Delivering sustainably

2023 TCFD Report

Lancashire Holdings Limited

2023 TCFD report

Note regarding page references

The pages in this TCFD Report have been extracted from the Lancashire 2023 Annual Report and Accounts. References to page numbers direct the reader to the full report which is available on our website.

Meeting the challenges and opportunities of ESG and climate issues has been a focus within the Lancashire business for many years.

Our underwriting mindset is grounded in a pragmatic understanding of potential perils, their nature, and mitigation factors. The risks of climate change on the insurance industry affect the asset and liability side of the balance sheet. That double exposure drives us to work with our clients to assist them with risk solutions that help them recover from the impact of catastrophic events, including those associated with climate change.

We also act as a partner with our clients during their journey through this phase of global carbon transition.

Lancashire operates in a subscription market that allows us to adjust our insurance solutions and provide policyholders with flexibility as their needs change to address climate-related challenges and planning.

Our approach to reporting

Every year, we build upon our increasing knowledge to move discussions further in identifying the opportunities to work alongside our clients, investors, and other stakeholders to address complex climate change issues. The summary on the following pages details our disclosures, which are consistent with the TCFD's four core elements – governance, strategy, risk management, and metrics and targets – underpinned by 11 recommendations.

About this report

In compliance with the Financial Conduct Authority (FCA) listing rules, these disclosures are consistent with the TCFD recommendations and recommended disclosures.

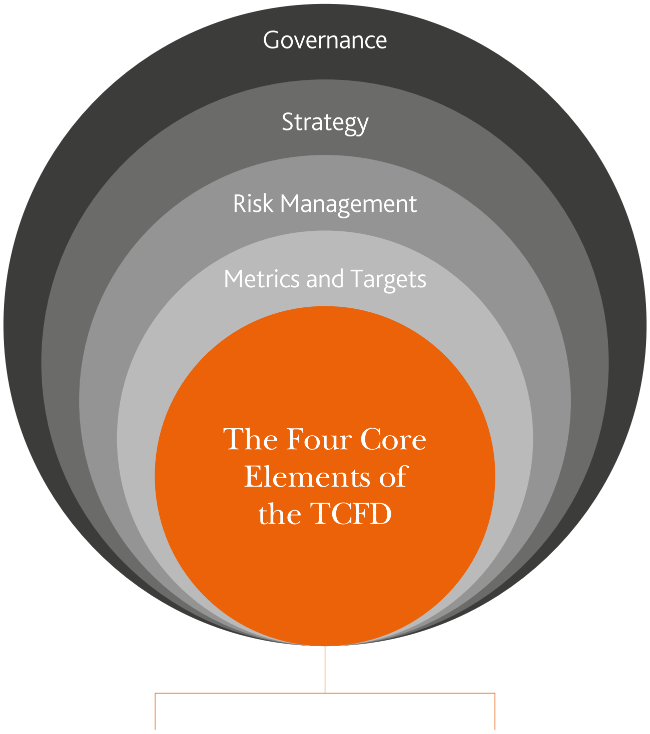
Lancashire is a TCFD supporter and recognises the value of consistent disclosures. Annual reporting against TCFD allows us to understand climate-related business risks and opportunities. Some additional guidance in the October 2021 TCFD Annex requires more time for us to consider fully. We will continue this review throughout 2024.

Our Scope 3 disclosures relate to the measurable emissions referable to our own operations, as more specifically detailed in this report. At this time, there is no commonly-adopted methodology, nor the available data for accurate and comparable measurement and apportionment of Scope 3 emissions referable to the economic activity associated with the Group's investment portfolio or its (re)insureds; further details on our approach can be found in the Strategy section of this report.

This report complements Lancashire's ClimateWise Report dated August 2023, our Principles for Sustainable Insurance disclosures and our CDP submission.

Lancashire's TCFD roadmap

In 2023, the Board assessed the prominent risks facing the Group, including those that could threaten our business model, future performance, solvency, or liquidity. This review stressed the 2023 business plan for several severe but plausible scenarios, including climate change and the impact on capital evaluated. Since then, we have completed annual disclosures relating to GHG emissions, focusing on continuous improvement over time. Looking at our progress to date, we can identify areas to focus on and prioritise combining short- and long-term actions and commitments that support meeting the UK government's net-zero target by 2050.



Governance

The organisation's governance around climate-related risks and opportunities

Strategy

The actual and potential impacts of climate-related risks and opportunities on the organisation's business, strategy and financial planning

Risk Management

The processes used by the organisation to identify, assess, and manage climate-related risks

Metrics and Targets

The metrics and targets to assess and manage relevant climate-related risks and opportunities

Core areas of TCFD disclosure

Governance

Disclosure elements	2023 Practice
Board's oversight of climate-related matters See page 51	• Continued to evolve Board oversight and monitoring of climate-related risks and opportunities, actioned through Board committees with climate-specific related duties. • Oversaw the strategic planning process and approved the annual update of the strategic plan, including building on climate change risks and opportunities.
Management's role in assessing and managing climate-related matters See page 51	• Continued to focus on the actual and potential impacts of climate-related risks and opportunities through our underwriting, risk and exposure management with wider oversight by the ESG Committee across the business. • Carried out climate-related risk and opportunities analysis, governed by the RRC, facilitated by our Group CRO and delivered through strategic business units and functional groups.

Strategy

Disclosure elements	2023 Practice
Climate-related risks and opportunities identified over the short, medium and long term See page 54	• Identified climate-related risks and opportunities using an internal view of risks and the impact of physical and transitional risks.
Impact of climate-related risks and opportunities See page 57	• Continued to explore opportunities and manage risks and the impact they have on all aspects of our business and strategy. • Linked underwriting guidelines to our formal risk appetite and focused on assisting the broader set of efforts to mitigate climate change's impact on the economy and society.
Resilience to climate-related risks using scenarios analysis See page 59	• Conducted stress and scenario testing as part of our business planning process to get insight into the impact natural catastrophe events could have on our business. • Supplemented the underwriting approach with several sophisticated models that model exposures and predict losses for hurricanes and other weather occurrences. • We manage our capital by reference to sophisticated modeling using actuarial inputs relating the Group's exposure to major catastrophic events, including climate-driven catastrophes.

