Climate-related risks and opportunities

Our approach to climate change is central to our sustainability strategy and we continue to mitigate climate risk through our risk management framework. This year, we have continued to progress our net-zero commitments, with a focus on engagement across underwriting, investment and our suppliers. We continue to develop our metrics, taking data availability and reliability into account, as we make progress against our commitments.

Governance

The Group Board approves QBE's strategic priorities, which includes consideration of climate risks and opportunities. It also oversees the environmental impact of the Group's activities and operations and sets standards on the Group's environmental responsibilities and practices.

The Group Board is assisted in its oversight by committees composed of a majority of independent directors. In particular, the Board committees outlined on page 21 have oversight relating to climate-related matters.

The Group Executive Committee (GEC) has the highest level of management oversight of climate-related matters and is supported by the committees outlined on page 21. Its responsibilities include overseeing the execution of QBE's sustainability strategy and commitments and managing climate-related risks and opportunities.

The Group Board and GEC participate in education sessions to enhance their awareness of, and capability surrounding, ESG issues, including climate-related risks and opportunities.

QBE is committed to integrating sustainability, including climate-related considerations, into the business. Functional representatives with accountability for sustainability across the Group collaborate through key management working groups and committees to support the GEC in the delivery of our strategy, initiatives and reporting.

QBE and its employees participate in industry and other forums to contribute to the dialogue on issues that are important to the business, including climate-related risks, the transition to a net-zero economy, and the development of consistent industry standards and approaches around climate-related disclosures.

In 2023

- The Group Board continued to oversee progress against our 2023–25 Sustainability Scorecard. Periodic updates on progress were provided during the year.
- The Group Board Charter was updated in June 2023 and reflects the Board's overall responsibility for environmental, social and governance (ESG) issues, including matters which were previously delegated to the Board Risk & Capital Committee.
- In November and December 2023, the Group Board Audit Committee and Divisional Board Audit Committee Chairs were updated on key reporting developments, including on the recently issued International Sustainability Standard Board (ISSB) standards.
- Climate change continues to be one of the top ESG risks identified by the ESG Risk Committee as part of its annual ESG risk horizon scan.
- Membership of the Environmental and Social (E&S) GEC Sub-Committee was expanded to include selected divisional CEOs to ensure consistent information flows between Group and Divisions.
- Sustainability-related non-financial measures are to be included in the executive long-term incentive plan from 2024, as detailed in the Remuneration Report on pages 42 to 64.

Climate governance framework

Group Board

Oversight of climate-related risks and opportunities

Risk & Capital Committee

Oversees the effectiveness of the Group's risk management framework and strategies including the consideration of adequacy of awareness, understanding and management of its risks, including ESG risk.

Audit Committee

Oversees the integrity of the Group's financial reporting, including climate-related financial disclosures.

People & Remuneration Committee

Oversees the remuneration policy, including the consideration of sustainability-related non-financial measures within incentive plans.

▼ OVERSIGHT — REPORT ▲

Group Executive Committee

Develop and implement the strategic approach to climate change

Environmental and Social (E&S) Sub-Committee

Supports executive decision making related to progressing the sustainability strategy and initiatives and targets in the Sustainability Scorecard, including climate-related commitments. Comprises members of the GEC and management.

Chair: Group Executive, Corporate Affairs and Sustainability
Meetings in 2023: 7

Executive Risk Committee (ERC)

Oversees the integration of ESG risk into the risk management framework. Comprises members of the GEC. Responsibilities include risk identification, measurement and mitigation.

Chair: Group Chief Risk Officer
Meetings in 2023: 5

Group Underwriting Committee (GUC)

Supports the GEC in meeting its responsibilities to develop, implement and review the Group's underwriting and reinsurance strategy, business plan and underwriting governance, including ESG issues and opportunities.

Chair: Group Chief Underwriting Officer
Meetings in 2023: 4

▼ OVERSIGHT — REPORT ▲

Management Committees

Integration across QBE's business

Sustainability Committee

Comprises senior representatives from across the Group who support the operational execution of QBE's sustainability strategy and commitments.

Net-Zero in Underwriting Steering Committee

Oversees the net-zero in underwriting program of work reporting to the GUC and E&S Sub-Committee and comprises cross-functional representatives.

