

Task Force on Climate-related Financial Disclosures (TCFD) 2023

Our climate-related responsibilities are something we take very seriously at Beazley. They are central to our vision – to be “the highest performing sustainable specialty insurer”; align with our values – Being bold, Striving for better, and Doing the right thing; and are embodied in the ‘Responsible business’ pillar of our corporate strategy.

This report details the governance, strategy, scenario analysis, risk management, and metrics we have in place to deliver on our responsibilities.

1. Governance

1.1 Board oversight on climate-related risks and opportunities

1.1.1 Plc Board oversight

The plc Board and supporting committees maintain active oversight of climate-related issues, by discussing the topic regularly, factoring it into decisions, and receiving papers, training and awareness. Further, specific detail on our approach to governance is shown below (and a summary of our corporate governance structure is on page 84).

Board/ Committee	Description of how climate-related matters are considered
Plc Board	<p>The plc Board tracks progress on climate-related goals via: papers and reports from the responsible business, investments, risk, and underwriting functions; and a metrics dashboard aligned to our risk appetite statements and risk management framework, produced by the Risk team. The dashboard includes three specific climate-related metrics, and detailed information is provided for any rated amber or red.</p> <p>Climate-related matters are also considered as part of the annual process to approve:</p> <ul style="list-style-type: none"> • the risk appetite statements; • the Group’s corporate business plan, including capital adequacy and the own risk and solvency assessment (ORSA); • updates to the Group’s Responsible Business Strategy; • the Responsible Investment Policy; • the Investment strategy; • annual report and accounts, including the TCFD report
Beazley plc Audit Committee	The Audit Committee is responsible for TCFD reporting and receives regular updates (three in 2023). It is involved in signing off and approving annual TCFD disclosures. The metrics in this report were proposed and approved by the committee in spring 2023.
Beazley plc Risk Committee	The plc Board has delegated oversight of the risk management framework to the Risk Committee. The committee’s responsibilities include overseeing the effectiveness of the risk management framework at Beazley, of which climate-related risk is one element.
Beazley plc Nomination Committee	NomCo considers the current and future leadership needs of the business, and recommends the annual board knowledge and training plan which includes climate-related matters.
Beazley plc Remuneration Committee	RemCo is responsible for ensuring that remuneration frameworks for Directors and senior management, and policies for the Group, incentivise performance while promoting effective risk management. As part of this, climate-related risk is actively considered in executive remuneration and documented in each executive director’s remuneration scorecard. The remuneration policy approved at the 2023 AGM also introduced ESG metrics into executive director LTIP awards. Remuneration is reviewed on an annual basis.

1.1.2 Training and awareness

The Culture and People team maintains skill matrices and annual training plans for the plc board. The training provided is shaped by current and emerging trends, stakeholder expectations, and regulatory demands. In 2023, the Board received detailed training on: different types of climate risk; our climate risk strategy; our Climate Risk Working Group plan; and climate related opportunities.

1.1.3 Subsidiary Board oversight

Beazley has four key subsidiary entities: Beazley Furlonge Ltd (BFL), Beazley Insurance Designated Activity Company (BIDAC), Beazley Insurance Company, Inc. (BICI), and Beazley America Insurance Company, Inc. (BAIC), each with their own Board and supporting Committees. The responsibilities of these Boards mirror those set out at a plc Board level, to ensure it is operating in accordance with both legal and regulatory requirements, as well as relevant Beazley Group policies and procedures. These entities are more insurance-risk-focused when compared to the plc Board, therefore the impact of climate-related risk on underwriting is considered in greater detail. Climate-related matters are also considered during their annual risk framework and ORSA approval process, with further updates provided via the Responsible Business report.

1.2 Summary of management's role on climate-related matters

1.2.1 Key individuals at Beazley for climate-related issues

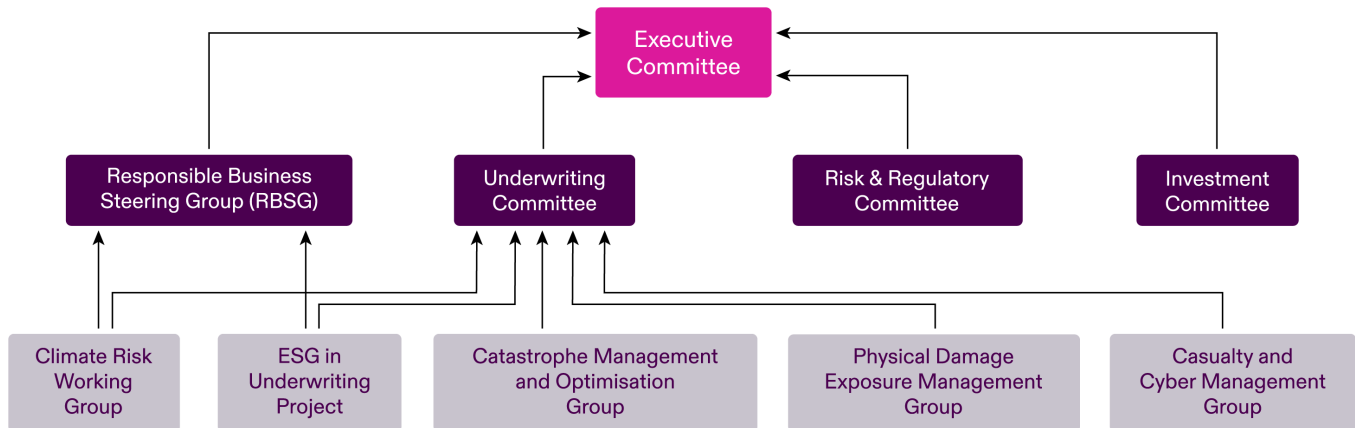
Responsibility for ensuring climate-related issues are appropriately managed by the business is designated across a range of roles:

Responsible individual	How climate-related matters are managed
Chief Executive Officer (CEO)	In addition to being an Executive Director and a member of both the plc Board and Executive Committee, the CEO chairs the Responsible Business Steering Group.
Chief Risk Officer (CRO)	The CRO sits on the Executive Committee, and is ultimately responsible for our risk management framework, of which climate-related risk is a key part. They provide updates on risk matters, including climate-related risk, to the plc Board, Executive Committee, Audit Committee and Risk Committee. They also split the role of senior management function (SMF) for climate-related risk with the Chief Underwriting Officer.
Group Finance Director (GFD)	The GFD is an Executive Director, and a member of both the plc Board and Executive Committee. They have responsibility for the financial performance of the Company, and provide updates throughout the year to the Board, Executive Committee, Audit Committee and Risk Committee.
Chief Underwriting Officer (CUO)	<p>The CUO sits on the Executive Committee and is responsible for ensuring climate-related matters are embedded within the underwriting process. The Head of Financial Climate Risk and Head of Exposure Management report into them, and they own the outputs of the Climate Risk Working Group and ESG in Underwriting project.</p> <p>The CUO provides updates on the underwriting performance of the Company, including matters arising from climate-related exposures, progress against climate-related risk objectives, and Exposure Management, to the plc Board, the Risk Committee and the Executive Committee. They also split the role of senior management function (SMF) for climate-related risk with the CRO.</p>
Chief Operating Officer (COO)	The COO is a member of the Executive Committee and has responsibility for ensuring we consider climate-related matters across our business operations, including office energy consumption, the use of data centres, and procurement.
Group Head of Strategy	The Group Head of Strategy oversees Beazley's business strategy and updates the plc Board on progress, and is a member of the Responsible Business Steering Group. On 1 November 2023, there was a personnel change in this role. The former Group Head of Strategy led the development of Beazley's new ESG strategy, which is now the responsibility of the Chief People Officer and Head of ESG.
Chief Investments Officer (CIO)	The CIO reports to the GFD and is responsible for all investment activity within the Beazley Group, including the development of investment strategy, delivery of appropriate investment returns, and the effective management of investment risks. Managing climate risks to our investment portfolio is a key aspect of this role.
Head of Culture and People	From the 1st November 2023, ESG oversight has moved to the Head of Culture and People who is an Executive Committee member and part of the Responsible Business Steering Group. The Head of Responsible Business and Head of Social Impact now report into this role.
Head of Capital	The Head of Capital provides quarterly updates to the Risk and Regulatory Committee on capital allocation for potential climate-related events and insurance claims. They oversee the assessment of climate-related capital requirements using modelled and non-modelled information to determine the impact of climate change on the business.
Head of Responsible Business	<p>The Head of Responsible Business is responsible for the delivery of the environmental objectives set within the Responsible Business Strategy. From a climate perspective, their role is focused on climate-related responsibility matters.</p> <p>They provide updates through the year (three in 2023) on responsible business matters to the Executive Committee and plc Board. These updates include progress against the objectives and targets set out within the Responsible Business Strategy, covering climate-related risk, climate-related responsibility, and an overview of items discussed at the responsible business steering group. The Head of Responsible Business is also responsible for curating the annual TCFD disclosures.</p>
Head of Financial Climate Risk	The Head of Financial Climate Risk oversees the integration of climate-related risk into underwriting, coordinates climate risk initiatives, and provides expertise to strengthen Beazley's climate risk management. This role reports to the CUO and provides quarterly updates to the Underwriting Committee and Responsible Business Steering Group.
Head of Social Impact	The Head of Social Impact role was newly created in 2023 to deliver social-related objectives within the responsible business strategy. They are a member of the Responsible Business Steering Group, and support the alignment of social and environmental issues.
Head of Compliance and compliance department	<p>The Head of Compliance is responsible for overseeing the compliance function at Beazley. This includes ensuring that we conduct business in accordance with all applicable laws and regulations we operate a Group-wide compliance framework designed to measure risk exposure, govern decision-making and monitor performance. Our framework consists of a number of systems and controls, including:</p> <ul style="list-style-type: none"> • Senior management oversight; • Risk assessments; • Staff training and awareness; • Compliance monitoring; and • Compliance reporting. <p>Beazley is mandated to ensure compliance with the following climate-related requirements:</p> <ul style="list-style-type: none"> • Annual disclosure against the TCFD reporting framework; and • Adherence with SS3/19. <p>The Head of Compliance reports into the CRO.</p>
Group Head of Internal Audit and internal audit department	The Head of Internal Audit ensures appropriate audits are undertaken to support our climate-related objectives, including underwriting functions, investments and TCFD disclosures.
Head of Exposure Management	The Head of Exposure Management leads the team responsible for developing approaches to monitoring the aggregation of exposure to natural catastrophes. The exposure management team reports to the CUO, who in turn provides regular updates to the Board on these matters. The Head of Exposure Management is the chair of the Physical Damage exposure management group (PDEMG). The exposure management team is supported by the Head of Financial Climate risk.

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1.2.2 Summary of management-level reporting structure

To help the business address climate-related issues, the roles outlined above (section 1.2.1) sit on or provide updates to a number of different management committees, steering groups and working groups (shown below).



