks Holdings provides an Executive function which is responsible for the day-to-day administration of the Group. The Executive's responsibilities include providing member administration services, accounting and finance services, including prompt settlement of member benefits. The Executive also supports the Group Trustee with its compliance and regulatory obligations including organising quarterly board meetings and providing oversight of the services provided by the Fiduciary Manager and other advisers and service providers. The Executive comprises a Head of Pensions, a Pensions Investment Manager, a Pensions Project Manager, a Pension Services Manager and a number of supporting roles.

Policies

Statement of Investment Principles

The Group Trustee has set out its investment beliefs in its Statement of Investment Principles (SIP) including its beliefs relating to the importance of environmental, social and governance issues to our investments. The SIP also sets out the Group's policies relating to a number of key investment matters, including, but not limited to, the types of assets to be held, the balance between different kinds of investments, investment risks, the expected returns on investments, and the Group's views on stewardship including the extent to which social, environmental and ethical factors are considered when selecting, retaining and realising investments.

The SIP is reviewed at least every three years with the most recent detailed review having taken place in September 2023. The SIP also contains provisions allowing it, if needed, to be altered after any significant changes in investment policy. The Group Trustee reviewed the SIP in September 2024 to ensure it remains substantially accurate and determined that no changes were required at that time.

The Group has a monitoring framework document setting out how compliance against each of these clauses in the SIP is to be monitored. The Group produces an annual Implementation Statement which outlines how, and the extent to which, the policies relating to stewardship, voting and engagement as outlined in the SIP have been followed.

ESG Policy

The Group's approach to environmental, social and governance (ESG) matters, including climate-related matters, is outlined in our ESG Policy which was published for internal use in 2023. We appointed BlackRock as Fiduciary Manager to deliver effective stewardship of the investment portfolio in line with this policy.

For passive investments, we believe that an ESG-optimised index approach should be used instead of a traditional market capitalisation approach where we have confidence that using the ESG-optimised approach will not detract from our ability to meet our investment objectives. The Fiduciary Manager is responsible for making this assessment.

Climate Change

In relation to climate-related matters, the UK Power Networks Group believes that the risks associated with climate change can have a significant, negative impact on the investment returns of occupational pension schemes, and that climate change may also present significant investment opportunities. We ask our Fiduciary Manager to consider climate change-related risks and opportunities when making investment decisions. We are committed to establishing robust governance and oversight processes to enable us to review the effectiveness of the Fiduciary Manager's efforts in this regard (see below).

The Group Trustee has ultimate responsibility for our approach to climate change. The Group Trustee is responsible for:

- Defining our expectations of our Fiduciary Manager in relation to climate change.
- Engaging with the Fiduciary Manager to understand how climate risks are managed in their investment approach. The Group Trustee considers climate related risks at its quarterly meetings as part of the review of its risk register.
- Reviewing the climate and other data provided by the Fiduciary Manager to ensure that climate-related risks and opportunities are being effectively managed, within the context of our wider risk and return requirements and consistent with our SIP.
- Ensuring that we meet our climate-related reporting obligations.

To ensure that we can deliver these responsibilities, the Group Trustee receives training (see below) and we require the Fiduciary Manager to provide us with the data and information we need to allow us to effectively scrutinise and challenge their approach.

As part of the process of developing its more detailed ESG Policy document, the Group Trustee revisited its investment beliefs for climate change and ESG matters. These beliefs were last revised in December 2023.

Monitoring and Review

With the assistance of the Executive, the Group Trustee monitors the performance of the Fiduciary Manager both in terms of its investment performance and its performance against the terms set out in the FMA. A formal assessment of the Fiduciary Manager against its objectives is undertaken on an annual basis. The Group Trustee maintains a climate related risk register, updated on a quarterly basis. This document considers the impact of various physical and transition risks and opportunities, resulting from climate change. The impact of these risks and opportunities is assessed over the short, medium and long term. The Trustee

classifies each risk and opportunity depending on the potential impact to the Group and documents the steps being taken to mitigate against the risks and to capture the opportunities.

During the period covered by this report, the Group Trustee reviewed its climate change risk register at each quarterly meeting. While no substantial changes were made, the Group Trustee did note that geopolitical risks were increasing, and agreed that these factors will need to continue to be monitored.

The Fiduciary Manager provides quarterly reports which include:

- Analysis of funding level performance over the period, including discussion of the economic environment, investment market factors and the Group's portfolio positioning.
- Commentary on the risks being taken in the assets, including the outcome of stress testing or other portfolio risk assessments.
- Assessment of funding levels versus the Group's objectives.
- Asset allocation analysis.
- ESG metrics, including carbon emission figures. These reports include aggregate and asset class level reporting of ESG scores relative to an appropriate benchmark. The Group Trustee uses this information to assess how the overall Group assets are invested and to track changes over time.
- Voting and cost disclosures, in line with relevant regulatory requirements

The Group Trustee notes that BlackRock's quarterly updates showed a gradual improvement in the ESG and climate related metrics, and that there were no decisions regarding asset allocation and climate-related risk management processes required of the Group Trustees during the year.

The Group Trustee has also appointed a Fiduciary Oversight manager, IC Select, to provide regular reports to ensure that BlackRock's business model and team retains its capabilities to deliver the services required.

The first meeting of the newly-created ESG Working Party was held in July 2024. This meeting discussed the TCFD targets and, based on the training received from BlackRock as part of that meeting, the ESG Working Party requested that BlackRock present a climate change target discussion with a view to revising the Scope 3 emissions targets for the Group.

At the Group Trustee meeting in September, BlackRock presented a proposal to change the Group Trustee's data quality target for the overall portfolio to the medium term (3-5 years). The proposal allows for the Group Trustee to focus its targets on the LDI portfolio given that this is an ever increasing part of the total portfolio. The Group Trustee noted that targets for Scope 1 and 2 emissions for the portfolio had already been met. The objective going forward is to retain current coverage levels for these emissions and to increase the coverage of Scope 3 reporting in the medium term once the industry-wide methodology has been established.

The Group Actuary, Martin Bell from WTW, helps the Group Trustees assess the potential impact of climate change risk as part of ongoing risk and funding review processes.

Penfida, as the Group Trustee's covenant advisers, helps the Group Trustee understand the potential impact of climate change risk on the covenant of the Principal Employer UK Power Networks Holdings Limited and each of the participating employers within the Group.

The in-house Pensions Executive monitors and manages the operational governance activities on behalf of the Group Trustee. The Executive ensures that the Board regularly reviews the climate risk register (which covers both the risks and the opportunities) and also ensures all the other advisers feed into the register to keep it up to date. The Executive keeps abreast of industry developments and liaises with the appointed advisers and similar firms to provide training to the Group Trustee if this is considered appropriate.

Training

The Group Trustee recognises that ESG is an evolving issue and that it is important to receive annual training on ESG matters and keep abreast of all developments. All new trustee directors are required to undertake training to understand the Group's current policies to facilitate their participation in the ongoing monitoring and development of this policy.

The Group Trustee participates in the Pensions Management Institute's (PMI) Trustee Group Continuing Professional Development (CPD) scheme. This scheme requires all trustees to complete 15 hours of relevant trustee training per annum. The Group Trustee also organises a half-day trustee training each quarter. In each year, at least one of these sessions focuses on investment topics, which may include some focus on ESG issues.

The Group Trustee has recognised the importance of building the Trustee Board's capacity and expertise on climate change, to ensure that trustees have the appropriate degree of knowledge and understanding of the identification, assessment and management of risks from the effects of climate change and the opportunities from climate change to support good decision-making.

At the July 2024 ESG Working Party meeting, BlackRock provided an in-depth look at how it takes ESG and climate change related matters into account in its strategic asset allocation and portfolio construction. BlackRock also demonstrated how it engages with companies with a view to improving their ESG and climate change credentials.

The Group Trustee also received additional training from BlackRock on journey planning for the longer-term self-sufficiency portfolio which incorporated BlackRock's thinking on climate change and ESG matters.

A number of Trustee directors undertook additional training on net-zero and TCFD matters from independent training providers.