Risk Management

Disclosure elements	2023 Practice
Processes for identifying, assessing and managing climate-related risks See page 60	• Continued dialogue with risk owners and subject matter experts across the Group including annual underwriting strategy days to review current and anticipated climate risks. • Continued to monitor PMLs of top elemental perils and continued to manage climate risk as a part of underwriting and investment risk considerations and as a driver of our capital requirements. • Continued to monitor ESG-related premiums to identify transition risk with these premiums reviewed by the Board every quarter.
Integration into risk management framework See page 61	• Embedded climate-related risk into our ERM framework, by using qualitative and quantitative risk analysis, and our risk appetite statements. • Integrated climate risk tolerances in Group and individual entity risk appetite statements, which are assessed at least annually. • Continued to enhance the process for identifying climate-related risks and opportunities with tools and frameworks used across the Group.

Metrics and Targets

Disclosure elements	2023 Practice
Metrics used to assess climate-related risks and opportunities See page 62	• Reported on PMLs and the outputs of how risk is monitored against various perils in different global regions. • Continued to test assumptions with external models challenging the macro and specific account levels.
Scope 1, 2, 3 GHG emissions See page 63	• Reported Scope 1, 2 and 3 operational GHG emissions, relating to our own emissions, and progress towards our path to the UK carbon net-zero in 2050. • Disclosed operational emissions per full-time employee (FTE) against our target of a further reduction in emissions per FTE of 15% by 2030.
Targets used to manage climate-related risks and opportunities See page 64	• Monitored our net-zero target for 2050 for our own operations' emissions and continually sought innovative ways to make improvements. • Established corporate policies in place and a commitment to offset our emissions for our own operations.

Governance

Board's oversight of climate-related matters

Our governance structure for managing the Group's climate-related risks and opportunities is the same as for any other key risks and opportunities identified on our risk register. Below is an overview of the organisational structure and how climate-related risks and opportunities are embedded in our governance structure.

Board Oversight

Board and Board Committees

Board of Directors and its Committees

Oversees and approves our climate strategy and how we manage climate risks and opportunities.

Nomination, Corp Governance & Sustainability Committee	Investment Committee	Underwriting & Underwriting Risk Committee	Remuneration Committee	Audit Committee
Oversees issues of sustainability, including developments in climate change risk management and reporting. Committee makes recommendations to the Board regarding the ESG responsibilities of the Company.	Oversees the investment risks, including sustainability risks, by monitoring the portfolio's climate change risk sensitivity, performance against a climate Value at Risk (VaR) appetite statement and the carbon intensity of certain investment assets as part of the regular quarterly reporting process.	Oversees the impacts as an influence on insured perils of climate change and transition risk, as well as the broader ESG risks, and articulates appropriate appetites and tolerances for the Group.	Oversees the Group's remuneration packages, including the Group's remuneration structure, ensuring they are in line with the Group's business and ESG strategy.	Oversees our financial reporting, internal and external audit oversight, internal controls and risk management systems. Oversees the disclosures of the Group's ESG strategy, carbon accounting footprint and offsetting, and the Group's TCFD report.

Management Oversight

Executive Committee

Chief Executive Officer

Oversees and responsible for providing strategic direction and implementation regarding climate-related goals, risks, and disclosures.

Group Chief Financial Officer	Group Chief Risk Officer	Group Chief Operating Officer	Group Chief Human Resources Officer	Group General Counsel and Chief Executive Officer Lancashire Insurance Company (UK) Limited	Chief Executive Officer Lancashire Insurance Company Limited and Reinsurance Manager	Chief Executive Officer, Lancashire Syndicates Limited	Group Chief Underwriting Officer and LCM CEO

Management Committees and Forums

- ESG Committee
- Disclosure Committee
- Investment Risk and Return Committee (IRRC)
- Risk and Return Committee (RRC)
- Reinsurance Security Committee (RSC)
- View of Risk Committee

Board oversight

The LHL Board is responsible for the oversight of climate-related risks and opportunities. It oversees the Group's ERM activities and receives regular updates on material risks, including ESG-related risks and opportunities. This is done through the Nomination, Corporate Governance and Sustainability Committee, the Underwriting and Underwriting Risk Committee, and the Investment Committee. The Board's five reporting committees provide oversight and challenge management on progress against goals and targets.

The **Nomination, Corporate Governance and Sustainability Committee** monitors issues of sustainability, including developments in climate change risk management and reporting.

The **Underwriting and Underwriting Risk Committee** monitors the Group's underwriting exposure to catastrophic risks including those influenced by the impacts of climate change on the transition and physical risks, as well as strategic planning of ESG risks, and articulates appropriate risk appetites and risk tolerances for the Group. The Committee also monitors exposures versus the Board-approved risk tolerances on a quarterly basis.

The **Investment Committee** monitors climate change risk sensitivity, the ESG, and the carbon intensity profile of the Group's investment portfolio and investment risk parameters, which include specific Board-approved climate-related investment guidelines applied across the Group's fixed maturity portfolio.

Director development

In 2024, our Group CRO will deliver a session on climate risk for Board members. The objective is to share current and emerging risk practices, regulatory developments, and evolving climate-related ESG issues. This will build on the existing quarterly ORSA updates that the Group CRO prepares, which informs on climate-related risk and capital implications. ORSA updates report on the Group's risk exposures and compare them against risk tolerances, including natural catastrophe perils. Were material breaches to occur, they would be presented and mitigation strategies would be recommended. Emerging risks, including climate-related financial risks are discussed, including their potential impact on the business plan.

Examples of Board ESG and climate change oversight in 2023

Annual review and approval of the Group's:

- Strategy including ESG factors;
- Risk appetite statements, including climate-related reports for the asset and liability side of our business; and
- Tolerances for elemental PMLs and non-elemental RDSs.

Review and approval of the Group's:

- Insurance underwriting guidelines including ESG considerations;
- Annual ORSA report and quarterly reporting, which contains information on all risk categories highlighting material risk considerations, including climate-related risk where appropriate; and
- Stress test outputs as part of the annual business planning exercise and the annual ORSA reporting process, including climate-related scenarios.

Monitors performance against:

- VaR risk appetite statement as part of the regular quarterly reporting process;
- Preference for the financial impact of the Climate VaR on the Group's actual fixed maturity portfolio;
- Investment portfolio performance referencing the MSCI carbon sensitivity and ESG profile tool;
- Business underwritten within the Group against the strategic plan and the Board-approved risk tolerances, including those linked to climate-related catastrophe loss events; and
- ESG-related premium as a percentage of total premium written.

Management's role in assessing and managing climate-related matters

At the Executive Management level, the Group CEO is accountable for the development and execution of the Group strategy, setting the right tone company-wide, and establishing our ESG priorities, including managing climate-related risks and opportunities and overseeing the process for calculating the Group's GHG emissions for its own operations and for the related purchase of offsetting credits.