A brief description of these committees, steering groups and working groups is as follows:

Executive Committee

The Executive Committee is our central decision-making and oversight body responsible for shaping our strategic direction, policies and operations. They receive regular updates on climate-related and ESG issues from sub-committees and working groups, including KPI and KRI dashboards collated by the Corporate Strategy and Risk teams. These dashboards contain climate-related metrics that provide insight into business performance and inform decision making.

Responsible Business Steering Group (RBSG)

The RBSG, a sub-committee of the Executive Committee, oversees the delivery of responsible business across Beazley, and monitor progress against our objectives. It met 10 times in 2023, with agenda items including: progress updates from the climate risk working group and ESG in underwriting project; reviewing the emerging transition plan, metrics for disclosure in the TCFD report, and progress against key climate-related KPIs; and the annual responsible business strategy refresh.

The primary purpose of the committee is to provide recommendations to decision-making fora, including the Executive, Underwriting, and Investment Committees. The dialogue between the RBSG and these committees further embeds responsible business matters across the organisation.

The RBSG is chaired by the CEO and attended by the Group Head of Strategy, Head of Responsible Business, Head of Financial Climate Risk, Chief People Officer and Head of ESG, Head of Procurement, and a representative from the Claims team. It also invites four Non-Executive Directors to attend quarterly as observers, to provide a further link between management and the plc Board on these issues.

Investment Committee

Chaired by the Group Finance Director, the Investment Committee oversees our investment strategy and ensures it can be delivered in alignment with business risk appetite.

To further promote sustainability and climate-related matters, Beazley has a responsible investment policy. This policy sets out how we have incorporated ESG issues into our investment analysis and decision-making process, and our approach to the management of climate change risk within the investment portfolio. The Investment Committee, in conjunction with the RBSG, also oversees progress against the investment-related objectives within the responsible business strategy. The Investment Committee continues to review and approve the portfolio of impact investments held which have a measurable social and/or environmental impact as well as a financial return.

Underwriting Committee

The Underwriting Committee, chaired by the CUO, monitors progress and ensures delivery of underwriting, claims, and reinsurance business plans. It includes representation from the underwriting teams, the Group Head of Claims, the Group Actuary, CRO, Group Head of Strategy, and Digital Head of Underwriting. The Committee is charged with ensuring the efficient implementation of ESG in underwriting, with prominence given to climate risk and opportunities. It has ultimate decision-making power on climate-related risk matters and receives updates from the Head of Financial Climate Risk and Head of Responsible Business. It reports monthly to the Executive Committee.

Underwriting sub working groups

Feeding into the Underwriting Committee are the following working groups:

Physical damage exposure management group (PDEMG)

The PDEMG monitors the natural catastrophe risk appetite set by the plc Board; risk appetites assigned to Beazley Group companies (including Beazley plc, BIDAC, BFL and BICI); and the physical damage RDS plan agreed by Lloyd's. The PDEMG reviews, on a monthly basis, the modelled loss output by the team and the overall Group total showing utilisation of the plan and provides challenge where there is a variance to plan. Its remit includes responsibility for the Group view of physical damage catastrophe risk written within the underwriting teams, and climate change analysis. The PDEMG monitors the utilisation of the Natural Catastrophe Risk Appetite & the 3 Lloyd's Natural Catastrophe RDS on a monthly basis.

Casualty and Cyber Management Group (CCMG)

The CCMG, chaired by the Underwriting Strategy Manager, is responsible for the Group view of Cyber and Casualty risk, including the impact of climate change on underwriting. It governs climate litigation scenario development and monitoring, and reports monthly to the Underwriting Committee.

Climate risk working group (CRWG)

The CRWG, chaired by the CUO in 2023, was established to embed climate-related risk into the underwriting process. Its work is part of the climate risk strategy approved by the plc Board. The Group's membership includes the Head of Exposure Management, the Head of Financial Climate Risk, the Head of Responsible Business, the Lead Pricing Actuary - Property Risks, and underwriting representatives from each of the divisions. It meets monthly to oversee climate risk projects and activities, and is involved in decision-making on climate-related matters and approved the metrics included in this report. The CRWG reports quarterly to the Underwriting Committee and RBSG.

ESG in underwriting project group

This group was established to oversee the further embedding of ESG matters within underwriting. Its work includes:

- Enhancing underwriting data collection to gather carbon emissions and transition-related information;
- Improving data gathering within the underwriting process on ESG matters; and
- Enhancing colleagues' knowledge on both ESG and climate-related issues through the delivery of training modules.

The project group reports to the CUO and provides regular updates to the Underwriting Committee and RBSG. Its members include the Head of Financial Climate Risk, the Head of Responsible Business, and underwriting representatives from each division.

Risk and Regulatory Committee

The plc Board has assigned oversight of the risk management department to the Executive Committee and the plc Risk Committee. The Executive Committee has further delegated direct supervision to the Risk and Regulatory Committee, which meets monthly and is chaired by the CRO. The risk section discusses the roles, responsibilities and oversight of this Committee in more detail.

Training

In January 2023, two mandatory e-learning training modules were introduced for the underwriting teams. The first module focused on ESG basics, whilst the second provided an introduction to climate risk.

Targeted training was also provided to specialty lines and property underwriting teams, where climate-related matters are considered to be more prevalent. For our property underwriters, the training supported the delivery of climate risks tools for better assessing the physical climate-related risks associated with properties. The content of this training included a focus on climate change metrics, catastrophe management and optimization, and climate risk underwriting questions. For some of our Specialty Risk lines of business, the training was provided in support of the introduction of ESG underwriting guidelines and questions.

Additionally, a third-party workshop helped key individuals across the business better understand climate-related litigation risk. This informed the appraisal of our current approach and the development of business strategy on the matter.

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2. Strategy

2.1 Climate-related risks and opportunities

2.1.1 Definitions of time horizons

Beazley considers risk across three broad time horizons for climate-related risks. These time horizons are reflective of our approach to business planning, the type of products Beazley provides, and the investment decisions the Company makes. A summary of climate-related issues which could potentially have a material financial impact on the Company within each timeframe are shown below, based on a review of external research and information. The processes by which we have reached these conclusions, and the opportunities which may arise as a result, are discussed further on in the report.

Time horizon	Description
Short term (1 year)	<p>Beazley's performance is evaluated on the results of each financial year and the business plan is developed on this basis. Most of Beazley's underwriting business is in short-tail classes. The impact of physical climate-related events occurring through the year are reflected in Beazley's approach to underwriting and pricing. Specific climate-related issues arising within this time horizon could include:</p> <ul style="list-style-type: none">• liability-related claims relating to greenwashing;• reputational incidents arising from the underwriting of, or investment in, companies which have a significant impact on climate change;• impact of green technology;• failure of Beazley to act as a responsible business on these matters; and• possibility for increased claims arising from natural catastrophes.
Medium term (1 to 5 years)	<p>Some of Beazley's underwriting business is in medium-tail classes, whilst investment in larger projects and platform developments may run over multiple years. Emerging risks can also crystallise over the medium term. Through this time horizon, the issues identified within the short term are likely to persist. Acute impacts of natural catastrophes is expected to increase in frequency and severity, and liability-related claims for failure to prepare for climate change will rise. Transitional issues from policy, market, or technology changes will also likely emerge.</p> <p>The five-year time horizon is aligned with the development of Beazley's medium-term plan (MTP). This plan sets out, at a high level, the growth ambitions for the business across the underwriting divisions. The MTP aims to provide a bottom-up view of the business, covering both the underwriting 'demand', and the operational 'supply', culminating in a financial plan and a sense of operational dependencies covering 2023-2027. It complements the Annual Underwriting Plan by building a view of what the business can deliver to support the underwriting ambitions</p>
Long term (5+ years)	<p>Beazley's strategy and strategic objectives are generally set over multiple years. Mega trends and slow-moving emerging risks may crystallise over many years. From a climate risk perspective there will be an increased trend in the acute physical climate-related risks, whilst longer term and more chronic impacts may also begin to be realised.</p> <p>From a material financial impact perspective, the issues identified within the short term are likely to persist. The frequency and severity with which acute impacts of natural catastrophes are felt is expected to begin to increase. The chronic impacts of climate change are also expected to begin to feature. Liability claims associated with a failure to prepare or adapt to climate change are expected to increase in severity and likelihood.</p>

2.1.2 Process to identify climate-related risks with a material financial impact

In 2021, Beazley took part in the PRA's Climate Biennial Exploratory Scenario (CBES) stress test. The exercise covered modelling of physical, transition and liability (litigation) risk over a 30-year time horizon within three different scenarios. The learnings from this exercise enabled us to further understand which climate-related risks could be material to the business. A number of actions were triggered as a result of the exercise, which have informed the basis for further developing our approach to embedding climate-related matters into our business, strategy, and planning.

Identification of physical climate-related risks

In 2023, to help address strategic priorities identified in the 2022 focus group business plans, Beazley focused on assessing and understanding physical climate-related risks, especially those with a material financial impact. This has been achieved through the implementation of a three phase climate-related risk assessment framework. The framework enables us to identify the risks, and also supports defining the actions needed to manage them (e.g. model validation, model adjustment, actions to pricing and underwriting).

This assessment will be refreshed on an annual basis to reflect changes of exposure and developments in climate science, and allow us to prioritise our efforts on risk assessment of material perils.