STRATEGY AND SCENARIO ANALYSIS

Risk Identification

The Group Trustee monitors and records climate risks and opportunities through its climate risk register. This document considers the impact of various physical and transition risks and opportunities over the short, medium and long term. The Trustee classifies each risk and opportunity depending on the potential impact to the Group and documents the steps being taken to mitigate against the risks and to capture the opportunities. The Group Trustee, in consultation with its Fiduciary Manager, reviews the risk register on a quarterly basis. While there have been a number of changes to the risk register over the year, there are no climate-related risks which the Group Trustee classifies as high risk. The only climate risk that is classified as a moderate risk is the potential impact of climate transition risks on the key assumptions affecting the funding strategy, specifically discount rates, inflation or other financial assumptions. This risk is managed through triennial valuations, the ongoing monitoring of the Group's funding position as well as the hedging of assets against inflation and interest rates. The risk register also considers transition risks arising from the pace of policy change increasing the likelihood of a compliance breach and/or inadequate governance. This is considered a higher risk in the short-term compared to the longer term, and is being managed through continued engagement with the Fiduciary Manager as well as training from all the Group Trustee's advisers.

Timeframes

The Group Trustee has developed a Climate Related Risk Register, which assesses risks over three timeframes:

- Short-term: 1 year.
- Medium-term: 3-5 years.
- Long-term: 10 years.

As an integral part of its investment process, BlackRock looks to identify climate-related opportunities as well as downside risks. Climate related risks and opportunities impact asset allocations through the macroeconomy (growth, inflation), through corporate profitability and through climate related repricing. For example, exposure to certain sectors and regions within equities are beneficial either via avoiding climate related damages or by enabling climate-driven opportunities. While no significant climate-related opportunities have been identified, the Group continues to monitor this through continued engagement with BlackRock.

The Group Trustee has delegated to BlackRock, as its Fiduciary Manager, the responsibility to design a diversified Strategic Asset Allocation ("SAA") that is consistent with the long-term investment objectives for the Group. The SAA is deemed consistent based on a number of requirements, including consistency with the BlackRock Investment Institute's expected return assumptions across asset classes and an acute understanding of the Group's specific requirements. In addition, the consideration of Environmental, Social and Governance ("ESG") factors that feature into the investment due diligence for the selection of managers, as well as the choice of mandates with ESG-optimised or exclusionary screen characteristics form part of the overall investment strategy. The Institute's expected return assumptions, referred to as Capital Market Assumptions ("CMAs"), are macroeconomic and asset return forecasts. These inherently account for the impact of climate change.

Underpinning BlackRock's CMAs is the view that managing climate-related risks and opportunities will help support economic growth and offer investors the ability to generate better risk-adjusted returns. Climate change and the global energy transition are expected to be drivers of asset returns, and consequently fundamental to strategic investment decisions.

Through the use of these Capital Market Assumptions, climate risk is integrated throughout the design of the SAA for the Group. These base return assumptions form a critical input to the design of the long-term strategic allocation for the Group. The inputs to the asset return models are adapted to account for climate change impacts through three principal channels:

- **Macroeconomic impact:** A long-run model of climate change is used to account for the physical damages, energy transition and the impact of public policies and their impact on macro variables, such as level of GDP. Two long-term economic scenarios are modelled: a green transition (the base case underlying the Capital Market Assumptions) and a no-climate-action scenario. In the green transition scenario, co-ordinated climate mitigation and fiscal policies, along with technological innovation in areas such as carbon capture, result in global temperature rises by 2100 remaining below 2 degrees Celsius (which is broadly in line with the goals of the Paris Agreement). In contrast, the no-climate-action scenario projects materially higher increase in global temperatures of 5.8 degrees Celsius and a worse economic outcome.
- **The Repricing channel (discount rate):** A consequence of shifting societal preferences for sustainability is that the price investors are willing to pay for assets perceived to be sustainable is changing, meaning the discount rate used to value these securities is also changing. For credit and equity markets the future cost of capital estimates are adjusted at the sector level, such that all things being equal, more/less sustainable sectors have respectively lower/higher future costs of capital.
- **The Fundamentals channel (cashflow/earnings):** Climate change and the efforts to address it will impact the profitability and growth prospects of companies. The impact on corporate earnings at the sector level of a green economic transition is estimated. To arrive at these estimates, the sensitivity of earnings to carbon pricing initiatives - a core element of climate mitigation policies - is assessed. The physical and transition risks and opportunities at the sector level are also taken into account.

The 2025 scenario analysis results, combined with the triennial covenant assessment by Penfida, where the covenant was assessed as Strong (the highest level awarded, as at March 2022), suggests that climate change does not currently pose a significant risk to the resilience of the covenant, in either the short, medium or long term. In addition, there is more than sufficient headroom to support the current levels of investment risk when assessed on a 6 year 1 in 6 Value at Risk (VaR) basis.

Penfida have started work on updating their detailed covenant assessment as at 31 March 2025, and while the review is not complete, the initial assessment has considered the Company's assessment of climate change risks and opportunities and its plans to adapt the business over time to address these matters. While the initial assessment does highlight there are many risks, none of these risks are sufficient for the Group Trustee to change its assessment that climate change does not currently pose a significant risk to the resilience of the covenant, in either the short, medium or long term.

Scenario Analysis

Methodology

In BlackRock's Aladdin Climate reporting, different climate-related scenarios are modelled as an instantaneous shock to an asset, or a sector benchmark through the Temperature Alignment models. All of these scenarios model Transition and Physical Risk, in line with the recommendations from the Network for Greening the Financial System ("NGFS"). BlackRock updates the input data and scenario models over time to reflect the evolving nature of climate analytics. Examples of updates can include (but are not limited to) updates to the discount rate that is used in the discounted cash flow analysis in each scenario, updates to inflation assumptions, or expanded/rolled forward financial and emissions data for bottom-up modelling. The Current Policies scenario is Aladdin Climate's base scenario, for Transition Risk to which the Net Zero 2050 and Delayed Transition scenario are compared. For Physical risk Blackrock uses a base scenario which assumes no additional climate damages in future.

As outlined in the table below, BlackRock have considered the transition and physical risks of the Net Zero by 2050 scenario (i.e. 'Orderly transition') and the Delayed Transition scenario (i.e. 'Disorderly transition').

Orderly transition – transition risk

Rationale	Catalysts	Calibration
<ul style="list-style-type: none"> A transition to Global Net Zero by 2050 is achieved via immediate and smooth policy responses Carbon taxes are channelled back to the economy via government investment 	<ul style="list-style-type: none"> UK sees up to 2% p.a. GDP gains peaking in 2027 (50% of carbon tax assumed to be reinvested into the economy) UK inflation around 1.9% higher peaking in 2026, largely driven by repricing of carbon prices Price of carbon rises to over 800 \$/ton by 2050. 	<p>The UK yield curve rises modestly as growth accelerates.</p> <p>Higher inflation however drives most of the impact on UK LDI assets and pension liabilities</p> <p>There is assumed to be no significant central bank response to higher inflation.</p>

Orderly transition – physical risk

Rationale	Catalysts	Calibration
<ul style="list-style-type: none"> Robust corrective action is taken to reduce emissions is taken but temperatures still rise by 1.5°C by c 2100 relative to pre-industrial levels 	<ul style="list-style-type: none"> Physical changes such as higher temperatures, sea-level rises and hurricanes impact GDP. The impacts are largely felt from 2050 onwards 	<p>The UK yield curve increases modestly in the near term, but more for longer tenors as physical risks become for evident.</p>

Disorderly transition – transition risk

Rationale	Catalysts	Calibration
<ul style="list-style-type: none"> A delayed transition starts in 2030 Carbon taxes are used to cut income tax, thus boosting private consumption There is a negative shock to business confidence as stringent policies are introduced 	<ul style="list-style-type: none"> There is a negative impact on UK GDP particularly in the early to mid 2030s UK inflation around 1% higher than in a base case peaking in 2032 largely driven by repricing of carbon prices Price of carbon rises from 0 in 2030 to over 1000 \$/ton by 2050 	<p>The middle of the UK yield curve rises modestly as the risk premia (probability of default) applied to the UK increases.</p> <p>Higher inflation is priced in from 2030 onwards</p> <p>There is assumed to be no significant central bank response to higher inflation.</p>