Divisional Committees

Support the E&S Sub-Committee on alignment and integration of the Group's sustainability and climate strategy across the regions, and support the Divisional Management on all related matters.

ESG Risk Committee

Assists the ERC in managing ESG risks across the Group, which includes overseeing the Environmental and Social Risk Framework and its implementation, considering and recommending policy positions on ESG risks that impact underwriting, investment and operations across the Group to the ERC, and overseeing climate scenario analysis.

Strategy

QBE has a strong focus on climate-related risks and opportunities through our sustainability strategy focus areas.

As an international insurer and reinsurer, we see first-hand the impacts of a changing climate on our customers, communities and partners. This is why two of our three sustainability strategy focus areas relate to the role we play in addressing climate risks and opportunities:

1. Foster an orderly and inclusive transition to a net-zero economy
2. Enable a sustainable and resilient workforce
3. Partner for growth through innovative, sustainable and impactful solutions

Our first focus area outlines our support for an orderly and inclusive transition to a net-zero emissions economy, aligned with limiting warming to 1.5°C by the end of 2100. We recognise the importance of addressing climate change and incorporating climate-related risks and opportunities into our decision-making, facilitating a resilient future for our business and our customers. Further, our third focus area looks at how we can explore ways to co-create solutions to meet the changing needs of our customers, and support communities affected by climate impacts and the net-zero transition. Our landscape is changing, presenting opportunities to innovate and partner on impactful solutions through our investments, supplier and broker relationships, the QBE Foundation and QBE Ventures.

Two of the top three sustainability topics identified through our sustainability materiality assessment this year were climate-related, specifically, natural disaster resilience and, climate change transition and emissions reduction.

We aim to influence through advocacy, either directly or through industry bodies and have a focus on resilience to extreme weather and emissions reduction by the insurance industry.

Through industry partnerships, we can share our experience and knowledge to stimulate investment into the area of climate finance to improve natural disaster resilience in the face of a changing climate. For example, QBE is a member of the Hazards Insurance Partnership (HIP), a partnership between the Australian Government and the insurance industry, managed by the National Emergency Management Agency. Through the HIP, the Australian Government and insurers are working together with the aim of addressing insurance affordability and availability issues as driven by natural hazard risk, to reduce risk for communities and improve Australia's resilience to natural hazards. In 2023, QBE continued to play an important role in the Insurance Council of Australia (ICA) committees and working groups, contributing to the national debate on improved land use planning, building codes, relocation of communities with repeated flood impacts, investment in community resilience to reduce risk and insurance premiums, the net-zero transition, and the value of nature for a more resilient future.

We seek to influence our stakeholders through engagement, including our supply chain, and external investment managers. We are also engaging with customers, initially focused on our Australasia, Canadian and European businesses with which we have a material commercial relationship, based on gross written premium; and who operate in higher-emitting sectors. In our own operations, we continue to progress our net-zero roadmap and this year maintained our carbon neutrality [1] for a defined inventory of greenhouse gas emissions related to our global operations [2].

To further our understanding of climate risks and opportunities, we have continued to undertake physical and transition scenario analysis. Understanding the changing nature of weather-related risks is critical to considering how we can help our customers manage their own physical risks and how we price for, and manage, the accumulation of these risks.

We have undertaken a global, economy-wide transition scenario analysis which has highlighted the risks and opportunities associated with the pathways to achieving net-zero emissions. While there is more work to be done to deepen our understanding and response to the decarbonisation journey, current data indicates QBE is broadly resilient. As a global insurer and reinsurer, we have the ability to support the transition across many industries and regions through the products and partners we work with across our insurance portfolio, investment portfolio and own operations.

Our net-zero commitments

QBE has made net-zero commitments for our own operations by 2030, and our investment and underwriting portfolios by 2050. Through these commitments we seek to contribute to the reduction of real-world emissions to mitigate the level of warming this century, and the most severe risks to our customers, society, economy and environment.

QBE's ability to meet our net-zero commitments is reliant on many factors, including the progress individuals, businesses and economies can make to transition to net-zero collectively, particularly in developed countries with net-zero commitments. It also depends on the development of new technology associated with carbon removal and emissions reduction.