The three phases of the framework are as follows:

<p>Phase 1 Identification of all climate-related risks arising in each time horizon</p>	<p>Phase 1 involves the collation of the outputs from a number of different tools and processes by which physical climate-related risk are brought together. This helps to create an initial indication of the potential impacts of physical climate-related risks on Beazley. The processes used include:</p> <p>Climate change research An extensive literature review of scientific journals is undertaken to ascertain the climate change impact on key parameters within each of our significant perils. The outputs of the review help Beazley to rank each peril in terms of confidence in climate change signal, and materiality to Beazley.</p> <hr/> <p>Stress and scenario testing Scenario analysis completed as part of ORSA submissions, and realistic disaster scenario (RDS) monitoring completed by PDEMG allow for regular monitoring of Beazley's exposure to various climate risks. Additional scenario analysis from the Climate Risk team helps to assess the future materiality of key climate risk perils. This work helps quantify the potential losses of different risks, which informs the assessment of materiality</p> <hr/> <p>Underwriting Engagement Regular engagement with underwriting teams helps to identify potential material climate-related risks. Whilst this engagement comes in many forms, the ESG Underwriting leads are important in ensuring product line specific climate-related risks are highlighted. The ESG in Underwriting project team, and the CRWG are two of the mechanisms by which this information is shared. This engagement builds on a series of 'deep dives' the ESG in Underwriting project team conducted in 2022 across all underwriting teams.</p> <hr/> <p>Emerging risk identification Beazley uses a two-pronged approach to identify, assess, manage, and report on emerging risks. The macro, which considers high-level risks that may impact our industry and markets, using tools such as PESTLE analysis (Political, Economic, Social, Technological, Legal and Environmental); and the micro, which focuses on risks specific to our business and functions. Climate change is captured as an emerging risk and is assessed based on how it could impact Beazley and that mitigation measures are in place. The Emerging Risk Working Group (ERWG) meets quarterly to continually monitor the evolving landscape of emerging risks.</p> <hr/> <p>Monitoring of exposure aggregation Beazley's Physical Damage Exposure Management Group (PDEMG) issues monthly physical peril exposure reports to monitor our exposure to various climate risks. These reports serve as a mechanism for managing risk and are used to update knowledge of climate-related risks in each time horizon.</p>
<p>Phase 2 Assessment of materiality</p>	<p>Once all climate related items have been identified, an assessment of materiality is undertaken to understand which items will be most impactful to Beazley's business activities. The purpose of materiality assessment is threefold:</p> <ol style="list-style-type: none"> 1) Monitoring exposure; 2) Linking materiality analysis to climate change impact of perils; and 3) Guiding and helping prioritise actions of Beazley projects on climate risk/opportunity. <p>The individual physical risk perils for each country are then examined using a combination of modelled losses and aggregate exposure for each peril by country. This is to identify the region/perils most material to Beazley.</p>
<p>Phase 3 Plan to mitigate the risks</p>	<p>Once the most material risks to Beazley are identified, a number of steps may be undertaken to manage and mitigate these risks. Given that these risks are likely to be accompanied with a business opportunity, these steps are usually not undertaken in isolation. The linkage between the risks and opportunities, and the actions Beazley is taking are outlined in the subsequent sections.</p>

Identification of climate-related litigation risk

Climate-related litigation could be a material risk to Beazley, given our exposure to Specialty Risks. Beazley began to undertake projects in 2023 to identify and quantify our exposure to this risk.

In June 2023, Beazley held a climate-related litigation workshop with a third-party partner to discuss the latest trends and developments in climate-related litigation and their potential impact on coverage and exposure. The workshop used insights from external experts to identify potential climate-related liabilities we could face and developed a climate litigation work plan with prioritised projects and future plans.

In accordance with this work plan, we are now reviewing our greenwashing scenario, as well as assessing our exposure to climate-related litigation by business line, sector, and jurisdiction. The exposure assessment will allow us to identify hot spots in our exposure to climate litigation risk, set triggers for any future scenario development, and consider any underwriting actions.

Identification of transition-related climate-related risks

Climate transitional-related risk could be a material risk to Beazley, so in autumn 2023 we began researching to further understand the risks arising by sector and geography. This work will continue in 2024 and builds on the transition related opportunities already identified (which are discussed further on in the report).

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2.1.3 Process to identify climate-related opportunities with a material financial impact

In addition to the approach to identify climate-related risks, there are also a number of processes by which Beazley identifies climate-related opportunities which have a material financial impact. These are detailed below:

Method of identification	Description
Identified as a result of determining a risk	The methods used to determine a risk also enable identification of an opportunity. The development of an opportunity, where underwriting-related, will be delivered using one of the three processes described below.
Incubation process	<p>The Incubation Underwriting team develops new products which sit outside of existing underwriting team business plan and appetite. New product opportunities can be sourced from brokers, InsurTechs, Beazley underwriting teams and internally from within the incubation team itself. When reviewing a new product opportunity, and thus its potential materiality, the Incubation team will consider: the addressable market; buyer urgency; market saturation; product economics; and customer interests.</p> <p>Should the opportunity warrant further investigation the incubation team will engage with experts within Beazley - including underwriting, actuarial, wordings, conduct, claims and others as necessary, before reviewing the opportunity with the head of underwriting strategy. Following feedback from these internal stakeholders, a decision paper is prepared and presented to the head of underwriting strategy. This is then presented by the Incubation team to the CUO and/or the underwriting committee.</p> <p>Opportunities are launched in pilot periods, typically to maximum aggregate limits, to test the opportunity. Progress is reported to the underwriting committee. If suitably 'proven' in the underwriting pilot, and following the required approvals, the opportunity will be handed over to an existing Beazley team, where suitable.</p> <p>Currently the Incubation team is investigating solutions related to climate risk and the carbon transition. Their work is monitored by the underwriting committee.</p>
Business planning process	Underwriting focus group leads are responsible for developing the annual business plan, in which they may identify an area of business in which to either enter or expand their portfolio. They will document their strategy within their business plan. This could include the type of products/services they will insure, and the size of the market and the opportunity for Beazley. This work is supported by input from specialists. One such example of this approach is the work being undertaken to develop a business plan for renewable energy, with a view to the energy team decarbonising its energy portfolio over the long term. This will align with the metric currently disclosed for the premium generated from low and zero carbon technologies.
Extension to an existing product or service	Due to the specialist nature of Beazley's products and services, there may be several existing products and services which can be used to cover similar risks in new settings. Where this occurs, the relevant underwriting team use their knowledge and expertise to ensure any adjustments to the policy wording are implemented. This work is supported by the product development team.
Additional underwriting opportunities	The development and deployment of climate risk metrics within Beazley allows for opportunities to share climate risk insights with clients. Engagement with underwriters can identify useful metrics to enhance our client's understanding of their exposure to physical climate risks.

2.1.4 Summary of opportunities identified

Physical climate-related opportunities

Based on the 2023 physical risk materiality assessment, the US was determined the most material geographical location in which the Group operates and underwrites. US hurricane was found to be the most material peril, followed by US wildfire, US inland flood, US severe convective storm & US winterstorm. Outside the US, high materiality was found for European windstorm and flood, as was Japan tropical cyclone, both of which are material to our Property and Treaty underwriting business.

The opportunities related to these areas for Beazley lie, in the first instance, internally as we further develop our understanding of these perils and the impact they may have on the business.

The initiatives through which we further understand physical perils are outlined in the table below. In turn, this approach helps to improve the quantification of this risk.

Risk mitigation measure	Description
Developing climate risk adjusted pricing	For certain risks that are affected by climate change, adjustments may be made to the pricing model to accurately reflect their risk profile. This is done by investigating the historical loss trends of the risk and conducting a review of scientific literature on the impact of climate change on it. In 2022, this approach was introduced for US Wildfire, Inland Flood, and Hurricane. In 2023, reviews were also completed for US Hail, Tornado, and Winterstorm, and the findings were incorporated into the pricing models.
Portfolio optimisation	Underwriters are provided with tools, metrics, and training to help them manage climate risk in their portfolios. When future-state climate models are available, regional scenario analyses can be conducted to show how different regions may be affected by climate risks over time. By sharing the results of these analyses with underwriters, they can make informed decisions when selecting risks and prioritize regions with lower future climate risk.
Capital management	The capital modeling process takes into account the impact of climate change. Adjustments are made to the capital model to reflect our forward-looking view of risk, including assumptions about the frequency and severity of events based on the RMS Climate Conditioned Hurricane model. The model also accounts for the increasing trend in US wildfire losses due to climate change.
Location level climate change metrics	Underwriting tools are implemented to help identify and mitigate physical climate risks. These tools allow underwriters to better understand their exposure to climate risks, the tools encourage better risk selection and underwriting performance. By sharing this information with clients, they can become more aware of which of their assets are at greatest risk. This enables them to target mitigation measures to increase resilience and reduce future losses.
Developing climate conditioned forward-looking view of risks	For highly material modelled physical perils, we look to develop a climate-change conditioned view of risk and implement it in catastrophe modelling of any affected assets. To do so, we prepare a study examining the impact of climate change on the scientific underpinnings of the peril. The study then assesses the potential implementation of these climate-change impacts in the models currently in use by Beazley and determines a final adjustment/model alteration to use. We also engage external experts in this process. The view of risk is reviewed by several internal working groups and committees before implementation. In 2022, we developed and implemented a climate change conditioned view of risk for US hurricane. In 2023, we developed our climate change conditioned view of risk for US inland flood and US wildfire. Alongside catastrophe modelling, the forward-looking view feeds into our exposure aggregation monitoring and capital management, to support the assessments of capital requirements and exposure appetites.
Climate risk questions	A series of climate risk questions have been rolled out for property underwriters who are writing risks identified as possessing a high degree of climate risk. For these risks, underwriters liaise with clients to understand whether they are aware of the climate related risks they are exposed to, and what protection measures and emergency responses are in place. By ascertaining how well clients understand and are responding to climate risk, underwriters can both encourage better resilience for our clients and better understand and account for their own exposures to climate risk.

Climate-related litigation opportunities

As mentioned earlier in this report, we're continuing to evolve our understanding of the risks associated with climate litigation. By gaining a better understanding, we expect to identify new opportunities for products and services. This work will continue in 2024.

Transition-related climate opportunities

It's important to us that we support a just transition to a net-zero world. While there are risks associated with this transition, there are also opportunities. These include developing our own transition plan, incubating products which provide coverage for emerging risks and technology, and supporting clients as they begin their own transition journey. From an investment perspective, seeking to align our investment portfolio with a 1.5-degree Celsius pathway by 2028 is important, and work continues to achieve this.

2.2 Impact of climate-related risks and opportunities on business strategy and financial planning

Our insureds are the most important part of our value chain. We do not see this value just in being their insurer, but also in supporting them as they address climate-related risks. Beazley's climate risk strategy and responsible business strategy outline how we manage material climate-related risks and opportunities. The following section provides a summary of our approach to climate-related matters across underwriting, investments, and operations, and how they inform our strategy.

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2.2.1 Developing our transition plan to net zero

The transition to a net zero world is a crucial topic for Beazley, and affects our operations, investments and underwriting. We are currently developing the first iteration of our net zero transition plan, which will be a key part of our strategic approach to ESG and climate-related matters. This plan can be divided into three key areas:

Underwriting

During our exploration of setting carbon emission reduction targets for Beazley's underwriting portfolio and our work with the Sustainable Markets Initiative (SMI), we realized that a collaborative effort is needed to facilitate the transition to net-zero. At the centre of this effort is the need for businesses to commonly report carbon emission data and for a consensus to be reached on common sector frameworks for assessing the transition to net-zero. As a result, our transition plan for the underwriting element of Beazley's operations will focus on two main areas:

- Improving the availability of carbon emission data for the clients we insure so that we can set reduction targets in the future. We plan to achieve this through client engagement, collaboration with third parties, and industry initiatives; and
- Delivering products and services that best support our clients as sectors begin to transition to net zero. An example of this is our business plan to develop our renewable energy underwriting capacity at Beazley. An action which can be tracked through the underwriting premium from low and zero carbon technologies, cited in the Metrics section of this report.