The Group CUO is ultimately responsible for the business written by the Group, assisted by the segment and subsidiary CUOs and active underwriters. Climate-related risks and opportunities related to the business written are assessed as part of the underwriting process. Each underwriter has underwriting authority, in which climate-related underwriting guidelines are embedded.

The Group CRO is responsible for the implementation of the risk management framework, which includes facilitating the identification, assessment, evaluation, and management of existing and emerging risks, and for ensuring these risks are considered and are properly included in management and the Board oversight and decision-making process.

Management reporting

The key areas of monitoring the overall governance processes and management reporting processes are:

- Achievement of strategic objectives;
- Business performance;
- Investment performance and liquidity;
- Concentration exposure;
- Reserving adequacy;
- Capital requirements;
- Material risks faced by the business;
- Risk appetite and tolerance;
- Effectiveness of the control environment; and
- Compliance with laws and regulations.

ESG-linked compensation

The Group CEO and CFO's performance-related compensation is based on Company-wide performance and personal performance objectives with a 75%/25% weighting. Their personal objectives include ESG-related objectives. Achieving our ESG targets is a fundamental component of our incentive plan, which the Board approves. By aligning our incentive compensation awards to our ESG performance, we have created a direct link between ESG-related criteria and executive compensation.

Management-level ESG Committee

The ESG Committee, which was established by management in 2021, is tasked with the oversight, co-ordination and internal management of the Group's ESG strategy. The ESG Committee reports to the Nomination, Corporate Governance and Sustainability Committee quarterly and regularly to the Group Executive Committee and is supported by the Diversity, Equity & Inclusion Working Group.

Key developments are reported to the Nomination, Corporate Governance and Sustainability Committee, as well as the Investment and the Underwriting and Underwriting Risk, Audit and Remuneration Committees as appropriate, and ultimately to the Board via the Group CRO's quarterly reporting and periodic reporting from the ESG Committee Chair.

Management-level Risk and Return Committee

The RRC evaluates and monitors the Group's modelled underwriting PMLs and RDSs against the Group's tolerance levels on a monthly and quarterly basis, respectively. Lancashire underwrites predominantly short-tail business, with loss exposures usually crystallising within a policy period of 12 months. As a result, with PML levels updated monthly and shared internally, we ensure we closely track both market pricing and coverage conditions and the Group's modelled climate-related loss exposures; this information, in turn, is communicated quarterly to the Board. Please see page 150 for more information.

Management-level Investment Risk and Return Committee

The IRRC actively monitors the potential impacts of climate change-related transitional risk on assets within the Group's investment portfolio. We work with our external portfolio managers to monitor the carbon and ESG profile of the Group's investment portfolio. The requirement to monitor, develop and implement ESG and TCFD principles is included within its terms of reference.

The Group CRO is a member or attendee of all the committees described above and provides a link between each individual forum and the Group Executive Committee.

Group-wide teams supporting climate initiatives

Our governance structure supports the effective oversight, management, and execution of our climate-change ambitions across our business. Our exposure management team — led by the Group Chief Actuary — works alongside the Group Head of Exposure Management and modelling professionals to ensure that climate-related physical risks are modelled, with the sensitivity of peril parameters (frequency and severity) assessed. The results inform decision-making with regards to our strategy and portfolio.

In our underwriting operations, we manage climate risk by sharing knowledge and guidance on the insurance underwriting guidelines that are part of each underwriter's authority. Adherence to underwriting authority forms part of the annual performance appraisal process. Our internal modelling expertise is supplemented with external vendor models that support complying with the tolerances and preferences created to manage our exposure, including loss events that climate change trends may have shaped.

Strategy

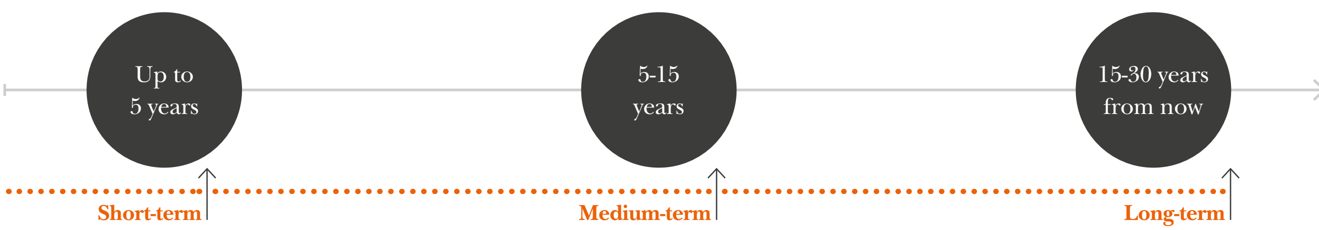
We integrate climate-related opportunities into our business to build on our strengths and capabilities.

The Group analyses its investment portfolio and uses tools to understand the resilience to climate-related scenarios, the carbon intensity of assets and other ESG-related considerations. The Group does not yet have a sufficiently robust set of analytical tools and data to articulate a GHG baseline for the investment portfolio, which might be used in target setting, but intends to work with its portfolio managers to refine the analytical tools and available data in the coming years. Similarly, there is no insurance industry-wide common methodology for calculating and reporting GHG emissions relating to an insured portfolio, and the Group does not yet have the data or a commonly accepted methodology to establish a meaningful baseline or associated target for its underwriting activities. The Group intends to continue engaging with industry bodies and think tanks to develop its strategic thinking in these areas, mainly through our participation in ClimateWise.

Climate-related risks and opportunities identified over the short, medium, and long term

Strategy and planning time frames

When evaluating the actual and potential impacts of climate-related risks and opportunities on our strategy and financial planning, we scrutinise three sets of time frames.



Short-term

We predominantly underwrite short-tail business, so the principal impact of climate-related risks and opportunities is on short-term strategy. Potential impacts are mitigated by our ability to consider new data regarding the frequency and severity of elemental catastrophe events, re-evaluate the portfolio annually, re-price physical risks and reset exposure levels.

Medium-term

Over the last several years, we have seen increased climate-related information provided in the underwriting process. We recognise that climate change impacts the longer-term strategy regarding emerging risks. The Group's casualty risk exposures, which have a medium-term time frame, are not typically heavily influenced by catastrophic climate change-related loss events.

Long-term

Management works with some of the leading external catastrophe model providers to better capture the latest science that underlies and informs developments in the short- and long-term climate-related assumptions in their stochastic models. These developments are included in the Group's management and Board-approved business strategy with a view towards 2030, which is reviewed and updated annually. More information can be found on page 120.