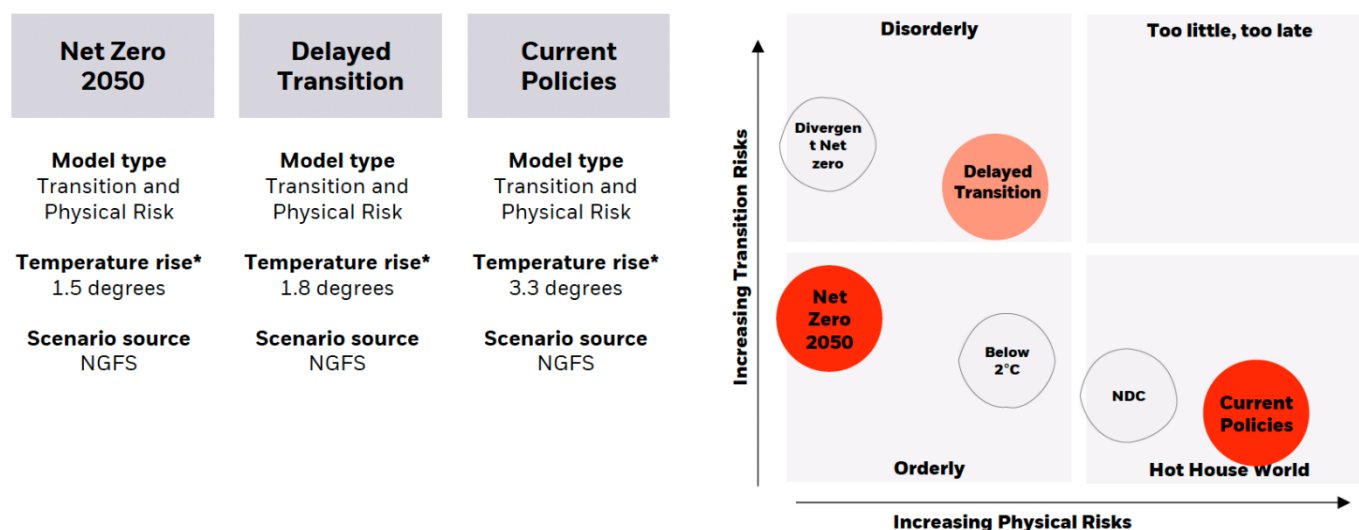
Disorderly transition – physical risk

Rationale	Catalysts	Calibration
<ul style="list-style-type: none"> Some corrective action to reduce emissions is take but temperatures still rise by 1.8°C by c 2100 relative to pre-industrial levels 	<ul style="list-style-type: none"> Physical changes such as higher temperatures, sea-level rises and hurricanes impact GDP. The impacts are largely felt from 2050 onwards 	<p>The UK yield curve increases modestly in the near term, but more for longer tenors as physical risks become for evident.</p>

Source: BlackRock

Aladdin Climate's models are intended to highlight the potential impact of climate policies and outcomes on the economy and on financial markets. Given the uncertainty in how policy makers, economies and companies may respond and adapt to the projected scenarios and the long-term nature of the scenarios, BlackRock makes a number of simplifying assumptions in its modelling. This allows Aladdin Climate to provide investors with insight into where they may face climate risks and opportunities within their portfolios; it is not, however, a forecast or a prediction of how asset values will actually evolve.

The impact of transition and physical risk on the Group LDI portfolio and pension scheme liabilities has been modelled separately in Aladdin through the calibration of user specified stress tests intended to be consistent with the climate scenarios shown below. In the table below, BlackRock have considered the transition and physical risks of the Net Zero by 2050 scenario (i.e. 'Orderly transition') and the Delayed Transition scenario (i.e. 'Disorderly transition').



Source: BlackRock

Aladdin Climate's models are intended to highlight the potential impact of climate policies and outcomes on the economy and on financial markets. In Aladdin Climate reporting, the climate-related scenarios are modelled as an instantaneous shock to an asset, or a sector benchmark.

The results are expressed as "climate-adjusted values" for Transition and Physical Risks ("TCAV" and "PCAV", respectively). These are based on discounted cash flow analysis in each scenario relative to a "counterfactual" scenario that is assumed to be priced into current valuations. BlackRock's analysis considers a single timespan over the lifetime of the scenario modelled.

The "counterfactual" (NGFS Current Policies) assumes no additional warming for Physical Risk scenarios, and no additional policies enacted for Transition Risk scenarios. The BlackRock outputs are, therefore, conservative by design (i.e. they produce more severe outcomes) which is consistent with stress testing market practice. Essentially "de minimis" pricing of climate change is assumed in current valuations. Given evolving nature of climate analytics, we expect input data and models to change over time, with potentially significant impacts on results.

The scenario analysis represents BlackRock's best estimate of what happens under the NGFS scenarios. There are, however, a number of important limitations to the modelling:

- The climate models address transition risk and physical risk separately. A more holistic view of climate-related financial risks would address both together.
- The climate models used do not predict the abrupt or irreversible changes that may result from reaching critical climate thresholds or "tipping points".
- The economics models used may not adequately predict feedback loops and may therefore underestimate the chance of systemic failure in parts of the global economy.
- The models do not include the social or political impact of mass migration.
- The modelling captures first-order impacts on companies' revenues and costs but does not capture second order effects such as supply chain disruption.
- Based on prior economic and financial crises, it can be hard to predict the scale of monetary and fiscal policy responses. The models' assumptions about changes in financial valuations may therefore be incorrect.
- The modelling does not include the impact of other shocks that might occur such as recessions, conflicts or pandemics.

The Group's asset allocation has a significant proportion of assets in LDI (c. 72.5% of the allocation) and a sizeable allocation to private markets (c. 24% of the allocation) where there is insufficient coverage data to be included in the scenario analysis. Therefore, the primary method of integration of climate risks within the portfolio construction process for the Group's asset allocation is through the Climate-Aware Capital Market Assumptions and the selection of underlying asset managers.

Over the course of 2024, two new asset classes were introduced within the matching portfolio (short duration credit and buy and maintain credit) and a formal de-risking strategy was undertaken. The two new managers were included in this year's scenario analysis, but this did not have a material impact on the results of the scenario analysis modelling on a standalone basis nor at the total portfolio level. There were no other material changes to the funding strategy or position. Therefore, the Group Trustee has concluded that the current scenarios cover the range of plausible scenarios likely to be relevant to the Group and that, therefore, it is not necessary to undertake new scenario analysis outside the mandatory cycle.

Results

The table below provides an overview of the potential impacts on the Group's total assets liabilities and funding which have been identified through the scenario analysis. The modelling, produced by BlackRock, considers the impact of these climate scenarios over the long-term, with the impacts of transition risks being considered until 2050 and physical risks extending until 2100, and so covers the short, medium and long term horizons set by the Group. The Current Policies scenario is Aladdin is used as a base scenario, to assess the potential impact of the transition and physical risks under the Net Zero 2050 and Delayed Transition scenario. The Current Policies scenario assumes no additional warming for Physical Risk scenarios, and no additional policies enacted for Transition Risk scenarios. On a standalone basis, the Current Policies scenario essentially assumes a "de minimis" pricing of climate change in current valuations.

	31 December 2024 £m	Physical Climate Impact		Transition Climate Impact	
		Net Zero 2050	Delayed Transition	Net Zero 2050	Delayed Transition
Assets	£2,716.9	£2,711.2	£2,711.0	£2,709.9	£2,724.6
Liabilities	£2,682.2	£2,678.7	£2,678.7	£2,678.4	£2,691.6
Surplus	£34.7	£32.5	£32.3	£31.5	£33.0
Funding ratio (%)	101.3%	101.2%	101.2%	101.2%	101.2%
Change in surplus	-	-£2.3	-£2.4	-£3.2	-£1.7
Change in funding ratio (%)	-	-0.1%	-0.1%	-0.1%	-0.1%

Source: BlackRock

Overall, the greatest risk to the Group's assets occurs through transition risks under the Net Zero 2050 scenario with an expected decline in the portfolio's surplus by £3.2 million. Meanwhile, under the Delayed Transition Scenario, the expected decline in surplus from transition risks is £1.7 million. Physical climate risks also pose a threat to the portfolio; the expected decline in surplus is £2.3 million under the Net Zero 2050 scenario and £2.4 million under the delayed transition scenario.