Operations

Although the carbon footprint from our operations is small compared to the emissions from our investment and underwriting portfolios, it is the area where Beazley employees can have the most influence. The operations element of our transition plan will focus on reducing carbon emissions from the offices we lease by working with our landlords and encouraging the use of renewable electricity.

This approach builds on our current targets for reducing carbon emissions from our operations. For 2023, we aim to reduce our normalized carbon emissions by 50% compared to the 2019 baseline (progress is reported in the Metrics section of this report). Beazley's GHG emissions mainly come from our Scope 2 and 3 emissions, as detailed in our GHG emissions disclosures.

As part of our ongoing project to incorporate ESG matters into our procurement process, we will also explore how we can support our supply chain in transitioning to net-zero and develop a detailed plan for this area of the business.

Investments

For our investments, our initial transition plan focuses on aligning our publicly listed corporate bonds (investment grade and high yield) and publicly listed equities with a less than 2-degree Celsius pathway by 2028. For our externally managed assets, we have moved most of our equity exposure into funds with an ESG approach and a decarbonization benchmark. For the remaining outsourced portfolios of in-scope assets, we are working with external managers to encourage the development of ESG compliant funds with a decarbonization target, with the intention of switching our funds when suitable products are available.

Details of the carbon footprint and temperature alignment of our portfolio are published in the Metrics section of this report. For other assets that are currently out-of-scope, we will expand reporting as new guidance is published for asset classes not currently covered by existing methodologies.

2.2.2 Climate risk strategy for underwriting

Our climate risk strategy forms the basis for the planning the actions the business will take, in the short term, to further embed climate change into our business as usual approach to managing climate-related issues. The strategy covers four key areas below and was communicated externally for the first time as part of our 2022 TCFD disclosures:

- Embedding climate risk into underwriting;
- Underwriting product opportunities;
- Risk mitigation; and
- Financial stewardship

Embedding climate risk into underwriting

Led by the CRWG, we're continuing to build on the work undertaken to date to further integrate climate-related matters into our underwriting approach. The focus has been on addressing the risks and opportunities outlined earlier in this report. A summary of our progress so far is below.

Initiative	Summary of progress and plan for 2023
1. Development of physical risk materiality assessment framework	In 2023, Beazley enhanced its approach to identifying material physical risk perils by incorporating scientific research into its physical risk materiality assessment. The assessment framework links the materiality of physical risk perils at present with their future climate change impacts. This materiality is then assessed based on factors such as premium, modelled losses, risk aggregation, and claims history. Future climate change impacts were then determined through a thorough scientific literature review led by our Natural Hazard Research team. The material assessment outputs allowed us to prioritize our efforts in developing climate risk tools.
2. Strengthen catastrophe modelling capabilities and develop forward looking view of risk	Our ongoing efforts to develop a climate change-conditioned view of risk allow us to take a forward-looking approach to managing risk from material perils. In 2022, we validated and implemented a US hurricane model that takes into account the elevated risk due to climate change. This model is used as our view of risk for 2023 and is implemented in portfolio management, pricing, and capital setting. At the end of 2022, we also validated a US wildfire model, which was introduced into portfolio management and capital setting at the beginning of 2023. We have also validated a US inland flood model and are developing a climate change-conditioned view of risk for US inland flood and US wildfire.
3. Develop climate adjusted pricing for key perils	At the end of 2022, we introduced climate loss trends in pricing for US wildfire and US inland flood, and in January 2023, we did the same for US hurricane. During 2023, we reviewed climate loss trends for US hail, US tornado, and US winter storm, and implemented climate-adjusted pricing for these three perils into our pricing models. This climate-adjusted pricing allows for improved risk selection and management of catastrophe line deployment.
4. Climate risk underwriting questions	In 2023, Beazley developed climate risk underwriting questions and guidance, which are currently being tested in Property and Specialty lines. The underwriting questions and guidance were created to explore the impact of a changing climate on the underwriting risk of these business lines, to assess the insureds' awareness of their climate risk, and to determine what steps they have taken to mitigate them. To support this pilot, we provided training to underwriting teams to implement the questions and guidance into the underwriting process. We are working to gain a better understanding of the use of the questionnaire and guidance, the ease of collecting the information, and any opportunities for refinement. Ultimately, they will help us better understand the risks and make more informed underwriting decisions.
5. Develop underwriting climate change metrics	In 2022, Beazley developed a climate change metric for US hurricane risk and implemented it into our key property pricing tool in 2023. This metric was developed using a third-party tool that provides climate change projections for a list of physical risk perils. The US hurricane climate change metric was validated and implemented first because it is the most significant peril. It helps underwriters understand the future impact of climate change on their portfolio, supporting their decision-making. At this stage, it will not affect the modelled premium as this is already captured in the hurricane climate-adjusted pricing. To support the integration of this metric into the underwriting process, we provided training to underwriting teams and are working closely with underwriters to support the use of the metric. The metric is used to select accounts that are most exposed to hurricane risk and helps identify where the climate risk underwriting questions need to be completed.
6. Portfolio management: develop and implement catastrophe optimisation framework and tools	In 2022 we developed, and in January 2023 implemented, a catastrophe optimization framework and tool, enabling underwriters to refine and manage their US Property Risks portfolios using risk appetite and performance metrics, and make decisions on where to expand or retract our exposure. A Catastrophe Management and Optimization Group was established at the beginning of 2023 to oversee the implementation, meeting monthly to review risk appetite and performance metrics.
7. Physical climate risk scenario analysis	During the year we progressed the development of physical climate risk scenario analysis. We conducted climate scenario analysis for US hurricane, our most material peril, under a number of temperature scenarios to assess the climate change impact on our property portfolios. The analysis is planned to be repeated at an agreed frequency, with results shared with underwriters. This will allow them to monitor their future hurricane risk exposure and help embed scenario analysis in their process for monitoring catastrophe risk. The results will also aid the business and medium-term planning processes next year.

Underwriting product opportunities

Beazley considers the impact of climate risk on end-to-end insurance operations, which drives opportunities for new and changes to existing products and propositions. The processes we have in place, as discussed in section 2.1.3, facilitate the development of product opportunities.

In 2022, we undertook a review on how Beazley's current and planned product suite applies to industries and sub-industries that are key to the green/clean technology element of the transition to net zero. As part of the review, we gathered information from our underwriting teams on both their appetite and demand for coverage for these industries. There is clearly a demand for products and services for renewable energies (wind, solar, hydro-electric, wave & tidal, geo-thermal, and hydrogen), as well as being demand for green technology (carbon capture & storage, battery technology, recycling) and green services, (green consulting, technical services, green finance).

The exercise also enabled Beazley to identify the challenges to underwriting green/clean tech, including a lack of available historical data and difficulty in predicting which green technologies will be most successful or how quickly they will be adopted.

The development of these product opportunities continued to progress in 2023.

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Financial stewardship

For Beazley, a crucial part of the transition to net-zero is ensuring that it occurs justly, balancing the short-term social needs of energy security against the longer-term needs to reach net-zero by 2050. At the beginning of 2022, we adopted a policy of not underwriting any new thermal coal, oil tar sands, or arctic energy exploration projects, or businesses generating more than 5% of their revenues from these areas. However, in November, due to the ongoing war in Ukraine, we revised the exclusion for thermal coal. This revision applies only to our Marine and Political Risk underwriting classes, where Beazley is prepared, until June 2024, to insure new clients transporting thermal coal from existing coal mines. This approach supports the need for energy security, as several global countries are increasing their use of thermal coal plants to provide electricity.

We aim to support as many of our clients as we can during their transition to net zero. We believe that this can be delivered through a combination of education on the need for a smooth and just transition; knowledge sharing from the learnings we gain during our own transition journey; and the provision of products and services in this space. Our approach to the just transition will evolve, as we work to further understand how best to support it.

Working with brokers

Brokers play a crucial role in connecting Beazley with our clients. As such, our collaboration with brokers is essential in addressing climate-related issues. Beazley works closely with several strategic broker partners on various topics, including climate-related matters. We engage with these partners, who have the capability to work with us, to establish initiatives that benefit them, our clients, and Beazley. This includes the development of new products and services.

For our Incubation team, the relationship with brokers is a vital part of the process of developing new products and services that address climate-related opportunities. The nature of this relationship may vary depending on the specific product being developed. Engagement with brokers could be influenced by factors such as their involvement in the development of the new product, their ability to assist with the placement of delegated agreements, or their capacity to source business for our new product.

2.2.3 Investments

Beazley's Responsible Investment Policy outlines how we incorporate ESG factors and climate risk into our investment decision-making process. In 2021, Beazley committed to investing up to \$100m in impact investments, which generate both a financial return and a measurable positive social and environmental impact. Since then, we have invested in three impact funds, including a renewable energy fund managed by a member of the Natural Capital Investment Alliance, an emerging markets microfinance fund, and the Big Issue Fund IV, which targets health and social care, affordable housing, and social infrastructure in the UK. We have a pipeline of potential investments and will be working towards our investment target of \$100m over the next year. It is intended that when fully invested, broadly half of the positive impact will be focused on the environment and mitigation of climate

change. These investments are under the oversight of the Investment Committee.

Over the next 12 months, we will focus on developing our plan for transitioning to net zero and further analysing the transition and physical risks of climate change, and the financial impact of different climate scenarios on our portfolio. This will help us monitor and manage our exposure to climate risk across our investments.

For our internally managed investment-grade fixed income portfolios, we will monitor the progress of our investee companies towards net zero and reduce our exposure to those not making sufficient progress towards decarbonization. Given the size and nature of our investments, we believe this approach is appropriate, as we are not able to effectively engage directly with the companies we invest in. Our equity investments, which make up a small proportion of our portfolio, are managed by external investment managers. We require these managers to exercise our voting rights and engage with our investee companies on climate issues. We continually monitor our investments to ensure that we are invested in the most sustainable options and engage with our managers to make changes to the mandate where possible.

2.2.4 Operations

Carbon travel budget

Business travel is a major contributor to our scope 3 emissions. To address this, we have implemented a carbon budget system, similar to a financial budget. Each division is allocated a specific amount of carbon that they can "spend" on greenhouse gas emissions resulting from business travel. Performance updates are provided throughout the year, allowing teams to track their carbon spending. This budget system, and the resulting changes in travel patterns, has helped Beazley achieve reductions in normalised carbon emissions, as outlined in the Metrics section of this report.