The process by which management identify emerging risks, including those which are climate-related, is described on page 27 of the enterprise risk management section. As part of this process the potential impact of the risks is assessed including magnitude, likelihood and time horizon. Risk mitigation and monitoring plans are then put in place using a risk based approach to prioritise those considered most material and likely to impact the business.

Board oversight of strategy

While our strategic planning is based on the period to 2030, the Board's strategic discussions are informed by consideration of potential global future trends in the medium- to longer-term scenarios. The Board examines the impacts of transitional climate change risk on our business, the Group's underwriting and investment portfolios, and associated strategies.

Decarbonising economy to net-zero

Decarbonising the power sector is expected to be a key driver in transitioning the global economy. Globally, the shift will be to swap to alternative energy sources. Investments and risk coverage will need to run parallel to this new lower carbon economy.

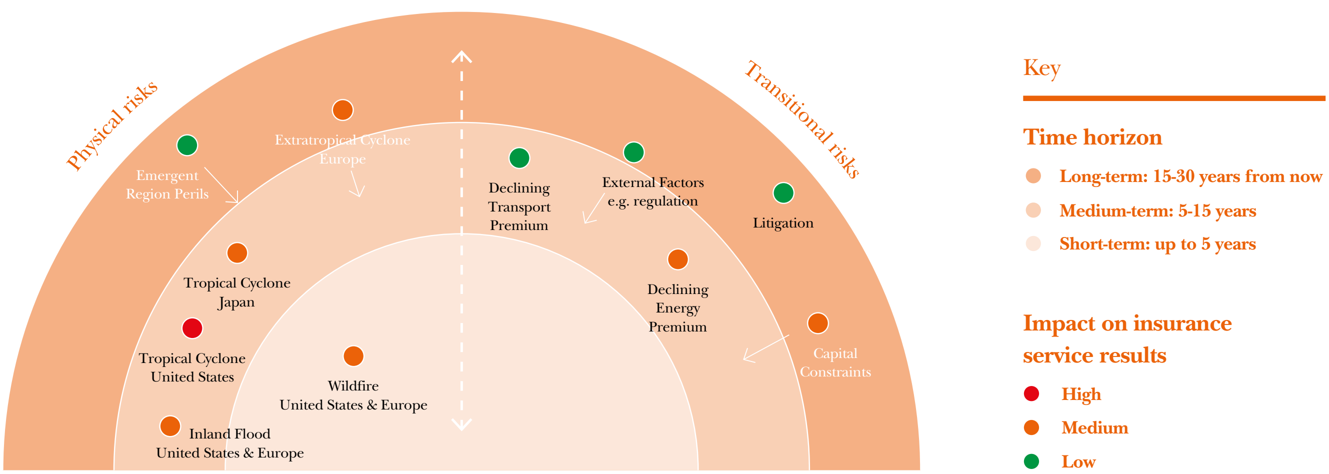
The Group may face the transitional risk of a declining premium environment in the traditional oil and gas sector, and transportation classes over time, and/or the risk of exposure to climate change-related litigation. As the economy transitions from a carbon-based one towards a net-zero future, we have considered the impact of new technology and how it will influence the whole energy sector including renewable energy risks, which we underwrite.

We can mitigate loss of revenues from these declining sectors by working with clients as they transition, and insuring the infrastructure and assets required for the transition.

Internal view of risk

In 2021, we developed a Climate Risk Radar, which was refreshed in 2023. It illustrates Lancashire's current internal view of the physical and transition risks from climate change, including the potential time horizon over which they may be faced, the potential magnitude of financial impact, and the geographical region (for physical risks). It allows us to map the climate dependencies to understand where the disruption might occur and financially impact our business from a physical or transition risk.

Climate change risk radar



The arrows pointing inward indicate shortening time-frames for these risks.

Annual strategy days

The two annual underwriting strategy days for our insurance and reinsurance segments included the assessment of climate-related risks of current and anticipated future risks. This includes but is not limited to transition risk arising from a decline in the value of assets to be insured, changing energy costs, and liability risks that could arise from climate-related litigation. Physical, transition, and liability risks are considered by business segment and geographical location, and the expected impact from the risks identified are tested for magnitude and timescale.

Over the last several years, we have continued to identify and articulate the financial impacts of physical and transitional climate-related risks; examples are:

Physical risks

Extreme Weather

- Flooding
- Drought
- Rising sea levels
- Rising temperatures
- Wind
- Forest fires
- Convective storms

Transitional risks

- Legal and regulatory
- Technology
- Market
- Reputational

Potential effects of climate risk

Physical risk to our own operations is less material. We do not have significant physical assets to be impacted by physical risk, with the main impact of physical risk arising from our underwriting portfolio as losses from elemental catastrophic events. We do, however, have robust business continuity processes in place.

Loss amplification factors, time frame, and magnitude are considered for each extreme weather physical risk identified, as are metrics by which these risks can be monitored and reported.

Transitional risks that the Group may face include the probability of a declining premium environment in the traditional oil and gas sector or transportation classes over time, or the risk of exposure to climate change-related litigation.

The potential impact in terms of premium is thought to range from low to medium for the relevant subsidiary writing the business. However, the financial impact of these risks on the Group ranges from very low to low due to the inherent responsiveness in the Group's underwriting strategy. The impact would be expected to be felt in both business segments, i.e., insurance and reinsurance.

Impact of climate-related risks and opportunities

Climate-related opportunities

As a (re)insurer, the Group accepts and mitigates risk; for every risk identified, there is the potential for an opportunity. Opportunities will arise from the investment in infrastructure required for the world's transition to a lower-carbon economy; this infrastructure will require insurance which lies within the Group's existing classes of business and risk appetite. The demand for new environmental insurance products and services is also expected to increase. We will work closely with existing clients to provide the insurance they need as they transition and access new market offerings in the form of new assets and locations requiring insurance coverage.

A summary of the opportunities, their likelihood, time frame, and magnitude of impact on insurance service result is included in the table below.