The scenario analysis estimates are based on information from the majority of the Group's equities, bonds and LDI assets. Alternatives are not currently included in the scope of the scenario analysis. For more information about data coverage, please refer to Appendix B.

The Group's investment strategy remains resilient to climate physical and transition risks given that a surplus is maintained under all potential scenarios assessed. Therefore, no changes have been proposed to the investment strategy in response to the 2025 scenario analysis, given the modest impact on the surplus. That being said, under both the Net Zero 2050 scenario and the Delayed Transition Scenario, the Group's assets are predicted to experience a loss. Therefore, the Group Trustee will continue to closely monitor these risks and ensure that they are adequately managed by the Fiduciary Manager. The Group Trustee will continue to conduct scenario analysis on an annual basis to ensure that climate change-related risks continue to not present a significant risk to the resilience of the covenant.

RISK MANAGEMENT

Managing Risks

The Group Trustee recognises that ESG risks could impact its ability to meet the investment objectives. It therefore seeks to ensure that its Fiduciary Manager, alongside other investment risks, integrates consideration of ESG risks throughout the investment decision making processes. The Group Trustee reviewed its arrangements with BlackRock during the year. Following this review and developments at BlackRock to further integrate ESG and climate change more generally within its business practices, the FMA was updated in early January 2024. Specifically, the Group Trustee requires BlackRock to:

- Assess how all managers charged with managing Group assets integrate ESG risks considerations into the selection, retention and realisation of investments. We expect this due diligence process to take place before appointing any underlying investment manager.
- Review the adherence of managers charged with managing Group assets to their ESG principles as part of its ongoing monitoring. We expect the Fiduciary Manager to report quarterly on key ESG metrics for these underlying managers, and to aggregate these to portfolio level where appropriate.
- Report quarterly on its execution of the voting and engagement responsibilities set by the Group Trustee. Where the Group invests in pooled funds, the Group Trustee recognises that the investment manager of the pooled funds is responsible for exercising voting rights and reporting on how they have exercised those rights.
- Where UK-domiciled investment managers are not signatories to the FRC's UK Stewardship Code, consider the investment manager's rationale for this position and, where appropriate, report these findings to the Group Trustee.

The Group Trustee has identified climate change as one of the risks that needs be managed as part of the Group's overall risk management processes. Climate related risks and opportunities are identified and managed in accordance with the climate risk register. This register presents the potential impact of each risk and opportunity, as well as the controls in place to manage this. On a quarterly basis, the Group Trustee asks BlackRock to note any new opportunities or risks that it has identified, and these are incorporated into the risk register and managed accordingly. The Trustee also considers risks to the liabilities and the employer covenant, where these are relevant to the investment and funding strategy.

As discussed above, all investment decisions, including decisions on how to integrate climate into investment research and decision-making, have been delegated to BlackRock. The FMA does not impose any obligations on BlackRock in terms of how it takes climate change into account in investment research and decision-making. The FMA does, however, require BlackRock to provide scenario analysis and other data which allows the Group Trustee to understand the climate-related risks that its assets are exposed to.

Stewardship

We recognise that stewardship can enhance value over the long term and that we have a responsibility to act as a good steward and protect and grow the long-term value for the benefit of the members. We expect the Fiduciary Manager to vote our holdings and to engage with underlying investee companies, as part of an effective stewardship approach that meets our expectations. We expect that the voting and engagement activities are carried out in the best financial interests of the assets being managed. As part of this responsibility, the Fiduciary Manager is expected to:

- Use reasonable efforts to obtain voting and/or stewardship policies of underlying or external managers charged with managing Group assets.
- Inquire about underlying manager's voting activity with respect to their stated policies, where appropriate.
- Request that underlying investment managers report on an annual basis a summary of the voting actions which have been taken and any votes cast which differ from the stated voting policy of that manager.
- Provide a summary to the Group Trustee of the overall level of voting activity on an annual basis.

METRICS AND TARGETS

Metrics

Since mid-2021, BlackRock has provided climate change-related metrics to the Group as part of its quarterly reporting. These metrics and their calculation methodology are outlined in the table below. BlackRock has reported against all of the metrics outlined in the table (see Appendix A for reported metrics).

Metric Type	BlackRock Calculation Methodology
Absolute emissions metric: Total GHG Emissions	Total GHG emissions are calculated using MSCI sourced Enterprise Value Including Cash (EVIC) and Scope 1 and 2 emissions. This is an absolute emissions figure that is normalized using Market Value from BlackRock on the portfolio level. Equation outlined below: $\sum_i \left(\frac{\text{Market Value}_i}{\text{EV Including Cash (\$m)}_i} \times (\text{Carbon Emissions Scope 1 + 2})_i \right)$
Emissions intensity metric: Carbon Footprint	Carbon footprint is an emissions intensity measure utilizing MSCI sourced EVIC and Scope 1 and 2 emissions. BlackRock market value and Net Asset Value figures are integrated to normalize to the portfolio level. Equation outlined below: $\frac{\sum_i (\text{Carbon Emissions Scope 1 + 2 Intensity (EVIC)}_i \times (\text{Market Value}_i))}{NAV}$
Emissions intensity metric: Weighted Average Carbon Intensity	Weighted Average Carbon Intensity is an emissions intensity metric utilizing MSCI sources sales and Scope 1 and 2 emissions values. BlackRock market value and Net Asset Value figures are integrated to normalize to the portfolio level. Equation outlined below: $\frac{\sum_i (\text{Carbon Emissions Scope 1 + 2 Intensity (Sales)}_i \times (\text{Market Value}_i))}{NAV}$
Data Quality	MSCI Coverage as measured by Scope 1 and 2 emissions broken down by "Reported", "Estimated" or "Not Reported" (represented as null values for Scope 1 and 2 emissions). Estimated values represent MSCI indication that the scope 1 and 2 emission data is estimated rather than officially reported.
Portfolio Alignment Metric: Binary Target Metric	The percentage market value of a portfolio where issuers have an approved SBTi target and investment is through a corporate bond or equity investment. Derivatives and other complex investment products are not captured
Emission intensity metric: Sovereign GHG Intensity (t/USD million GDP nominal)	This figure represents GHG intensity of an economy (in tons per USD million GDP nominal). The higher the value the more carbon intensive the economy is. Six greenhouse gases, considered under Kyoto Protocol, are considered for this data point. These gases are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GDP is in nominal terms. Utilizes MSCI data.
Emissions intensity metric: GHG Emission per Capita (Sovereigns)	Tons CO ₂ e per capita. Six greenhouse gases, considered under Kyoto Protocol, are considered for this data point. These gases are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Utilizes MSCI data.
Total GHG Emissions Scope 3 Only	This figure represents the company's most recently estimated Scope 3 total emissions normalized by the most recently available enterprise value including cash (EVIC) in million USD. This ratio facilitates portfolio analysis by allocating emissions across equity and debt. (t/million USD)
Carbon Footprint Scope 3 Only	This figure represents the company's most recently estimated Scope 3 total emissions normalized by the most recently available enterprise value including cash (EVIC) in million USD. This ratio facilitates portfolio analysis by allocating emissions across equity and debt. (t/million USD)

Since 2022, BlackRock has provided analysis of the developing trends in climate-related metrics. This analysis has allowed the Group Trustee to track progress, both on portfolio related emissions and on the implications of climate change for investment performance. The table below outlines the performance of the Group's portfolio on key TCFD metrics. The Group's total GHG emissions were 0.392 MtCO₂e for Scope 1 and 2 and 0.726 MtCO₂e for Scope 3. Meanwhile, the Group's carbon footprint was 186 tCO₂e/£M for Scope

1 and 2 and 2846 tCO₂e/£M for Scope 3. The increase in GHG emissions and the overall Carbon Footprint for 2024 is primarily attributed to enhanced data reporting of Scope 3 emissions by investment managers Neuberger and HarbourVest. In 2023, neither manager provided Scope 3 data, which limited the accuracy of emissions reporting. However, in 2024:

- HarbourVest submitted Scope 3 data on a one-year lag, using 2023 figures to inform the 2024 metrics. This significantly impacted the emissions profile of the Alternatives allocation.
- Neuberger's newly reported Scope 3 data contributed to the rise in emissions for the Corporate Bonds allocation.

These updates reflect a marked improvement in data quality, with coverage increasing by 10.7% for Alternatives and 15.1% for Corporate Bonds compared to 2023.