3. Scenario analysis

3.1 Overview

Climate scenario analysis is a valuable tool to assess financial risks from climate change and inform strategic and business decision making. By measuring the future financial impacts of climate risk to our business, we can adjust our strategy accordingly to ensure resilience. Our approach to scenario analysis has evolved, with key initiatives being as follows:

Year	Outline of initiative
2021	<p>Bank of England Climate Biennial Exploratory Scenario (CBES) stress test</p> <p>The exercise covered modelling of physical, transition and liability (litigation) risk over a 30-year time horizon within three different scenarios – Early Action (EA), Late Action (LA), and No Additional Action (NAA). The scenarios were based on those established by the Network for Greening the Financial System (NGFS).</p> <p>The exercise focused on both assets and liabilities, taking a view, based on end-of-year 2020 balance sheets, of what might happen depending on future climate-related policies, technological advancements and consumer behaviour to limit greenhouse gas emissions. It was determined that the overall balance sheet impact was material over the long term, particularly in the NAA scenario which sees greater physical and transitional risk. However, in no scenario was Beazley rendered unviable as an organisation.</p> <p>On physical risk, the biggest impact on loss occurred in the NAA scenario, specifically the US perils (i.e. US windstorm, US inland flood, US wildfire, US severe convective storm, and US winter storm). On transition risk, the largest asset portfolio loss occurred in the NAA scenario and the smallest in the EA scenario.</p>
2022	<p>Internal scenario analysis development</p> <p>Likely future state scenario</p> <p>In 2022, we developed a 'likely future state' scenario which ensures that all areas of the business are aligned in terms of views on likely future scenarios and what 'degree world' we are operating in and planning for. The scenario is based on future emissions pathways set out by the Network of Central Banks and Supervisors for Greening the Financial System (NGFS), and the Intergovernmental Panel on Climate Change (IPCC) scenarios. The proposed 'Beazley most likely' scenario parameters are:</p> <ul style="list-style-type: none">• Future emissions follow the RCP 4.5 emissions pathway• A very late and more aggressive policy transition. Assumes annual emissions do not decrease to 2030. <p>The 'likely future state' scenario parameters have been used to inform the decision on developing climate change conditioned view of risk for material physical risk perils and location level climate change metrics.</p> <p>Greenwashing scenario</p> <p>In 2022, following completion of CBES 2021, we developed a Greenwashing RDS scenario, assessing our exposure to a scenario in which a number of insureds across several exposed business lines faced greenwashing claims for overstating their green credentials. The RDS considered the degree to which the different insured industry sectors and firm sizes of insureds are likely to be subject to Greenwashing litigation, as well as how the frequency and severity of claims may differ between countries.</p>

3.2 Developments in 2023

In 2023, we have developed a new series of scenarios for physical risk, whilst pursuing projects which will guide future scenario developments for climate-related litigation risk.

3.3.1 Physical Risk

Scenario scope and peril choice

Based on the results of our materiality assessment, and given that hurricanes are our most significant peril, we have developed a climate scenario analysis for US hurricanes. This analysis examines the impact of climate change on various property lines under different temperature scenarios in the future. The focus is solely on physical climate risk, and the analysis assesses the impact of climate change on each property line at different future temperatures. This allows us to evaluate the effects of further global warming on our property portfolio.

Methodology and key parameters

Our climate scenario analysis used Global Mean Surface Temperature (GMST) temperature increase as the independent variable, with scenarios modelled for three temperatures. Each temperature corresponded to a different business and strategic planning horizon over the short, medium, and long terms.

The decision to use temperatures as the key parameter was based on making results easy to communicate with stakeholders, compared to the alternative of using a combination of time horizon and future emissions pathways.

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Additionally, the use of a temperature allows results to be given with a range of time horizons, as each temperature may be reached by different points in the future according to how future emissions develop. This helps communicate the uncertainty inherent in predicting future climate states and encourages stakeholders to keep this uncertainty in mind. The table beneath shows the three temperatures selected, and the reasoning behind them:

GMST increase	Time horizon	Reason for selection
+1.4 °Celsius	2025-2030	Short term medium business planning In line with Paris agreement (aggressive mitigation efforts required to limit warming to here)
+2.0°Celsius	2035-2060	Long term strategic planning Required by regulators Warming is likely to reach this extent in all but the most aggressive mitigation scenarios
+3.0 °Celsius	2060 onwards	Exploratory 'stressed' scenario Required by regulators Parameter in 'Beazley most likely' scenario Hot house scenario Current policies put us on place to reach this extent by 2100.

Beazley conducts business planning over short to medium-term time horizons, evaluating its performance based on the results of each financial year and developing an annual business plan accordingly. Since some of Beazley's underwriting business involves medium-tail classes or longer-term projects and developments, medium-term considerations must also be taken into account during business planning. Beazley's strategy and strategic objectives are set over multiple years, and therefore must consider mega trends and slow-moving emerging risks that may materialize over time.

For each temperature scenario, we performed a scenario analysis using a climate change conditioned catastrophe model. The event rates within the model were adjusted to reflect the future conditions at each temperature. The modelling was conducted at both national and regional levels, allowing us to see losses on a regional basis.

Findings, assumptions and limitations

The results of our climate scenario analysis showed the percentage increase in modelled losses, with a focus on average annual losses and losses for a 250-year return period. For regionalised losses, all modelled property lines experienced the largest increases in losses in Gulf states such as Texas, Alabama, Mississippi, Louisiana, and Florida, as well as significant increases in the Carolinas. The higher temperature scenarios had more significant impacts, with a higher overall increase in losses for each portfolio and a wider range of loss increases across all states.

It's important to note that this scenario analysis was conducted under the assumption that our future exposure and local mitigation measures will remain the same as they are today. As a result, there are limitations to the results, particularly for the higher temperature scenarios associated with longer time horizons. These limitations contribute to increasing uncertainty at longer time horizons, due to unmodelled variables such as changes in exposure and local adaptation measures, as well as inherent uncertainty regarding the impact of temperature increase on hurricane impacts.

Business use cases and governance

The primary purpose of our physical scenario analysis is to aid in business planning. By evaluating the regional impact of climate change on property focus groups, underwriters can understand the potential impact on their portfolios and identify the regions that will be most affected.

This scenario analysis is planned to be repeated and will be presented to the Catastrophe Management Optimisation Group, before being shared with the relevant underwriting teams. By repeating scenario analysis underwriters can monitor how their exposure to future climate risk changes as their portfolios evolve, enabling them to make informed decisions about managing or growing their underwriting book. This also helps to integrate scenario analysis into our processes for monitoring catastrophe risk.

We are also developing an additional use case for capital management, which will assess the impact of stressed scenarios on our capital requirements and help us understand the potential impact of climate change on our capital needs.

Next steps on physical risk scenario analysis development

In 2024, we will look to extend physical scenario analysis to additional high-materiality climate perils, with US flood and wildfire the next most material after hurricane. We will continue to build use cases for scenario analysis.

3.3.2 Climate litigation risk

Greenwashing scenario review

Beazley instigated an independent review of our internal greenwashing scenario, challenging the assumptions and methodology used. This scenario review had the aim of informing us on how we can improve future scenarios we run for climate litigation, allowing us to refine our approach to scenario analysis and continue to develop our capabilities in the field.

Climate-related litigation portfolio assessment

We are exploring an assessment of our portfolio to determine our exposure to climate litigation. The results of this assessment will inform the development of future scenarios for climate litigation. The assessment will define various forms of climate litigation and allow us to evaluate our exposure to each form across different industries and jurisdictions. Our goal is for the assessment to help us understand where our key exposures to climate litigation risk lie. After the assessment is completed, we may develop further scenario analyses, prioritizing the portfolios and types of litigation identified as being most at risk.

4. Risk management

4.1 Risk management framework

4.1.1 Overview of Beazley's risk management framework

Beazley's risk management framework establishes our approach to identifying, measuring, mitigating and monitoring the Group's key risks, including climate risk. See additional detail on the risk management framework in the strategic report which starts on page 1.

4.2 Identification and assessment of climate-related risks

We use the key mechanisms set out below to identify and assess a range of climate-related risks relevant to Beazley, whether that be by geographical location, sector or product line.

Key mechanism	Description
Scenario Analysis	Scenario analysis includes stressing the scenarios of the first line or developing additional scenarios to consider climate related risks.
Natural Catastrophe Modelling	<p>Beazley utilises physical damage catastrophe models, such as those created by Moody's proprietary modelling system RMS, to help understand the implications of physical events. The modelling of physical events with a climate-adjusted view, i.e. models that enable us to review potential changes in physical risk as a result of a changing climate, is a discipline in its infancy. The Group has licensed, and validated, the RMS climate-adjusted model for our most material peril and expects to review and validate more climate-adjusted models released in 2023.</p> <p>The primary purpose of the tool is to gather data from the underwriting portfolio and provide loss-related information about pre-defined events, such as Lloyd's RDSs. However, it is also used to assist with determining rate adequacy and as a key input in portfolio management decisions; for example, in terms of diversification and geographical spread.</p> <p>The modelling enables the impact of climate-related risk to be reviewed from the following perspectives:</p> <ul style="list-style-type: none"> • regional variation; • different climate risk scenarios; and • different loss perspectives <p>Beyond this modelling, we also engage with other data and tool providers to review potential changes in physical perils at an individual location level.</p>
Deterministic Scenarios	<p>Beazley runs RDSs in order to determine the impact of different risks. The natural catastrophe RDS and climate litigation RDS are run on a regular basis. This modelling process is overseen by the exposure management team, who have developed a complex and emerging underwriting risks protocol. This sets out the activity in place to review potential, complex, and/or emerging risks relating to underwriting. There are approximately 60 Deterministic Realistic Disaster Scenarios (D-RDS) used to monitor the most significant.</p> <p>These scenarios are either modelled, using data drawn from third-party modelling partners, or non-modelled, where experts across Beazley collaborate to determine the impact. An example of our approach to non-modelled risks is wildfires, an increasingly common event due to the impacts of climate change. The modelling approach, meanwhile takes into account the impact of sector, geography and business segment, in order to determine Beazley's exposure. This helps to determine the relative significance of the climate-related risk in relation to other risks. In turn this informs decision-making across the business.</p>
Climate-related strategic risks	<p>The Board identifies and analyses emerging and strategic risk on an annual basis for discussion at The Board level. Climate-related matters may form part of these discussions, where applicable.</p> <p>Strategic emerging risks are reviewed by the risk team as part of the emerging risk assessment process. These reviews are a collaborative effort with all the Risk team, management and the business functions. It is an opportunity to identify and assess emerging risks, and provide appropriate mitigation measures to reduce/manage the risk. The emerging risk assessment is undertaken at a micro-level and macro-level, (please see the table in section 2.1.2 for more information). This assessment is also where Beazley captures its own response to climate change, and refers to the appropriate action being taken to improve the risk and control framework.</p>
Identification of emerging risks, trends and regulatory requirements	<p>Regular scanning of the horizon for emerging trends, regulatory requirements and stakeholder perspectives is undertaken. Key elements which are looked for include:</p> <ul style="list-style-type: none"> • Understanding the perspectives of stakeholders, whether they be investors, activists or our employees, through regular dialogue; • Determining current and emerging legal requirements, whether they be mandated or voluntary. This includes compliance with regulatory demands and legislation. It also extends to voluntary initiatives Beazley is a member of, such as the UN Principles for Sustainable Insurance; and • Understanding the evolving reputational risks associated with our activities. <p>Regular communication on these matters occurs across the teams identified in section 1.2 in order to ensure Beazley's approach to responsible business meets stakeholder expectations. Where necessary, proposals are put to the responsible business steering group for further discussion or clarification and recommendations for any appropriate action. Last year the Group committed to setting a net zero target for 2050.</p>

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4.3 Management of climate-related risks

4.3.1 Consideration of climate-related risk within the Risk Management Framework

Climate financial risk is a pervasive risk which spans multiple risk categories and owners; however it is also viewed as a standalone risk in its own right. Below is a brief outline of how climate-related matters are reflected in the relevant principal risk categories of the risk register.