Risk Description	Market Opportunity	Time frame	Likelihood	Magnitude
Political risk insurance	Currently, a strong uptick in ESG-related funding from our existing client base and this trend is expected to continue.	S – M	High	Low
Natural catastrophe (re)insurance	Additional limit purchased by insureds and reinsurers at improved pricing levels as catastrophe risk increases with both earnings protection and capital protection being sought.	M	High	High
Renewables	The trend for global renewable electricity generation is fully expected to continue. As our clients transition from fossil fuels to renewable energy, there will be sizeable opportunities in the market to grow this part of our portfolio.	M	High	Medium
Decommissioning insurance: Oil & gas assets	Energy transition will accelerate the decommissioning of many offshore platforms and complexes. As these assets reach the end of their commercial life, there will be increased pressure to ensure that their decommissioning is done in an environmentally friendly way with appropriate risk management solutions.	M	Medium	Low
Carbon capture: injection of CO_2 into depleted gas fields	Offshore carbon capture and storage may play a major role in global efforts to reduce emissions with appropriate risk management solutions.	M – L	Medium	Medium
Environmental insurance products	Environmental insurance provides coverage for loss or damages resulting from unexpected releases of pollutants typically excluded in general property and liability policies.	M – L	Low	Low
Parametric (weather) insurance products for food and agriculture industry	Industries will look at new ways of managing weather risk where parametric triggers are more likely to offer a form of indemnity.	L	Low / Medium	Low

Time frame

Short-term *up to 5 years* (S)

Medium-term *5-15 years* (M)

Long-term *15-30 years from now* (L)

Short- to medium-term (S – M)

Medium- to long-term (M – L)

Likelihood

High

Medium

Low

Magnitude

High

Medium

Low

Managing risk

Lancashire is exposed to the risk of heightened severity and frequency of weather-related losses, which may be influenced by climate change. We manage this risk using stochastic models from third-party vendors with a long history of quality data governance. In addition, we adapt these models based on our views of climate risk and our clients' exposure data to create aggregate loss scenarios.

The modelling data and the capital deployment are closely monitored by executive management. Likewise, the Board monitors this quarterly as part of strategic risk and capital management, with the testing of the models leading to changes in risk levels, reinsurance purchasing and structuring strategy as required.

As part of the financial planning process, the assumptions within the underwriting portfolio are reviewed, including the expected rate adequacy and losses for each class of business. Several factors, including climate change-related factors such as frequency and severity of elemental events and the potential for associated claims inflation, drive our assumptions.

The level and availability of capital, as well as capital utilisation by class of business, are also key considerations in the financial planning process. The business mix is also reviewed, with new products and lines considered where rates prove attractive and accretive.

Underwriting guidelines

Climate-related insurance underwriting guidelines have been embedded within our Underwriting Authority framework since their development in 2021. The guidelines monitor and guide underwriting in the more carbon-intensive industries, restricting insurance policies covering targeted activities in specific global regions. When a risk is unclear, a referral process is in place. We continue to enhance how we track premiums and policies according to their climate profile. We continue to engage with our clients in the more carbon-intensive industries to understand their progress on their net-zero commitments.

Business continuity processes

Lancashire's exposure to physical risk in our operations is modest. As a business with an office in Bermuda, we recognise that this area of the world is vulnerable to catastrophic windstorm events and may be affected by future climate change trends. All Lancashire offices have business continuity processes (BCPs) and disaster recovery plans in place. Specifically, the Bermuda management team and Board consider hurricane and tsunami risks within the Bermuda office's BCP.

Risk partnerships

Outside of physical risk, Lancashire has been a risk partner of businesses operating in the aviation, marine and energy sectors worldwide for many years. The risk solutions we provide help deliver the wider social benefits of safer operations in a properly regulated environment with access to capital resources to repair quickly and remediate damage in the event of accidents or catastrophic failure.

Lancashire has strong relationships with brokers distributing our products via larger international firms and smaller independent intermediaries. We strive to be a trusted partner and add value through our expertise in risk management and risk transfer. We will continue to support our clients in meeting their business needs and in their journey to transition away from carbon-based forms of energy.

Investment portfolio

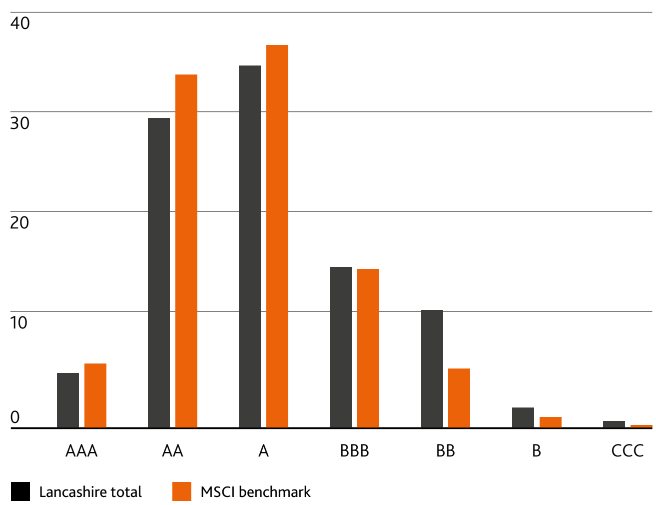
We have tools to identify, measure, and manage the potential impact of ESG and climate-related risks and opportunities on the Group's investment portfolio. This information is reviewed and reported through the IRRC, the RRC, and the Board's Investment Committee.

For the past three years, we have collaborated with our external portfolio managers to monitor the carbon intensity and ESG profile of the Group's investment portfolio. The Group's investment guidelines restrict investments in companies that rely on thermal coal for power generation or derive revenues from oil sands or Arctic oil/gas, as well as investments in fixed maturity securities with high carbon intensity ratings. Compliance with the investment guidelines is monitored every month and any adjustments are approved by the Board and Investment Committee.

Every quarter, we monitor the climate VaR against the MSCI benchmark by analysing the underlying securities measured by MSCI. Management's target preference is for the impact of climate change to be less detrimental on our portfolio than the relevant benchmark at the same level.

Lancashire monitors the ESG profile of its fixed maturity portfolio for those securities covered by the MSCI ESG rating tool. The majority of the portfolio for the year-end of 2023 was designated within the "average" ESG category. Please see the Investment Committee report starting on page 94 for further information.

MSCI overall rating (%)



Percentages for the MSCI Benchmark data are up-scaled to compare with the Lancashire securities that are covered by the MSCI.

External investment managers

As of 31 December 2023, 96.7% of our external investment portfolio was administered by managers who are signatories to the United Nation's Principles for Responsible Investment. After stress testing, our year-end analysis has shown that our investment portfolio, specifically the fixed maturities, is more resilient to the impacts of climate change than the relevant benchmark, which we have linked to a 1.5°C future pathway scenario. In our last strategic asset allocation study, we recommended a target percentage to be invested in a sustainable fund. In 2023, a portion of the funds has been dedicated to an ESG sweep facility product, an investment tool that directs cash into a money market fund account daily. In 2024, we will continue to look at other suitable sustainable funds. We are committed to working with external portfolio managers to refine our analysis further.