Metric	Total GHG Emissions (Mt/CO ₂ e)		Carbon Footprint (tCO ₂ e/£M)		Binary Target Metric (%)		Data Quality (%)	
	1 & 2	3	1 & 2	3	1 & 2	3	1 & 2	3
Scope								
2022	0.012	0.100	41.78	360.64	3.4	0	9.5	8.7
2023	0.381	0.094	164.66	373.02	5.3	5.3	76.5	8.4
2024	0.392	0.726	186.00	2846.58	2.1	2.1	77.6	9.4

Targets

One of the Group Trustee's conclusions from the data and analysis that have been provided by BlackRock to date, is that there are limited data available for important areas of the market, e.g. private markets. These data limitations constrain the Group Trustee's ability to set performance or other expectations in these asset classes. This is the reason why the Group Trustee set data quality targets in its TCFD report published in 2023. The Group has set a medium-term target to increase data coverage for Scope 1, 2 and 3 carbon emissions for the overall portfolio to at least 50% over the next 3-5 years. This target will be monitored closely on an annual basis with a view to setting outcome-based targets once this has been achieved.

The target is monitored through the 'Data Quality' metric, as independently reported by MSCI to BlackRock. This metric determines whether Scope 1, 2 & 3 emissions are 'Reported', 'Estimated' or 'Not Reported'. It considers the percentage of the portfolio for which accurate and reliable emissions data is available.

Since 2022, data availability for Scope 1 and 2 emissions has risen from less than 10% to over 70% of the total portfolio. This is largely a result of GHG emissions now being provided by Insight Investment (the manager of the Group's liability-driven investments (LDIs)). Emissions data for the purpose of calculating Scope 1 and 2 emissions for the LDI portfolio is based on the emissions of the UK government, as reported on the DWP website. Data availability for Scope 3 emissions remains low (9.4%) but has seen gradual improvement since 2023. The Group Trustee hopes to see an improvement in Scope 3 emissions data over the next 3-5 years, in line with its target to increase Scope 3 data coverage by 50% by 2030. It notes this may prove difficult due to industry concerns about the measurement of Scope 3 emissions for sovereign debt.

BlackRock has engaged with Insight (the Group's LDI manager) who have noted that aggregation of Scope 3 data is dependent on the existence of accurate emissions data at the global level. However, Insight believes that the availability of accurate data is going to be a multi-year journey and have formed a cross-body group across the LDI industry to reach a consensus on developing a reporting standard. BlackRock's manager research team are engaging with Insight to understand what interim steps need to be achieved before Scope 3 data will become available and will report this to the Trustee once available.

While BlackRock has requested that all underlying investment managers provide TCFD related data for the purpose of compiling this report, some managers are still unable to do so. The following reasons have been provided to BlackRock:

- For some sub-asset classes, there continues to be a lack of industry consensus on how to attribute and quantify emissions statistics. This is particularly relevant for alternative assets. These assets are bespoke in nature and the industry is still working towards achieving a uniform reporting standard.
- Some elements of the investment portfolio are managed by underlying asset managers domiciled in parts of the world where TCFD-related reporting is not yet a mandatory regulatory obligation.
- In the case of Scope 3 data, investment managers have cited difficulties with the complexity of calculating this data accurately whilst avoiding the possibility of double-counting data.

BlackRock is liaising with all underlying managers to better understand when they may be in a position to start reporting TCFD-related data. BlackRock has asked its manager research team to raise questions in relation to this matter during their ongoing engagement with these managers.

APPENDIX A: UKPN GROUP TCFD METRICS (AS AT 31 DECEMBER 2024)

2024 Metrics

Portfolio Emissions - Aggregated Data - UKPN

Metric ¹	Total Portfolio – Scope 1 & 2	Total Portfolio – Scope 3
Total GHG emissions (MtCO ₂ e)	0.39238	0.72638
Total GHG Intensity (t/ \$M GDP nominal)	69.53	6.58
Carbon footprint (tCO ₂ e/£M)	186.00	2846.58

The weighted average data coverage across the investment portfolio has been estimated* to be **77.6%** for scope 1 and 2 emissions combined. The weighted average data coverage across the portfolio has been estimated to be **9.4%** for scope 3 emissions.

Please note that the data related to GHG Emissions and the Carbon Footprint do not consider the coverage from the Group's exposure to LDI and emissions from sovereigns. This is reported through the GHG Intensity Metric.

The Trustee acknowledges that as coverage improves over coming years (in line with the wider industry), it is likely that the Group's absolute measure of emissions (total GHG emissions) may rise before it falls. This may be as the result of steps taken to improve the ESG characteristics of the investment portfolio.

Source: MSCI, third party managers Equitix, Schroders, PGIM, Neuberger Berman, T Rowe, Partners Harbournvest, Blackstone, Barings, Insight. Data as of 31 December 2024
*We have determined the overall data coverage of the total portfolio as the weighted average of the data coverage across asset classes. For asset classes where the data is not yet available and / or best practice is still being developed, we have assumed that data coverage is nil.
For scope 3 emissions, the emissions data is based on estimated data only.

BlackRock

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UKPN-Emissions by Asset Class: Scope 1 and 2

	Alternatives	Cash	Global Equity	Government Bonds	Corporate Bonds	LDI	Total
Market Value (£)	£ 592.5	£26.1	£55.9	£60.6	£51.5	£1,930.2	£2,716.9
% of total section assets	21.8%	1.0%	2.1%	2.2%	1.9%	71.0%	100.0%
Total GHG Emissions (MtCO ₂ e)	0.01778	0.00001	0.00153	0.00000	0.05644	0.31662	0.39238
Carbon Footprint (tCO ₂ e/£M)	198.53	0.54	27.67	NA	1,526.47	166.26	186.00
Data Quality Reported	1.6%	89.3%	87.8%	NA	57.3%	95.8%	72.2%
Data Quality Estimated	13.5%	0.1%	11.0%	NA	14.4%	2.9%	5.5%
Data Quality ¹	15.1%	89.4%	98.8%	NA	71.7%	98.7%	77.6%
GHG Intensity (t/ \$M GDP nominal)	NA	NA	NA	211.43	NA	88.62	69.53
Binary Target Metric ²	0.0%	4.0%	49.0%	NA	16.0%	1.0%	2.1%

¹. % of Market Value where reported and estimated Carbon Emissions and Carbon Footprint data is available. Total excludes coverage from sovereigns ; emissions from sovereigns reported via GHG Intensity Metric.

² % of Market Value where issuer has SBTi approved target.

Source: MSCI, third party managers Equitix, Schroders, PGIM, Neuberger Berman, T Rowe, Partners Harbournvest, Blackstone, Barings, Insight. Data as of 31 December 2024.
LDI data has been estimated based on the latest available statistics on national emissions and national debt, in-line with the DWP's statutory guidance.

BlackRock

UKPN- Emissions by Asset Class: Scope 3

	Alternatives	Cash	Global Equity	Government Bonds	Corporate Bonds	LDI	Total
Market Value (£)	£ 592.5	£26.1	£55.9	£60.6	£51.5	£1,930.2	£2,716.9
% of total section assets	21.8%	1.0%	2.1%	2.2%	1.9%	71.0%	100.0%
Total GHG Emissions (MtCO ₂ e)	0.03277	0.00163	0.01721	0.00000	0.63463	0.04013	0.72638
Carbon Footprint (tCO ₂ e/£M)	410.28	69.75	310.91	NA	18,996.91	635.40	2,846.58
Data Quality Reported	0.0%	0.0%	0.0%	NA	9.9%	0.0%	0.2%
Data Quality Estimated	13.5%	89.4%	99.0%	NA	55.0%	3.3%	9.2%
Data Quality ¹	13.5%	89.4%	99.0%	NA	64.8%	3.3%	9.4%
GHG Intensity (t/ \$M GDP nominal)	NA	NA	NA	211.43	NA	0.00	6.58
Binary Target Metric ²	0.0%	4.0%	49.0%	NA	16.0%	1.0%	2.1%

¹ Data quality is based on estimated scope 3 carbon emissions data. % of Market Value where reported and estimated Carbon Emissions and Carbon Footprint data is available. Total excludes coverage from sovereigns; emissions from sovereigns reported via GHG Intensity Metric

² % of Market Value where issuer has SBTi approved target.