Insurance risks

Risk type	Relevance to climate-related matters
Attritional and large claims	<p>This is the risk that claims costs may be higher than expected leading to material losses. It includes the risk of systematic mispricing of the medium-tailed Specialty Risks business, which could arise due to a change in the US tort environment, changes to the supply and demand of capital or companies using incomplete data to make decisions. In the context of climate-related matters, liability risks could manifest themselves, especially in relation to accusations of greenwashing. Transitional risk may also play a part in claims arising from market cycle risks.</p> <p>The Group uses a range of techniques to mitigate this risk including sophisticated pricing tools, analysis of macro trends, analysis of claim frequency and the expertise of our experienced underwriters and claims managers.</p>
Natural catastrophe underwriting risk	<p>This is the risk of one or more large events caused by nature affecting several policies and therefore giving rise to multiple losses. Given Beazley's risk profile, such an event could be a hurricane, major windstorm, earthquake or wildfire.</p> <p>This risk is monitored using exposure management techniques to ensure that the risk and reward are appropriate, and that the exposure is not overly concentrated in one area.</p>
Climate financial risk	<p>This relates to potential financial risks that may result from the physical impact and transition requirements of a changing climate on Beazley's underwriting and investment portfolios. This could be due to systemic mispricing of climate-related exposures, mismanagement of our aggregate exposures, or greater claims costs than expected resulting in financial loss and/or reputational damage.</p> <p>The Group mitigates this in a number of ways, including having a clearly defined and documented underwriting and investment strategy. There is training and guidance on related risks as part of the business planning process. Pricing models are regularly reviewed and updated to include/reflect climate-risk-related information. Exposure management processes are in place, which includes stress and scenario analysis.</p>
Reserve risk	<p>This is the risk that established reserves are not sufficient to reflect the ultimate impact climate change may have on paid losses. This includes unanticipated liability risk losses arising from our client's facing litigation if they are held to be responsible for contributing to climate change, or for failing to act properly to respond to the various impacts of climate change. With support from our Group actuarial team, claims teams and other members of management, the Group establishes financial provisions for our ultimate claim's liabilities. The Group maintains a consistent approach to reserving to help mitigate the uncertainty within the reserve's estimation process.</p>

Market, credit and liquidity risks

Risk type	Relevance to climate-related matters
Market risk	<p>This is a risk of investment loss, in any period, sufficient to impact capital and/or cause reputational damage. Beazley's investment portfolio could suffer detrimental returns following drops in the share prices of investments following a climate-risk-related incident.</p> <p>To mitigate this risk, an approved investment strategy is in place that provides guidance on appetite. In addition, adherence to the investment strategy is monitored through ongoing review, oversight and audit work.</p>
Reinsurance credit risk	<p>In the event material natural catastrophe events, there would be a risk that our reinsurance counterparties are unable to pay reinsurance balances due to Beazley. If the frequency or severity of these events is increased due to climate change, this could cause a corresponding increase in credit risk. An important consideration when placing our reinsurance programme is evaluation of our counterparty risk. Every potential reinsurer is evaluated through a detailed benchmarking exercise which considers financial strength ratings, capital metrics, performance metrics and other considerations.</p>
Liquidity risk	<p>There is a risk that losses resulting from unprecedented natural disasters or extreme weather could erode our ability to pay claims in a timely manner, due to unavailability (or not having access to) the necessary financial resources to meet obligations.</p>

Strategic risk

Risk type	Relevance to climate-related matters
Environmental, social, and governance (ESG)	<p>ESG is the umbrella term for environmental, social and governance factors that are used to measure the sustainability and ethical impact of a business. The risk is that we fall short of the expected standard of ESG in relation to our stakeholders. For example, this could stem from failing to understand and keep pace with ESG related thinking (that continues to gain momentum) and consequently not taking appropriate actions to address Beazley's stance and exposure in those areas. This could result in actual, or a potential, material negative impact and/or reputation of Beazley, arising from an adverse sustainability impact.</p> <p>We mitigate this risk by ensuring there is a clearly defined and documented ESG strategy driven by the executive team, that includes targets and milestones which are communicated to all staff. This is primarily governed via the Responsible Business Steering Group to ensure we take a consistent approach across the Group. Sustainability initiatives are incorporated into the business planning process.</p>
Strategic direction	<p>The Group's performance would be affected in the event of making strategic decisions that do not add value.</p> <p>The Group mitigates this risk through the combination of recommendation and challenge from Non-Executive directors, debate at the Executive Committee and input from the Strategy and Performance Group (a group of 30+ senior individuals from across different disciplines at Beazley).</p>
Reputation	<p>Although reputational risk is a consequential risk, i.e. it emerges upon the occurrence of another risk manifesting, it has the potential to have a significant impact on an organisation. Beazley expects its staff to always act honourably by doing the right thing.</p> <p>From a climate-related risk perspective, reputational risk manifests itself in the decisions we make on climate matters. This includes our approach to the transition to net zero, our approach to underwriting and investments, particularly in carbon-intensive sectors, and performance against the objectives we have set within our Responsible Business Strategy.</p>
Talent management and flight risk	<p>There is a risk that employees, including senior management, could be overstretched or could fail to perform, which would have a detrimental impact on the Group's performance and ability to meet its strategic objectives.</p> <p>The performance of the senior management team is monitored by the CEO and Culture and People team and overseen by the Nomination Committee. Climate-related objectives are built into senior management remuneration packages. This ensures progress can be measured and reported against.</p>

Regulatory and legal risk

Risk type	Relevance to climate-related matters
Regulatory and legal	<p>Regulators, legislators, investors and other stakeholders are becoming increasingly interested in companies' responses to climate change. Failure to appropriately engage with these stakeholders and provide transparent information could result in the risk of reputational damage or increased scrutiny. The Group regularly monitors the regulatory and legislative landscape to ensure that we adhere to any changes in relevant laws and regulations. This includes making any necessary regulatory or statutory filings with regard to climate risk.</p>

Operational risk

Risk type	Relevance to climate-related matters
Business, technology and cyber resilience	<p>This is the risk that the physical impact of climate-related events has a material impact on our own people, processes and systems, leading to increased operating costs or the inability to deliver uninterrupted client service. The Group has business continuity plans in place to minimise the risk of interrupted client service in the event of a disaster.</p>
Third party risk	<p>The Group aims to minimise where possible the environmental impact of its business activities and those that arise from the occupation of its office spaces. As we operate in leased office spaces, our ability to directly influence the building's environmental impacts is limited. However, we do choose office space with climate change mitigation in mind, and engage with our employees, vendors and customers in an effort to reduce overall waste and our environmental footprint.</p>

4.3.2 Processes for managing climate-related risks

Beazley's risk management philosophy is to balance the risks the business takes on with the associated cost of controlling them, while staying within the risk appetite set by The Board. The Company continuously monitors its risk profile to ensure it stays within this appetite and takes advantage of opportunities as they arise. As a specialist insurer, Beazley underwrites several classes of business that are vulnerable to the effects of climate change. To manage these risks, the Company has four options: accept the risk, avoid it, mitigate it, or transfer it.

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Tools to help manage climate-related risks

Beazley employs a variety of tools to help manage climate-related risks. These are as follows:

Tools used	Description of use
Stress and scenario framework	<p>The stress and scenario framework is a key element of the risk management framework, enabling senior management to form an understanding of the vulnerabilities of the business model. There are two levels of stress and scenario tests conducted at Beazley, which ensures there is coverage of the key risks facing us and ownership at the appropriate management level.</p> <p>Single-pillar stress and scenario tests such as RDSs are performed as part of normal business processes, with RDSs for natural catastrophes run on a regular basis in order to determine the impact of different risks.</p> <p>In addition, multi-pillar testing is conducted as part of the Own Risk and Solvency Assessment (ORSA) process, to ensure that tests continue to develop and reflect the evolving risk environment.</p>
Monitoring of aggregation of exposure	<p>The Exposure Management team has the responsibility for developing approaches to monitor the aggregation of exposure to natural catastrophes. Part of this work involves assessing the latest views on climate change and reporting to the business on the impacts any changes could have to the insurance portfolios. The Exposure Management team reports to the Chief Underwriting Officer, who in turn provides regular updates to The Board on these matters. The Exposure Management team is supported by the Head of Financial Climate Risk.</p>
Capital modelling	<p>The Head of Capital provides an update to The Board, using modelled and non-modelled information, to help determine the impact of climate change on the business. An example of this is the internal modelling the capital team undertook to determine the impact of wildfires, which are becoming increasingly prevalent as a result of climate change. They also set out a view on the more material hurricane risk as part of this process.</p>
Risk appetite	<p>On an annual basis, Beazley's risk appetite is reviewed and is informed by outputs from the RDS, capital model, and credit risk assessment, as well as input from the trading teams. This helps guide the underwriting teams for the following year, before being reviewed against the capacity available.</p> <p>This appetite is agreed and set by the Board, before being tracked by the exposure management team on a monthly basis, who flag up to the business any areas where we are close to the limits the business has set. Capacity is impacted by the number of physical weather events which occur throughout any given year, and therefore the impact of climate change is considered when deciding on risk appetite.</p> <p>During 2022, Beazley's risk appetite statements (RAS) and associated key risk indicators (KRIs) were materially enhanced for all risks, including financial climate risk. The RAS and KRIs now include qualitative statements and metrics relating to the effectiveness of the CRWG and the investment portfolio temperature alignment. These have been monitored and reported on a frequent basis across 2023 to the Risk and Regulatory Committee, plc Risk Committee and Board; and this will continue in 2024.</p>
Detailed risk assessment	<p>On a periodic basis, as part of a core element of the risk management framework, the Risk function undertakes a detailed risk event assessment of climate financial risk. The aim of the assessment is to review the risk ownership and governance; the inherent and residual risk scores; the risk appetite; and the control environment.</p>

Quantitative and qualitative assessment of climate-related risks within the Risk Management Framework

The Board-level Key Risk Indicators (KRIs) are monitored as part of Beazley's risk management framework and are outlined in the risk appetite statements. These KRIs are designed to provide early warning signals that can be addressed through the Company's governance structure. They use a red, amber, and green (RAG) rating system to indicate whether a risk is within the Company's appetite and whether any escalation is necessary. The KRIs related to climate change are as follows:

Area of the business	Key Risk Indicator
Underwriting	Natural catastrophe aggregate exceedance probability and occurrence exceedance probability metrics (at multiple return periods) Progress in meeting the objectives of the Climate Risk Working Group.
Investments	Compliance with responsible investment policy and transition risk.
Operations	Reduction in carbon emissions for our operations compared to the 2019 baseline of 40% in 2022, and 50% in 2023.