Resilience to climate-related risks using scenarios analysis

Stress and scenario tests

Stress and scenario testing and reverse stress tests are performed as part of the annual business planning process and the yearly ORSA reporting process that includes climate-related scenarios. The capital impacts from various scenarios, including climate-related risks and opportunities, are presented to the RRC and Board for review and discussion. We test against the prescribed underwriting loss event scenarios outlined in the Bermuda Solvency Capital Requirements (BSCR) every year. In 2023, stress testing was performed on the Group's business plans to understand the impact should the recent high catastrophe event experience be more indicative of the average experience than that currently predicted by the third-party catastrophe models.

Climate scenario used

The key climate change scenario used in the business plan and ORSA was one where the timeline for the onset of climate change related risk was deemed to accelerate. The scenario included physical risk assumptions with regards to frequency and severity of major hurricanes, and transition risk assumptions resulting in a stressed impact on inwards premiums and outwards premiums. Loss ratios were increased and an inflationary impact added, expenses were increased and investment return decreased. Overall, the scenario reduced key metrics such as Diluted Book Value Per Share, profit and return on average equity by circa 30%, but had sufficient capital to meet regulatory and rating agency requirements. This led management to conclude the Group has resilience to the impacts of climate change risk in its strategy and business model.

New modelling tool

In 2022, we transitioned to a different catastrophe model provider to increase the range of secondary perils we can model. As part of this transition and our annual model review, we have explicitly considered the impact of climate change to ensure our hazard selections within the model are appropriate for our understanding of the current environment and impact with respect to climate change.

In addition, our exposure management team has licensed a new tool to perform climate-related scenario testing looking at the impact of changes in the frequency and severity of hurricanes and the impact of storm surge for specified temperature increases.

All material new models and model changes are validated via the View of Risk Committee.

Historic modelling

Every quarter, we model the Lloyd's catastrophe RDSs for our current portfolio to understand the present-day impact of their re-occurrence. Such events include, but are not limited to, a Japanese typhoon based on the 1959 typhoon Vera, Florida windstorms landing in Miami-Dade County, and Pinellas County, Gulf of Mexico windstorm, Northeast windstorm and Carolinas windstorm.

Wind scenarios 2°C of warming

The Group calculates its outputs for modelled wind exposures which are estimated for a 2°C warming scenario, with frequency and severity assumptions for this scenario drawn from published scientific research reviewing multiple underlying published estimates of hurricane changes. The high-level stress testing looked at the relative impact using current Lancashire exposure values, applying established relationships for windspeed changes in terms of both severity and frequency under the differing response parameters, compared to current assumptions. The change in Lancashire exposure (based on current values) is shown below, which we estimate has a slightly lower impact than that for our estimate of the impact of overall industry exposures, using the same set of climate scenario assumptions and modelling.

Scenarios shown consider only the impact of the physical response of 2°C of global warming upon hurricane activity in terms of estimated wind impacts and do not consider the impact of additional physical parameters such as changes in the level of expected storm surges or rainfall patterns. Frequency and severity estimate of hurricane response under projected global climate change are inherently uncertain, with individual modelling studies generating significant variations in results for different hurricane metrics and regions, as a result of using different underlying resolutions of climate models with different underlying emission scenarios and warming ranges and/or different temperature change baselines.

Reviews of individual studies apply methods and assumptions to standardise results into common climate baselines, with then our own expert interpretation applied to selected ranges for the most appropriate values for our exposure footprint. Limitations of the scenarios are that calculations assume exposure responses, and insurance conditions remain constant as per today's relationships to hurricane frequency and severity parameters. No consideration is given to any specific mitigations (e.g., the construction of additional sea defences) or specific adaptions (e.g., strengthened local building codes, zoning regulations, etc.), or wider changes in policy responses. Scenarios assume no changes in exposure values through inflation or from underwriting decisions.

Wind only – example 1

Metric	Lancashire percentage change in exposure (based on the current portfolio)
Scenarios chosen: 0% change in frequency, 4% increase in severity (for 2°C of global warming)	
Occurrence exceedance probability every 1 in 200 years	10%

Wind only – example 2

Metric	Lancashire percentage change in exposure (based on the current portfolio)
Scenarios chosen: 15% decrease in frequency, 4% increase in severity (for 2°C of global warming)	
Occurrence exceedance probability every 1 in 200 years	8%

Resilience in our strategy

The following key factors lead the Board and management to conclude there is resilience in the Group's strategy and business model to the impacts of climate change risk: i) our book of business is largely short-tail; ii) we are able to model the geographical indications and economic impacts of climate risk on the products we sell; and iii) we price based on flexible and dynamic risk analysis.

Risk Management

Our approach to managing the effects of climate change is through an enterprise risk management (ERM) framework.

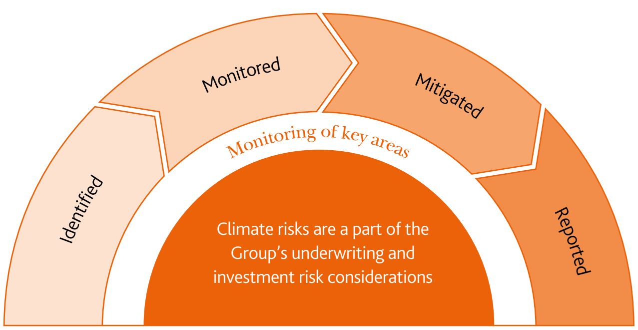
The impact of climate-related risks is managed within an existing ERM framework that functions as an active partner in business decision-making, see risks page 27.

One of Lancashire's key operating principles, which supports the Group's strategy to produce an attractive risk-adjusted total return to shareholders over the long term, is to balance risk and return through the cycle.

Processes for identifying, assessing and managing climate-related risks

Identifying climate risks

Climate-related risks are identified and assessed as part of the usual risk identification and management process, including dialogues with risk owners and subject matter experts across the Group, and discussions at the Group's Emerging Risk Forum and the ESG Committee.



These risks are managed similarly to others: identified, monitored, mitigated, and reported upon against tolerance as appropriate.

The emerging risk process on page 27 explains how emerging risks are assessed for potential impact to the business, and the process for establishing mitigating actions and ongoing monitoring. In addition to these conversations, our insurance underwriting guidelines and our processes and controls allow us to identify any risks written outside predetermined criteria.

Climate-related risks specific to the (re)insurance portfolios are identified and assessed as part of the day-to-day underwriting process by individual underwriters in their analysis of specific risk information and, more broadly, in the context of the wider portfolio during the daily UMCC and the fortnightly RRC meetings.

Some examples of risks identified include the assets to be insured, their physical location, weather-related perils that have impacted that location, historical frequency, severity, and expected short- and long-term changes.