Source: MSCI, third party managers Equitix, Schroders, PGIM, Neuberger Berman, T Rowe, Partners Harbourvest, Blackstone, Barings, Insight. Data as of 31 December 2024. LDI data has been estimated based on the latest available statistics on national emissions and national debt, in-line with the DWP's statutory guidance.

BlackRock

2023 Metrics

Portfolio Emissions - Aggregated Data - UKPN

Metric ¹	Total Portfolio - Scope 1 & 2	Total Portfolio - Scope 3
Total GHG emissions (MtCO ₂ e)	0.38050	0.09417
Total GHG Intensity (t/ \$M GDP nominal)	86.83	0.00
Carbon footprint (tCO ₂ e/£M)	164.66	373.02

The weighted average data coverage across the investment portfolio has been estimated* to be **76.5%** for scope 1 and 2 emissions combined. The weighted average data coverage across the portfolio has been estimated to be **8.4%** for scope 3 emissions.

Please note that the data related to GHG Emissions and the Carbon Footprint do not consider the coverage from the Group's exposure to LDI and emissions from sovereigns. This is reported through the GHG Intensity Metric.

The Trustee acknowledges that as coverage improves over coming years (in line with the wider industry), it is likely that the Group's absolute measure of emissions (total GHG emissions) may rise before it falls. This may be as the result of steps taken to improve the ESG characteristics of the investment portfolio.

Source: MSCI, third party managers Equitix, Schroders, PGIM, Payden, Neuberger Berman, JPM, American Century, Insight Data as of 31 December 2023

*We have determined the overall data coverage of the total portfolio as the weighted average of the data coverage across asset classes. For asset classes where the data is not yet available and / or best practice is still being developed, we have assumed that data coverage is nil.

For scope 3 emissions, the emissions data is based on estimated data only.

BlackRock

UKPN-Emissions by Asset Class: Scope 1 and 2

	Alternatives	Cash	Global Equity	Government Bonds	Corporate Bonds	LDI	Total
Market Value (£)	£626.6	£43.4	£161.8	£61.6	£74.9	£2,053.2	£3,021.6
% of total section assets	20.7%	1.4%	5.4%	2.0%	2.5%	68.0%	100.0%
Total GHG Emissions (MtCO ₂ e)	0.00020	0.00003	0.00676	0.00000	0.00679	0.36671	0.38050
Carbon Footprint (tCO ₂ e/£M)	11.44	0.90	42.21	NA	160.13	178.60	164.66
Data Quality Reported	0.0%	78.4%	91.3%	NA	44.8%	100.0%	75.1%
Data Quality Estimated	2.8%	7.4%	7.8%	NA	11.9%	0.0%	1.4%
Data Quality ¹	2.8%	85.7%	99.1%	NA	56.7%	100.0%	76.5%
GHG Intensity (t/ \$M GDP nominal)	NA	NA	NA	245.22	NA	112.30	86.83
Binary Target Metric ²	0.2%	7.2%	96.8%	NA	0.0%	NA	5.3%

¹ % of Market Value where reported and estimated Carbon Emissions and Carbon Footprint data is available. Total excludes coverage from sovereigns ; emissions from sovereigns reported via GHG Intensity Metric.

² % of Market Value where issuer has SBTi approved target.

Source: MSCI, third party managers Equitix, Schroders, PGIM, Payden, Neuberger Berman, JPM, American Century, Insight. Data as of 31 December 2023.
LDI data has been estimated based on the latest available statistics on national emissions and national debt, in-line with the DWP's statutory guidance.

BlackRock

UKPN- Emissions by Asset Class: Scope 3

	Alternatives	Cash	Global Equity	Government Bonds	Corporate Bonds	LDI	Total
Market Value (£)	£626.7	£43.4	£161.8	£61.6	£74.9	£2,053.2	£3,021.6
% of total section assets	20.7%	1.4%	5.4%	2.0%	2.5%	68.0%	100.0%
Total GHG Emissions (MtCO ₂ e)	0.00095	0.00362	0.05537	0.00000	0.03423	0.00000	0.09417
Carbon Footprint (tCO ₂ e/£M)	53.70	96.06	345.90	NA	926.04	0.00	373.02
Data Quality Reported	0.0%	0.0%	42.2%	NA	10.4%	0.0%	2.5%
Data Quality Estimated	2.8%	86.7%	56.7%	NA	39.0%	0.0%	5.8%
Data Quality ¹	2.8%	86.7%	98.9%	NA	49.4%	0.0%	8.4%
GHG Intensity (t/ \$M GDP nominal)	NA	NA	NA	0.000	NA	0.000	0.000
Binary Target Metric ²	0.2%	7.2%	96.8%	NA	0.0%	NA	5.3%

¹ Data quality is based on estimated scope 3 carbon emissions data. % of Market Value where reported and estimated Carbon Emissions and Carbon Footprint data is available. Total excludes coverage from sovereigns; emissions from sovereigns reported via GHG Intensity Metric

² % of Market Value where issuer has SBTi approved target.

Source: MSCI, third party managers Equitix, Schroders, PGIM, Payden, American Century, JPM, Insight. Data as of 31 December 2023.
LDI data has been estimated based on the latest available statistics on national emissions and national debt, in-line with the DWP's statutory guidance.

BlackRock

2022 Metrics

Portfolio Emissions - Aggregated Data - UKPN

Metric ¹	Total Portfolio – Scope 1 & 2	Total Portfolio – Scope 3
Total GHG emissions (MtCO ₂ e)	0.0120	0.10024
Total GHG Intensity (t/ \$M GDP nominal)	103.21	0.00
Carbon footprint (tCO ₂ e/£M)	41.78	380.64

The weighted average data coverage across the investment portfolio has been estimated* to be **9.5%** for scope 1 and 2 emissions combined. The weighted average data coverage across the portfolio has been estimated to be **8.7%** for scope 3 emissions.

Please note that the data related to GHG Emissions and the Carbon Footprint do not consider the coverage from the Group's exposure to LDI and emissions from sovereigns. This is reported through the GHG Intensity Metric.

The Trustee acknowledges that as coverage improves over coming years (in line with the wider industry), it is likely that the Group's absolute measure of emissions (total GHG emissions) may rise before it falls. This may be as the result of steps taken to improve the ESG characteristics of the investment portfolio.

Source: MSCI, third party managers Equitix, Schroders, PGIM, Payden, Neuberger Berman, JPM, American Century, Insight Data as of 31 December 2022

*We have determined the overall data coverage of the total portfolio as the weighted average of the data coverage across asset classes. For asset classes where the data is not yet available and / or best practice is still being developed, we have assumed that data coverage is nil.

For scope 3 emissions, the emissions data is based on estimated data only.

BlackRock

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UKPN-Emissions by Asset Class: Scope 1 and 2

	Alternatives	Cash	Global Equity	Government Bonds	Corporate Bonds	LDI	Total
Market Value (£)	£606.9m	£28.3m	£209.9m	£128.7m	£65.5m	£1,995.2m	£3,034.5m
% of total section assets	20.0%	0.9%	7.0%	4.2%	2.2%	65.7%	100.0%
Total GHG Emissions (MtCO ₂ e)	0.00010	0.00002	0.00877	0.00000	0.00311	0.00000	0.01200
Carbon Footprint (tCO ₂ e/£M)	5.22	0.66	42.51	NA	82.75	NA	41.78
Data Quality Reported	3.3%	79.2%	66.5%	NA	48.2%	NA	7.1%
Data Quality Estimated	0.0%	3.4%	14.9%	NA	9.1%	NA	1.3%
Data Quality ¹	3.3%	82.7%	97.5%	NA	57.3%	NA	9.5%
GHG Intensity (t/ \$M GDP nominal)	NA	NA	NA	505.38	NA	124.80	103.21
Binary Target Metric ²	0.0%	99.4%	30.8%	NA	15.2%	NA	3.4%

¹ % of Market Value where reported and estimated Carbon Emissions and Carbon Footprint data is available. Total excludes coverage from sovereigns and LDI; emissions from sovereigns reported via GHG Intensity Metric.

² % of Market Value where issuer has SBTi approved target.