5. Metrics

We use a number of metrics to monitor our progress on climate-related matters.

5.1 Enhancing our approach

The CRWG was established in 2022 to improve Beazley's approach to climate-related issues in underwriting. The Group's progress is measured using two quantitative metrics: the number of perils with a climate change-conditioned view of risk, and the number of perils with climate loss trends incorporated into pricing model calibration. These metrics are monitored and reported in more detail below.

Number of perils with climate-change-conditioned view of risk

Beazley is researching climate change-conditioned models and updating its understanding of the impact of climate change on physical risk perils through dedicated research. This will help the Company develop a forward-looking view of risk that takes climate change into account.

A peril is defined as a weather hazard event or circumstance that results in property damage losses to Beazley. For a peril to be considered to have a Climate Conditioned View of Risk, the following must have been undertaken:

- The Exposure Management team have prepared a study examining the impact of climate change on the scientific underpinnings of the peril;
- The implications of these impacts on the models currently in use by Beazley has been reviewed; and
- The determination of a final adjustment/model alteration to use has been undertaken. This is implemented for pricing, but not portfolio management.

We introduced a climate-change conditioned view of risk for US hurricane in 2022. In 2023, whilst we worked on implementing a view of risk for US Wildfire and US Inland Flood, it is yet to conclude. We expect to deliver a climate-change-conditioned view of risk for these perils in 2024.

Number of perils with climate loss trends introduced into pricing model calibration

To integrate climate-related matters into underwriting, it is important to incorporate climate loss trends into pricing model calibration. Beazley is currently working on including climate trends for key perils into the model calibration for pricing property risk.

A peril is defined as a weather hazard event or circumstance that results in property damage losses to Beazley. The trend is measured as a per annum percentage increase in the expected losses. The climate loss trend is considered as having been introduced into the pricing model calibration, when the following has occurred:

- Climate trended pricing is built into the pricing model by an actuary;
- The incorporation into the pricing model has been reviewed by a senior actuary; and
- The pricing trend has been incorporated into the rating tool.

In 2022, we reviewed climate loss trends for US hurricane, US wildfire, and US inland flood. In December 2022, US Flood and US Wildfire were introduced into the pricing tool for the North America Commercial Property and Open Market Property lines. US hurricane then followed in January 2023.

Subsequently US tornado, US hail, and US winterstorm were introduced in December 2023. A summary of progress is as follows:

2021	2022	2023
0	2 (US wildfire, US inland flood)	4 (US hurricane, US tornado, US hail, US winterstorm)

5.2 Underwriting

Net Estimate Premium Income arising from low and zero carbon technologies

The sum of net estimated premium income (net EPI) arising from low and zero carbon technologies underwritten across the last three years is as outlined in the table below. The net EPI is calculated from data on the line slip, or in the case of binders, the estimate of the declarations as estimated by the broker and / or underwriter, as documented in notes. The metric is based on an estimate, therefore, could be subject to change as premiums are adjusted through the life of the policy.

The Net EPI disclosed in this report is the total estimated premium incepted in 2023, and as measured at the end of 2023. The data has been collected from the information entered into Beazley's underwriting systems. Where exchange rates have needed to be applied, for EUR and USD these have been applied at the date of entry into the underwriting system. For lesser used currency conversions occur prior to entry.

For 2023, the scope of reporting is limited to offshore and onshore wind, and onshore solar. The totals are as follows:

2021	2022	2023
\$4.5m	\$8.0m	\$5.9m

TCFD 2023 continued

5.3 Investments

For the purpose of reporting of climate metrics, our portfolio of publicly listed corporate bonds and publicly listed equities are considered to be in-scope. This combined represents 45.8% of the market value of our total portfolio as at 31 December 2023. The individual methodologies to estimate the investment related climate metrics are outlined in the section below. The common inputs and processes across each metrics are as follows:

The GHG emissions data is based on Scope 1 and 2 emissions only and is sourced from S&P CAP IQ pro, S&P collect and report GHG emission data for companies within their platform. Where they cannot, an estimated carbon emissions amount is used. The carbon emission data used in the calculation of the metric will reflect a 12-month period. The 12th month period is dependent on the financial year of reporting for the individual company. The data is reported as at 31st December 2023.

The investment grade corporate bond portfolio is managed internally with portfolio and security level holding data maintained by an investment administration system provided by Clearwater. All other publicly listed securities are outsourced to external managers who provide look-through data. Security holdings are maintained on the S&P platform for the calculation of climate metrics based on a share of financing basis (enterprise value including cash).

The calculation of the metrics are based on the assumption that the data contained within S&P CAP IQ Pro is correct, and the calculation methodology used by S&P is reflective of the calculations outlined in their methodology document. Beazley uses data from Standard & Poor's Market Intelligence Capital IQ pro (S&P CAP IQ pro) to calculate the following investment portfolio metrics:

Total apportioned GHG emissions arising from our investments

This is the total Carbon Emissions apportioned to Beazley's in-scope assets and is the starting point for calculating the carbon footprint of our investments. It follows a share of financing methodology and is consistent with the GHG Protocol accounting standard, allocating emissions based on enterprise value including cash (EVIC) basis.

The calculation is the value of investment divided by the issuers share of financing before this figure is multiplied by the issuers scope 1 and 2 GHG emissions. This sum is undertaken for each in scope security and totalled to provide an overall apportioned GHG emission figure.

In 2022 we reported apportioned carbon emission data for our publicly listed equity holdings only. During 2023 we increased allocation to equities from 1.8% to 3% of total assets, resulting in an increase to our overall apportioned emissions despite an improvement in the energy efficiency of our exposures. To provide a like-for-like comparison, a normalised number showing apportioned carbon per \$1m exposures has been included.

	2022	2023
Apportioned GHG emissions (tCO ₂ e) arising from our investments (Publicly listed equities only)	2,359.3	3,955.0
Normalised apportioned GHG emissions (tCO ₂ e) arising from our investments (Publicly listed equities only) per \$m of holdings	14.8	14.0
Reporting coverage of listed equities by market value (%)	90.2	99.8

In 2023 we expanded our coverage to include publicly listed corporate bonds in addition to our publicly listed equity holdings. The total market value of these holdings is \$4,253m representing 45.8% of our total assets.

	2023
Apportioned GHG emissions (tCO ₂ e) arising from publicly listed equities and corporate bonds	76,298
Carbon reporting coverage for publicly listed equities and corporate bonds (%)	97.6

Weighted average carbon intensity (WACI)

The weighted average carbon intensity (WACI) of our publicly listed equity and corporate bond portfolios is set out in the table below. The WACI is calculated by taking the sum of the GHG emissions (Scope 1 and Scope 2) for the holding and dividing by the total revenue of each holding. This figure is then multiplied by its investment weight (the value of the holding divided by value of the total holdings, both as at 31st December 2023). The GHG emissions data is sourced from S&P CAP IQ. Emissions have been reported for 97.6% of the market value of in-scope assets.

	2021	2022	2023
WACI (tCO ₂ e/\$m sales) arising from our investments	75.5	49.9	44.4

Temperature alignment of our investment portfolio

The reporting of the temperature alignment of Beazley's portfolio is based on the methodology set out by the S&P Cap IQ. The methodology apportions the value of holdings with regards to the 'under/over 2°C budget' metric which is produced by S&P annually for every company. This is calculated by multiplying the 'under/over 2°C budget' figure by the investor's value of holdings and then dividing this value by the total enterprise value of that particular company. The individual values are then summed across the entire portfolio in order to either give a negative figure (aligned) or positive figure (misaligned). The scope of the reporting is limited to the GHG emissions arising from our publicly listed corporate bonds (investment grade and high yield) and publicly listed equities. The data was reported as at 31st December. Temperature alignment metrics have been reported in respect of 96.7% of the market value of in-scope assets.

The reporting of Beazley's current pathway alignment is the starting point from which future comparisons will be made. Beazley has set an objective to align its investment portfolio with a 1.5 degree Celsius pathway by 2028 and will continue to work towards this in 2024.

	2022	2023
Current Temperature Pathway Alignment	2-3 degree Celsius	2-3 degree Celsius

5.4 Beazley's operations

5.4.1 GHG emissions

The Greenhouse gas (GHG) emissions are calculated and in accordance with the Greenhouse Gas Protocol, Corporate Reporting and Accounting Standard including the amended GHG Protocol Scope 2 Guidance, and HM Government, Environmental Reporting Guidelines, using the applicable UK Government's (BEIS) GHG Conversion Factors for Company Reporting unless otherwise indicated. The full methodology, including limitations, for calculating the GHG emissions is available on Beazley's Responsible Business pages on Beazley's website, as is the full breakdown of carbon emissions across each of the three Scopes of emissions. Where revisions to GHG emissions in previous years have been made due to a change in calculation methodology, these changes are detailed in the full methodology document.

The parameter of Scope 1 and Scope 2 reporting in 2023 includes 22 sites covering London (UK), Birmingham (UK), Dublin (Ireland), Munich (Germany), Paris (France), Barcelona (Spain), Singapore (Asia), Atlanta (US), Boston (US), Chicago (US), Dallas (US), Farmington (US), New York (US), San Francisco (US), Philadelphia (US), Denver (US), Houston (US), Los Angeles (US), Miami (US), Vancouver (Canada), Toronto (Canada), Montreal (Canada), and one third party cloud-based data centre service provider called Equinix). This equates to 95.5% of Beazley employees including contractors. Business travel (Scope 3) is included for all employees.

Beazley's two US subsidiaries, Lodestone (Lewisville) & BHI (Miami), are excluded.

Energy consumption for the charging of electrical vehicles in scope 2 is included and calculated based on maximum distance specified in terms of car lease agreements.

Reporting is based on operational control. Beazley Group does not have operational control over the building infrastructure and plant at its offices due to the presence of facility management companies and shared tenancy; as a result, emissions primarily fall within Scope 2 and 3 of the Greenhouse Gas Protocol.