The potential impact of all material risks is assessed through:

- the development and monitoring of early warnings or triggers that allows timely consideration of, and adequate response to, material risks;
- the development and regular use of measurement techniques to determine the relative materiality of identified risks at a Group and entity level;
- the identification of risks that are elevated relative to business preference, to enable the prompting of remedial actions where appropriate;
- the development of processes for regular monitoring and updating of risk assessments in response to changes to the internal and external risk environment; and
- the assessment of the adequacy of the internal control framework in aggregate at a risk, entity or Group level.

Risk management methods include:

- transferring part of the risk elsewhere;
- treating or mitigating the risk;
- accepting or tolerating the level of risk;
- eliminating or terminating the risk; or
- revising risk appetite levels or tolerating the breach for a defined period of time.

Underwriting strategy days

The underwriting strategy days for the insurance and reinsurance segments also provide a good platform for reviewing current and anticipated future climate-related risks. Examples of such risks include transition risks arising from a decline in value of assets to be insured, changing energy costs and liability risks that could arise from climate-related litigation. Physical, transition and liability risks are considered by business segment and geographical location, and the expected impact from the risks identified is considered with respect to both magnitude and timescale.

Engaging with stakeholders

We actively engage with our clients to understand their net-zero transition pathways, evaluate new risk solutions, and provide insurance cover for their business needs, including climate risk-related solutions. We will work with our clients through a period of global energy transition to help manage their operational and catastrophe-exposure risks in a controlled and responsible way.

Monitoring and reporting PMLs

The PMLs related to the top perils are monitored and reported monthly to the RRC and quarterly to the Board. These elemental perils are primarily those that are directly influenced by global warming. We monitor our PMLs as a percentage of tangible capital; the chart on page 63 shows this for our 100-year Gulf of Mexico wind net PML at 31 December.

Integration into risk management framework

The Group subscribes to a 'three lines of defence' governance model with respect to the identification, ownership, monitoring and mitigation of risk. Please see page 26.

The management of climate-related risk falls within this same framework, which is fully embedded throughout the Group and includes discussions on climate change as the core agenda item for the ESG Committee. Read more on page 41 and page 53.

Annual review of risk tolerances

All risk tolerances are subject to at least an annual review and consideration by the individual boards of directors. A yearly assessment of risk tolerances enables designing a contrasting but appropriate risk assessment. The Board is actively involved in identifying and considering a balanced risk and reward trade-off as they establish the Risk Profile, Risk Appetite, and Risk Tolerances to be used. The Board considers the capital requirements of the business on at least a quarterly basis. The Group's exposure to natural catastrophe risks is one of the key drivers of the capital held by the Group to support its underwriting activities.

> Climate change may influence the severity and frequency of events that impact policyholders, and Lancashire's quick response to such post-loss situations can, therefore, be seen as a competitive advantage.

Metrics and Targets

We are committed to measuring, tracking and reporting our operational performance against our path to attaining our carbon net-zero ambition in 2050.

We have engaged with ClimatePartner to calculate our corporate carbon footprint through their five-step climate action strategy.

Metrics used to assess climate-related risks and opportunities.

Our risk appetite for underwriting risks is defined as a percentage of capital we are willing to lose in a specific event, and we set a capital loss tolerance for and track the Company's modelled PMLs to weather-related hurricane perils. Our underwriting strategy is based on several factors, (including but not limited to):

- market conditions;
- available capital;
- market opportunities; and
- pricing adequacy

Impact of climate-related risk on the current portfolio

In the Strategy section starting on page 54, we described the work undertaken in 2023 to identify and articulate the financial impacts of climate-related risks. The table below sets out the possible financial impact of physical risk based on our current portfolio. If exposure was to change materially the financial impact could be more significant. However, the longer term impact to the Group should be managed by our ability to reprice contracts if needed and develop new products.

Further detail is also included in the insurance risk disclosures on pages 149 to 153, where we have noted the geographical area of risks insured and the Group's exposure to certain peak zone elemental losses by geography as a percentage of tangible capital over a 100-year and 250-year return period.

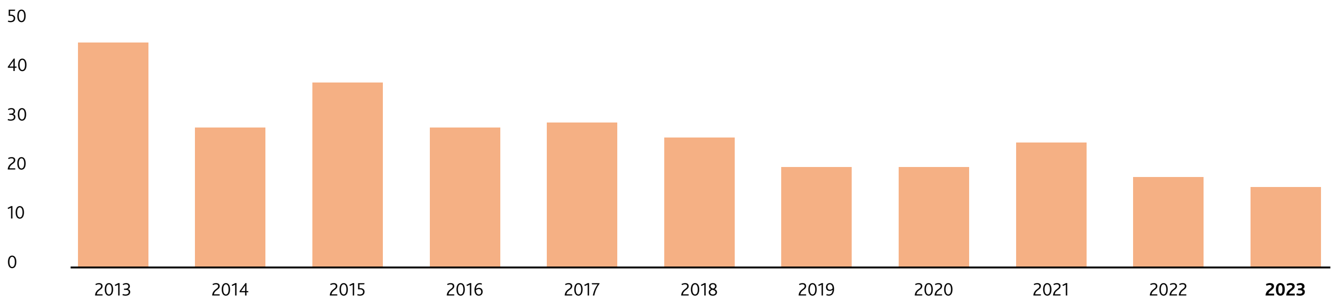
Physical: acute and chronic	Time frame	Magnitude of impact	Potential financial impact Group net PML/ % of capital
Tropical Cyclone			
U.S. Windstorm – Gulf of Mexico	Medium	High	$300.5 million/16.9%
U.S. Windstorm – Non-Gulf of Mexico	Medium	High	$237.9 million/13.4%
Japan Typhoon	Medium	Medium	$134.0 million/7.6%
Extratropical Cyclone			
European Windstorm	Medium – Long	Medium	$161.4 million/9.1%

Mitigation

- Positive feedback loop in pricing models that reflect heightened risks from climate change
- Lancashire adjusts gross risk appetite wherever the risk is viewed as inappropriately priced for the exposure
- Outwards reinsurance is adapted to reflect the changing exposures
- Robust internal controls ensuring PMLs are monitored monthly by the RCC
- Additional secondary perils now modelled
- We continue to develop views on other perils

PML as a percentage of GWP

The chart below illustrates the Gulf of Mexico one in a 100-year event, and how the PML as a percentage of gross written premium has been managed over time.



Our PMLs are derived using stochastic models licensed from third-party vendors. These models include perils such as windstorm, convective storm, wildfire and flood. The View of risk committee assesses the assumptions within the licensed model and, where appropriate, applies loadings to it. Model outputs are regularly challenged at both the macro and specific account levels. The RRC reviews our PMLs and the actual in-force exposure versus tolerance on a monthly basis. The loadings applied to the model are reviewed by the View of Risk Committee periodically to assess their ongoing appropriateness.