Source: MSCI, third party managers Equitix, Schroders, PGIM, Payden, Neuberger Berman, JPM, American Century, Insight Data as of 31 December 2022.

LDI data has been estimated based on the latest available statistics on national emissions and national debt, in-line with the DWP's statutory guidance.

BlackRock

UKPN- Emissions by Asset Class: Scope 3

	Alternatives	Cash	Global Equity	Government Bonds	Corporate Bonds	LDI	Total
Market Value (£)	£606.9m	£28.3m	£209.9m	£105m	£89.1m	£1,995.2m	£3,034.5m
% of total section assets	20.0%	0.9%	7.0%	3.4%	2.9%	65.7%	100.0%
Total GHG Emissions (MtCO ₂ e)	0.00000	0.00172	0.07663	0.00000	0.02189	0.00000	0.10024
Carbon Footprint (tCO ₂ e/£M)	0.00	84.11	387.36	NA	486.13	NA	380.64
Data Quality Reported	0.0%	0.0%	0.0%	NA	0.0%	NA	0.0%
Data Quality Estimated	0.0%	72.5%	93.5%	NA	50.5%	NA	8.7%
Data Quality ¹	0.0%	72.5%	93.5%	NA	50.5%	NA	8.7%
GHG Intensity (t/ \$M GDP nominal)	NA	NA	NA	0.00	NA	0.00	0.00
Binary Target Metric ²	0.0%	0.0%	0.0%	NA	0.0%	NA	0.0%

¹ Data quality is based on estimated scope 3 carbon emissions data. % of Market Value where reported and estimated Carbon Emissions and Carbon Footprint data is available. Total excludes coverage from sovereigns and LDI; emissions from sovereigns reported via GHG Intensity Metric

² % of Market Value where issuer has SBTi approved target.

Source: MSCI, third party managers, Schroders, PGIM, American Century. Data as of 31 December 2022.

LDI data has been estimated based on the latest available statistics on national emissions and national debt, in-line with the DWP's statutory guidance.

APPENDIX B: CLIMATE SCENARIO ANALYSIS FOR THE UKPN GROUP (MARCH 2025)

Scenarios and scenario output

In the analysis that follows, Aladdin Climate has leveraged industry-standard NGFS scenarios to assess the potential impact of both Transition and Physical Risk, which is expressed in the analysis as physical climate adjusted value (also described as physical risk) and transition climate adjusted value (also described as transition risk), respectively. The scenarios themselves are taken directly from NGFS and are not a reflection of BlackRock's views.

Physical and Transition Risk are modelled separately as they require different model drivers. For the next 20 years, the increase of Physical Risk is unaffected by the transition pathway.

Available NGFS scenarios	NGFS Net Zero 2050 ¹	NGFS Delayed Transition ¹	NGFS Current Policies ¹
Temperature rise by ~2100	~1.5 degrees	~1.8 degrees	~3.3 degrees

Results are expressed as "climate-adjusted values" for Transition and Physical Risks ("TCAV" and "PCAV", respectively). These are based on discounted cash flow analysis in each scenario relative to a "counterfactual" scenario that is assumed to be priced into current valuations. BlackRock's analysis considers a single timespan over the lifetime of the scenario modelled.

The "counterfactual" (NGFS Current Policies) assumes no additional warming for Physical Risk scenarios, and no additional policies enacted for Transition Risk scenarios. The outputs are therefore conservative by design (i.e. they produce more severe outcomes) which is consistent with stress testing market practice. Essentially "de minimis" pricing of climate change is assumed.

Due to different methods the Physical and Transition Risk adjusted values cannot be added to provide a total climate risk adjusted value.

Aladdin Climate scenarios and models have limitations – they may not capture compounding effects of climate change or the scale of monetary and fiscal policy response. The models' assumptions about changes in financial valuations may therefore be incorrect.

The climate models used do not predict abrupt or irreversible changes that may result from reaching critical climate thresholds or tipping points*. They may also not adequately reflect feedback loops, and therefore underestimate systemic economic impact.

Given evolving nature of climate analytics, we expect input data and models to change over time, with potentially significant impacts on results.

¹ NGFS (Network for Greening the Financial System) published Phase 3 scenarios overview can be found here https://www.ngfs.net/sites/default/files/medias/documents/ngfs_climate_scenarios_for_central_banks_and_supervisors.pdf and technical documentation here https://www.ngfs.net/sites/default/files/medias/2022/11/21/technical_documentation_ngfs_scenarios_phase_3.pdf. NGFS has since released an updated scenario suite (Phase IV) that is on our near-term roadmap to be brought into the Aladdin Climate offering. Source: BlackRock, March 2024

BlackRock

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Physical and transition risk | Assets

			Physical Climate Adj. Value %		Transition Climate Adj. Value %	
	Current Allocation %	Current Allocation £m	Net Zero 2050	Delayed Transition	Net Zero 2050	Delayed Transition
Growth Strategy						
Equities	55.8	2.1				
BlackRock ACS World ESG Equity Tracker	27.5	1.0	-3.4%	-3.7%	-4.2%	-4.2%
BlackRock Factor Strategy	15.6	0.6	-3.4%	-3.7%	-4.0%	-3.8%
iShares Edge MSCI USA Value Factor	1.9	0.1	-4.2%	-4.5%	-11.4%	-6.4%
Schroders International Selection Emerging Markets	10.8	0.4	Out of Scope			
Bonds	112.2	4.1				
Aquila Life Overseas Bond Index	60.6	2.2	-0.1%	-0.1%	-0.2%	-0.1%
Neuberger Berman Emerging Market Debt - Local Currency	6.2	0.2	Out of Scope			
PGIM Global Corporate Bond	30.4	1.1	-0.2%	-0.2%	-1.2%	-0.7%
T.Rowe Global High Yield Bond	15.0	0.6	Out of Scope			
Alternatives	592.6	21.8				
Equitix VI - Infrastructure Equity	82.1	3.0	Out of Scope			
BlackRock Reditus Fund	192.8	7.1	Out of Scope			
Barings European Private Loan Fund	150.3	5.5	Out of Scope			
Blackstone Breds IV	60.3	2.2	Out of Scope			
Harbourvest	74.7	2.7	Out of Scope			
Partners Fund	32.4	1.2	Out of Scope			
Cash	26.1	1.0				
Cash	26.1	1.0	0.0%	0.0%	0.0%	0.0%
Matching Strategy						
Insight LDI	1,841.2	67.7	-0.2%	-0.2%	-0.2%	0.6%
AXA Short duration credit	89.0	3.3	-0.0%	-0.0%	-0.2%	-0.1%
Total Fund	100.0%	2,716.9				

The potential impact of transition and physical risk on the LDI portfolio, B&M credit portfolio and pension scheme liabilities has been modelled separately in Aladdin through calibration of user specified stress tests on interest rates and inflation only and are intended to be consistent with the climate scenarios shown.

Estimates are based on assumptions and are subject to change. Due to differences in the scenario counterfactuals and valuation methodologies, Physical and Transition Risk should not be added to show a total climate risk. Individual securities not covered by Aladdin Climate are assumed to be impacted in line with the relevant portfolio average. Figures subject to rounding. Source: BlackRock as at 31 December 2024.

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Physical and transition risk: Impact on total assets, liabilities and funding

	31 December 2024 £m	Physical Climate Impact		Transition Climate Impact	
		Net Zero 2050	Delayed Transition	Net Zero 2050	Delayed Transition
Assets	£2,716.9	£2,711.2	£2,711.0	£2,709.9	£2,724.6
Liabilities	£2,682.2	£2,678.7	£2,678.7	£2,678.4	£2,691.6
Surplus	£34.7	£32.5	£32.3	£31.5	£33.0
Funding ratio (%)	101.3%	101.2%	101.2%	101.2%	101.2%
Change in surplus	-	£2.3	£2.4	£3.2	£1.7
Change in funding ratio (%)	-	-0.1%	-0.1%	-0.1%	-0.1%

The potential impact of transition and physical risk on the LDI portfolio, B&M credit portfolio and pension scheme liabilities has been modelled separately in Aladdin through calibration of user specified stress tests on interest rates and inflation only and are intended to be consistent with the climate scenarios shown.