5.4.2 Location-based GHG emissions

Our GHG emissions normalised for Beazley's full-time equivalent (FTE) (including contractors) were 2.82 tonnes carbon dioxide equivalent (tCO₂e/ FTE) in 2023. This equates to a normalised (per FTE) 46.8% reduction when compared to our 2019 baseline. Total emissions, prior to normalisation, have reduced by 16.8% when compared to the 2019 baseline. The largest proportion of our reported emissions comes from Beazley's business travel. Emissions in 2020 and 2021 were impacted by reduced business travel due to the COVID-19 pandemic. The Scope 2 and Scope 3 data for 2019 to 2022 has been revised from previously stated emissions. This is due to the receipt of actual data, rather than relying on estimates to calculate emissions. 2022 saw a return to face to face contact with stakeholders, however, the early months of the year were considered to be still impacted by the pandemic. The 2023 Scope 1 emissions saw a reduction from 2022, driven by no refrigerating top ups occurring which are very carbon intensive.

Location-based GHG Emissions (tCO ₂ e)	2019	2020	2021	2022	2023
Scope 1	21.08	16.50	8.23	65.20	2.13
Scope 2	1,672.53	1,425.88	1,236.09	946.81	829.72
Scope 3	6,725.81	1,636.96	863.94	4,152.40	6,166.96
Total tCO ₂ e	8,419.42	3,079.34	2,108.26	5,164.41	6,998.81
Total tCO ₂ e/FTE	5.30	1.87	1.15	2.44	2.82

TCFD 2023 continued

5.4.3 Market-based GHG emissions

Beazley Group's market-based GHG reporting for 2023, taking into account the procurement of 743,423kWh of electricity from certified renewable sources, is summarised in the table below. Renewable electricity was procured for our London, Dublin and San Francisco offices. Biogas is used in our London office. This equates to renewable electricity being 29.1% of Beazley's overall in scope electricity use, and biogas being 26.75% of Beazley's overall in scope imported heat use. The energy for the data centres was also procured from renewable sources. The procurement of renewable energy resulted in a saving of 211.05 tonnes of CO₂ equivalent for scope 2, and a further 208.90 tonnes of CO₂ equivalent for scope 3.

The market-based emissions, which take into account the carbon emission reductions achieved through the use of renewable energy in four of Beazley's offices, are set out in the table below, and lead to an overall 50% reduction when compared to the 2019 baseline. The Scope 2 and Scope 3 data for 2019 to 2022 has been revised from previously stated emissions. This is due to the receipt of actual data, rather than relying on estimates to calculate emissions.

Market-based GHG Emissions (tCO ₂ e)	2021	2022	2023
Scope 1	8.23	65.20	2.13
Scope 2	861.45	770.32	618.67
Scope 3	863.94	3,940.07	5,958.07
Total tCO ₂ e	1,733.62	4,775.59	6,578.87
Total tCO ₂ e/FTE	0.95	2.25	2.65

5.4.4 Detailed breakdown of emissions

SCOPE 1

Our Scope 1 emissions arise from company car use, refrigerant top ups of air conditioning systems and back-up generator use for our Dublin office. Emissions for 2023 were 2.13 tCO₂e, all of which were within the UK.

SCOPE 2

Beazley Group does not have operational control over the building infrastructure and plant at its offices due to a combination of shared tenancy and the presence of facility management companies. Beazley offices are heated/ cooled by the building's central HVAC systems, which are managed by the landlord or landlord's agent. This does influence the options we have for procuring energy. Our Scope 2 emissions can be broken down by region. The Scope 2 data for 2019 to 2022 has been revised from previously stated emissions. This is due to the receipt of actual data, rather than relying on estimates to calculate emissions.

UK

	2019	2020	2021	2022	2023
Total location-based GHG Emissions (tCO ₂ e)	826.59	586.17	439.87	246.95	224.64
Total market-based GHG Emissions (tCO ₂ e)	826.59	144.86	140.82	114.76	43.65

REST OF WORLD

	2019	2020	2021	2022	2023
Total location-based GHG Emissions (tCO ₂ e)	71.52	69.91	70.77	69.02	26.59
Total market-based GHG Emissions (tCO ₂ e)	71.52	69.91	70.77	69.02	26.59

USA

	2019	2020	2021	2022	2023
Total location-based GHG Emissions (tCO ₂ e)	653.35	653.35	624.26	568.91	529.67
Total market-based GHG Emissions (tCO ₂ e)	653.35	653.35	624.26	568.91	517.96

EUROPE

	2019	2020	2021	2022	2023
Total location-based GHG Emissions (tCO ₂ e)	121.07	116.45	101.19	61.93	48.82
Total market-based GHG Emissions (tCO ₂ e)	121.07	22.17	25.60	17.63	30.47

SCOPE 3

Our overall Scope 3 emissions are as detailed below. We have provided further details of how the market-based emissions factors also impact our overall emissions. The Scope 3 T&D data for 2019 to 2022 has been revised from previously stated emissions. This is due to the receipt of actual data, rather than relying on estimates to calculate emissions.

Location based emissions

	2019 (tCO ₂ e)	2020 (tCO ₂ e)	2021 (tCO ₂ e)	2022 (tCO ₂ e)	2023 (tCO ₂ e)
Air travel	6,074.04	1,437.70	527.39	3,666.49	5,661.32
Rail travel	107.65	5.69	4.20	11.93	17.17
Hotel stays	183.22	34.74	30.81	96.13	130.73
Car hire use	23.52	3.24	2.74	9.56	12.25
Electricity transmission & distribution losses (location-based)	93.84	72.57	58.42	43.42	38.19
Taxi use	165.11	59.13	22.68	99.97	49.36
Personal car use	73.92	19.11	19.15	7.79	58.09
Electric vehicle charging transmission & distribution losses	—	0.28	0.26	0.28	0.34
Imported heat transmissions & distribution losses	4.51	4.50	4.50	4.50	4.56
Data centres	—	—	193.79	212.33	194.95
Total	6,725.81	1,636.96	863.94	4,152.40	6,166.96

Market based emissions

	2019 (tCO ₂ e)	2020 (tCO ₂ e)	2021 (tCO ₂ e)	2022 (tCO ₂ e)	2023 (tCO ₂ e)
Air travel	6,074.04	1,437.70	527.39	3,666.49	5,661.32
Rail travel	107.65	5.69	4.20	11.93	17.17
Hotel stays	183.22	34.74	30.81	96.13	130.73
Car hire use	23.52	3.24	2.74	9.56	12.25
Electricity transmission & distribution losses (location-based)	93.84	72.57	58.42	43.42	24.25
Taxi use	165.11	59.13	22.68	99.97	49.36
Personal car use	73.92	19.11	19.15	7.79	58.09
Electric vehicle charging transmission & distribution losses	—	0.28	0.26	0.28	0.34
Imported heat transmissions & distribution losses	4.51	4.50	4.50	4.50	4.56
Data centres	—	—	193.79	—	—
Total	6,725.81	1,636.96	863.94	3,940.07	5,958.07

TCFD 2023 continued

5.4.5 Carbon offsets

Beazley has not purchased carbon offsets in 2023. Beazley is currently reviewing different carbon offset options, with a view to using offsets as part of a range of measures to help reduce Beazley's carbon footprint.

5.6 Remuneration

As set out within the remuneration dashboard on page 125, a section of executive compensation is linked to the achievement of ESG objectives. The score-card, and the degree to which it has been achieved, is determined by the Remuneration Committee.

Compliance with TCFD Requirements

Beazley has included on pages 22 to 44 in the Strategic Report a climate-related financial disclosures consistent with the TCFD's Recommendations and Recommended Disclosures, with the exception of the following:

Strategy 2a: Organisations should describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.

Beazley has partially disclosed against this requirement. Beazley is currently exploring the climate-related risks and opportunities as part of ongoing work on climate-related matters. This is being undertaken in a manner which will best align with our strategy. At the point of disclosure, it was considered that the work currently in progress is not sufficiently completed to meet the requirement of the disclosure recommendation.

Strategy 2b: Organisations should describe the impact of climate-related risks and opportunities on the organisations business, strategy and financial planning.

Beazley's responses to this requirement are still developing, it is not possible to consider all possible future outcomes when determining asset and liability valuations, and timing of future cash flows, as these are not yet known. Nevertheless, the current management view is that reasonably possible changes arising from climate risks would not have a material impact on asset and liability valuations at the year-end date. Our TCFD disclosures are to be updated on an annual basis, therefore, we will be able to set out our progress as part of our 2024 TCFD disclosure.

Beazley has partially disclosed against the supplementary requirements for insurance companies and asset owners. Beazley is working to further develop our approach to climate-related matters. At the point of disclosure, it was considered that the work currently in progress is not sufficiently completed to meet the requirement of the disclosure recommendation.

Strategy 2c: The organisation should describe how resilient their strategies are to climate-related risks and opportunities, taking into consideration a transition to a low-carbon economy consistent with a 2°C or lower scenario.

Beazley's responses to this requirement are still developing, it is not possible to consider all possible future outcomes when determining asset and liability valuations, and timing of future cash flows, as these are not yet known. Nevertheless, the current management view is that reasonably possible changes arising from climate risks would not have a material impact on asset and liability valuations at the year-end date. Our TCFD disclosures are to be updated on an annual basis, therefore, we will be able to set out our progress as part of our 2024 TCFD disclosure.

Metrics and Targets 4a: Organisations should disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.

Beazley partially complies with this requirement and is currently working to develop an appropriate tranche of data metrics by which to further monitor climate-related risks, particularly in respect to the transition to net zero. Once developed these metrics will compliment the metrics already reported. At the point of disclosure, it was considered that the work currently in progress is not sufficiently completed to meet the requirement of the disclosure recommendation.

Supplementary requirements for insurers and asset owners
For the supplementary requirements, our status is as follows:

Strategy 2c: Beazley has partially disclosed against the supplementary requirements for insurance companies and asset owners.

Risk 3a: Beazley is partially compliant with the supplementary requirements for asset owners and insurance companies.

Risk 3b: Beazley is partially compliant with the supplementary requirements for insurers, but is not compliant with the supplementary requirements for asset owners.

Metrics and Targets 4a: Beazley partially complies with the supplementary requirements for asset owners, but does not comply with the supplementary requirements for insurers.

Metrics and Targets 4b: GHG emissions and related risks
Beazley does not comply with the supplementary requirements for insurers, but partially complies with the supplementary requirements for asset owners.

For these areas of the supplementary requirements, Beazley is working to further develop our approach to climate-related matters. At the point of disclosure, it was considered that the work currently in progress is not sufficiently completed to meet the requirement of the disclosure recommendation. Our TCFD disclosures are to be updated on an annual basis, therefore, we will be able to set out our progress as part of our 2024 TCFD disclosure.

Transition Plan

Beazley has not published a transition to net zero plan. As referred to in the TCFD disclosure, the plan will be approved by the Plc board, before then being published in 2024.