Additionally, risk learning can be performed following a large catastrophe event to compare the actual loss versus the modelled loss to assess further the appropriateness of the assumptions and loadings within the model and establish whether further adjustments are required.

Carbon intensity of fixed-income

The IRRC is cognisant of the potential impact transitional risk has on the Group's assets within the investment portfolio. Carbon intensity limits have been added to our fixed-income managers' guidelines. We monitor our fixed-income portfolio's carbon intensity and transition risk. Updates on these metrics, including the investment portfolio's exposure to climate-related risk, for those securities covered, as compared to the MSCI Climate VaR is monitored and reported to the Investment Committee quarterly. The Lancashire Fixed Maturity portfolio has a target preference for the aggregate climate risk measured by Climate VaR by MSCI, at the 1.5°C degrees global warming goal, in line with the Paris Accord, to have a lesser financial impact than the relevant MSCI ESG benchmark.

Most of the investment portfolio at year-end 2023 comprised of fixed maturity securities, making up 83.8%, of which almost half were government-related securities. We had 34.5% allocated to corporate bonds, of which we had a small exposure to climate-related risks. Further insight into the structure of our financial portfolio can be found on page 20.

Scope 1, 2, and 3 GHG emissions

Measuring and offsetting

The Group is committed to managing the environmental impact of its business. We measure our carbon footprint to minimise its negative impact through mitigation strategies and offsetting 100% of our greenhouse gas (GHG) emissions from our own operations to remain carbon neutral.

The ClimatePartner certification program provides insight into the effectiveness of our efforts to make progress on our 2050 net-zero ambition. Our approach to reporting GHG emissions is to be transparent, aiming to continually refine our processes to reflect relevant standards, methodologies, and, where appropriate, best practices.

During 2022, we instructed ClimatePartner to calculate and facilitate offsetting our carbon emissions; a report on the metrics collected can be found on page 68.

CDP submission

The Group CRO and the Board oversee the Company's annual submission to the CDP (previously known as the 'Carbon Disclosure Project') and note that the information which is requested as part of that reporting process is aligned with the recommendations of the TCFD.

Digital capabilities

With global operations in London, Bermuda, Australia, and recently in the U.S., as well as clients and brokers around the world, the Lancashire Group has incurred the bulk of its carbon footprint from business travel. Timely communication and knowledge sharing are critical to our operation for employees to perform their jobs effectively. We have adopted several digital solutions in our offices to reduce inter-office travel and facilitate remote work and virtual collaborations. All our offices have video and telephone conferencing capabilities at all individual workstations and meeting rooms. As travel restrictions started to lift in 2022, in-person conferences and events recommenced, which saw an uptick in travel when it was considered safe for our employees. Following the global pandemic, travel levels during 2023 are back to what we consider normal and necessary for our business to maintain good relationships with our clients and stakeholders.

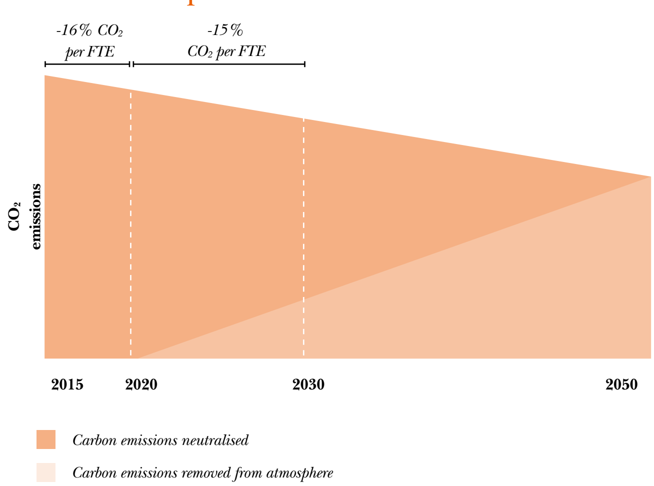
Targets used to manage climate-related risks and opportunities

Net zero in 2050 objective

In 2021, the Group expressed its objective to meeting the UK Government's net-zero target by 2050. Our baseline year, 2015, was selected because it was the first full year in our London office at 20 Fenchurch Street, an energy-efficient building with a BREEAM "Excellent" rating.

The following diagram shows our path to carbon net-zero in 2050, illustrating the planned downward trajectory of our emissions per FTE and the intended increase in offsetting projects that remove carbon from the atmosphere.

Lancashire's path to carbon net-zero in 2050



In terms of the Group's own emissions targets and the Group's business travel emissions, we have travel policies in place to reduce our impact on the environment whilst balancing the needs of our employees and Directors. For instance, our policy is not to ordinarily book a business class airline ticket if the flight is less than five hours long.

Offsetting emissions

The Group commits to continue to offset 100% of Scope 1 and 2 emissions and 100% of the Scope 3 emissions pertaining to our operations, which we are able to accurately calculate and exercise sufficient control over at this time. These include business travel, waste generated in operations, our employees' commuting, and fuel and energy-related activities not included within Scope 1 or Scope 2. As a financial services company, we consider some emissions categories to be either not applicable to our operations or that we have minimal operational control over them. We are working with a specialist third party and alongside others in the industry to understand how to accurately calculate and track emissions within the unreported categories where applicable.

Going forward

The Group will continue to benefit from the 100% renewable electrical energy from our 20 Fenchurch Street London office location, a BREEAM "Excellent" rated building. As the Group continues to search for innovative ways to reduce our own emissions, we will continue to challenge the status quo and propose ideas for consideration outside of those related to business travel. We are always looking at ways to reduce paper usage further, reduce water waste, improve recycling, and eliminate single-use plastics. A list of the full metrics can be found in the GHG disclosure section on pages 69 and 70.

For the Group's investments, we continue to have a target of managing the impacts of our fixed maturity portfolio by reference to a Climate VaR appetite statement, as discussed in the risk management section.

For our underwriting exposure, Lancashire limits its tangible capital at risk by referencing a series of PML loss exposure scenarios, including climate-related loss scenarios. PMLs are regularly monitored and reported to the Board every quarter and reflect real-time changes in the Group's underwriting portfolio. The Group's stated tolerance is to expose not more than 25% of its tangible capital by reference to any one of its principal PMLs. More information on the reported outcomes of this process can be found in the Financial Statements section under Risk disclosures, see page 150; it further shows the details of the Group's principal PMLs, including those related to catastrophic weather loss events linked to climate change risk.