Estimates are based on assumptions and are subject to change. Due to differences in the scenario counterfactuals and valuation methodologies, Physical and Transition Risk should not be added to show a total climate risk. Individual securities not covered by Aladdin Climate are assumed to be impacted in line with the relevant portfolio average. Figures subject to rounding. Source: BlackRock as at 31 December 2024.

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Physical and transition risk: Data coverage by portfolio

There are a number of portfolios for which we do not have adequate data (defined as less than 50% coverage) on the underlying holdings to provide quantitative scenario analysis. These have been excluded from the analysis. These include:

Schroders Emerging Market Equity
Neuberger Berman EMD
T Rowe Global High Yield
Equitix Infrastructure Equity
Barings European Private Loan Fund
BlackRock Reditus Fund
Blackstone Breds IV
Harbourvest
Partners Fund

Where BlackRock has conducted analysis on portfolios managed by other investment managers, we are reliant on the accuracy of the holdings data and/or any other information provided by those managers. The portfolios that have been included in the analysis based on sufficient coverage, are listed below.

	Coverage
BlackRock ACS World ESG Equity	>90%
BlackRock Factor Strategy	>90%
BlackRock Global Treasuries	>90%
PGIM Global Credit	>90%
Insight LDI	>90%
AXA Short Duration Credit	>90%

Source: BlackRock as at May 2025, based on holdings as at 31 December 2024. Note that coverage is estimated based on the incorporation of derivative mark-to-market exposure as at 31 December 2024.

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UK sovereign bonds*

Orderly transition - transition risk

Rationale	Catalysts	Calibration
<ul style="list-style-type: none"> A transition to Global Net Zero by 2050 is achieved via immediate and smooth policy responses Carbon taxes are channelled back to the economy via government investment 	<ul style="list-style-type: none"> UK sees up to 2% p.a. GDP gains peaking in 2027 (50% of carbon tax assumed to be reinvested into the economy) UK inflation around 1.9% higher peaking in 2026, largely driven by repricing of carbon prices Price of carbon rises to over 800 \$/ton by 2050. 	<ul style="list-style-type: none"> The UK yield curve rises modestly as growth accelerates. Higher inflation however drives most of the impact on UK LDI assets and pension liabilities There is assumed to be no significant central bank response to higher inflation.

Orderly transition - physical risk

Rationale	Catalysts	Calibration
<ul style="list-style-type: none"> Robust corrective action is taken to reduce emissions is taken but temperatures still rise by 1.5°C by c 2100 relative to pre-industrial levels 	<ul style="list-style-type: none"> Physical changes such as higher temperatures, sea-level rises and hurricanes impact GDP. The impacts are largely felt from 2050 onwards 	<ul style="list-style-type: none"> The UK yield curve increases modestly in the near term, but more for longer tenors as physical risks become for evident.

Disorderly transition - transition risk

Rationale	Catalysts	Calibration
<ul style="list-style-type: none"> A delayed transition starts in 2030 Carbon taxes are used to cut income tax, thus boosting private consumption There is a negative shock to business confidence as stringent policies are introduced 	<ul style="list-style-type: none"> There is a negative impact on UK GDP particularly in the early to mid 2030s UK inflation around 1% higher than in a base case peaking in 2032 largely driven by repricing of carbon prices Price of carbon rises from 0 in 2030 to over 1000 \$/ton by 2050 	<ul style="list-style-type: none"> The middle of the UK yield curve rises modestly as the risk premia (probability of default) applied to the UK increases. Higher inflation is priced in from 2030 onwards There is assumed to be no significant central bank response to higher inflation.

Disorderly transition - physical risk

Rationale	Catalysts	Calibration
<ul style="list-style-type: none"> Some corrective action to reduce emissions is taken but temperatures still rise by 1.8°C by c 2100 relative to pre-industrial levels 	<ul style="list-style-type: none"> Physical changes such as higher temperatures, sea-level rises and hurricanes impact GDP. The impacts are largely felt from 2050 onwards 	<ul style="list-style-type: none"> The UK yield curve increases modestly in the near term, but more for longer tenors as physical risks become for evident.

*The potential impact of transition and physical risk on the LDI portfolio, B&M Credit portfolio and pension scheme liabilities has been modelled separately in Aladdin through calibration of user specified stress tests on interest rates and inflation only and are intended to be consistent with the climate scenarios shown.
Source: BlackRock, May 2025.

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Scenarios | Physical risk

Understanding Physical Risk

Physical climate risk can manifest in both acute and chronic ways. Acute risks are event-driven, such as increasing extreme weather, increased wildfires, widespread inland flooding. Chronic risks are longer-term and generally less obvious, covering impacts including more volatile and higher average temperatures, and rising sea levels. Physical climate risk, among other risks, has impacts on both short- and long- term investing, with both direct (e.g., damage to property or consumer locations) and indirect (e.g., supply chain disruption) impacts. BlackRock has partnered with climate scientists and research groups to better quantify the financial implications of Physical Risk, combining local climate and econometric data with our financial models to understand the effects of a changing climate.

Physical Climate Scenario Analysis

By combining scenario projections from peer reviewed climate science with econometric models, we can better understand the financial implications of varying carbon emissions pathways on portfolios. Aladdin Climate models the following NGFS scenarios¹:

Current Policies – a “hot house world” scenario developed by NGFS. Current Policies assumes that only currently implemented policies are preserved, leading to high Physical Risk. Emissions grow until 2080 leading to about 3 °C of warming, resulting in irreversible changes like higher sea level rise.

Net Zero by 2050 – an orderly scenario developed by NGFS. Global warming is limited to c. 1.5°C through stringent climate policies and innovation, with CO₂ emissions reaching “net zero” in c. 2050

Delayed Transition – a disorderly scenario developed by NGFS. It assumes that no action is taken in the near term, and that strong policies are then needed from 2030 onwards to limit warming to below 2°C

Source: BlackRock, December 2022.

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Scenarios | Transition risk

Understanding Transition Risk

Transition Risk identifies the risks and opportunities that arise from exposure to society's transition to a lower-carbon economy. The transition is already re-wiring the economy across sectors impacting investments through policy, technology, and behavioural change. However, the speed and shape of the transition is uncertain and uneven. Investors will need to identify and manage risks and opportunities resulting from the transition across their portfolios, with an awareness for differentiations across market channels, sectors, and regions. Aladdin Climate quantifies this impact of transitioning to a lower-carbon economy at the asset level, allowing for meaningful risk identification and portfolio analysis. These analytics are a product of collaboration across BlackRock's economic researchers, energy value chain experts, and financial analysts.

Transition Scenario Analysis

Transition scenario analysis is a key analytical technique used to model the potential transition scenarios for our economy, and the varying shapes and speeds of response. Such scenarios evaluate the potential futures of economic activity (e.g., GDP and population) alongside energy and land use patterns, as well as embed complex assumptions regarding the socioeconomic drivers of policy, technology, and consumer preferences. While there is vast uncertainty in what will happen, transition scenario analysis enables an understanding of what could happen, and the potential impacts to securities, issuers, and portfolios. Current scenarios referred to as "Net Zero" help us understand what society needs to do to reach Net Zero emissions by 2050 and limit average annual temperature rise to 1.5°C - 2°C by the end of the century, consistent with the Paris Agreement. Aladdin Climate currently models the following NGFS scenarios:

Current Policies – a "hot house world" scenario developed by NGFS. Current Policies assumes that only currently implemented policies are preserved, leading to high Physical Risk. Emissions grow until 2080 leading to about 3 °C of warming, resulting in irreversible changes like higher sea level rise.

Net Zero by 2050 – an orderly scenario developed by NGFS. Global warming is limited to c. 1.5°C through stringent climate policies and innovation, with CO₂ emissions reaching "net zero" in c. 2050

Delayed Transition – a disorderly scenario developed by NGFS. It assumes that no action is taken in the near term, and that strong policies are then needed from 2030 onwards to limit warming to below 2°C

Aladdin Climate uses the Current Policies scenario as the "counterfactual" scenario, i.e. other scenarios are compared to that counterfactual to derive transition risk impact.

Source: BlackRock, December 2022.

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- I. The BlackRock data, models and methodologies are not fixed and are likely to change over time;
- II. BlackRock does not endorse any conclusions relating to the BlackRock data, models and methodologies as being definitive; and
- III. the BlackRock data, models and methodologies rely on comparatively new analysis and there is limited peer review or comparable data available.