1 Based on the RE100 Climate Group's materiality threshold guidance which excludes countries with small electricity loads (<100MWh/year and up to a total of 500MWh/year) and where it is not feasible to source renewable electricity via any credible sourcing options. We meet our RE100 commitment through a combination of contracts with electricity suppliers and purchasing unbundled energy attribute certificates.

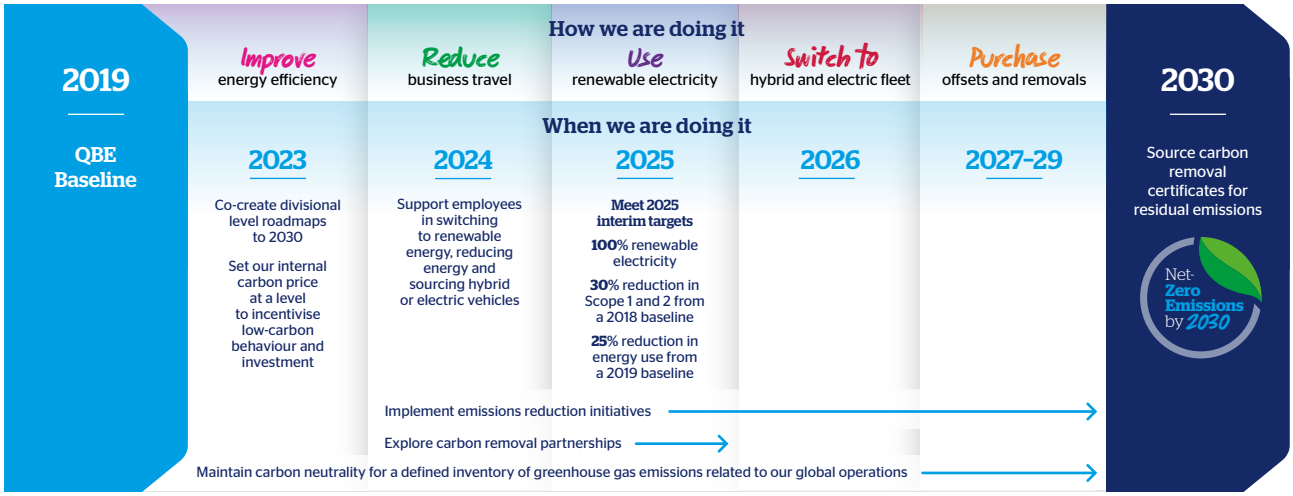
2 Defined inventory includes some purchased goods and services, capital goods, fuel- and energy-related activities, waste generated in operations, business travel, employee commuting and downstream leased assets. Please refer to our Sustainability Data Book (data book) for further information.

Operations

As a business, we've committed to net-zero operations by 2030 for our Scope 1, 2 and material Scope 3 operational emissions, as outlined in our data book [1]. In 2023, we continued to progress our commitment to net-zero by 2030 for our global operations. Across each of our divisions, we formed working groups to identify further initiatives to reduce our operational emissions. These are summarised in our net-zero operational roadmap, which will continue to evolve over time. Fuel use for our fleet vehicles contributes the most of our Scope 1 emissions, and this year we continued transitioning our fleet to low emissions vehicles. We also continued to optimise the office space we occupy in line with our new ways of working, releasing surplus floorspace and implementing energy efficiency measures across our operations.

As we provide a hybrid working environment, our commuting and working from home emissions form part of our operational emissions footprint, and we are working with our people to identify ways to reduce these emissions. This includes offering discounts on public transport in certain countries and raising awareness of government lease schemes for electric and hybrid vehicles, where available. To further embed climate considerations into operational decision making, we have set our internal carbon price at $65 per metric tonne of carbon dioxide equivalent for 2024. We will use this to support internal investment in emission reduction initiatives as well as any expenditure required to maintain our environmental commitments. In 2023, we met our RE100 target for the third year, with 100% of our electricity use across QBE offices (excluding Bermuda and Pacific Islands) certified as renewable, supporting our commitment to 100% renewable electricity by 2025 [2]. In 2023, we also maintained carbon neutrality [1] by purchasing renewable energy and fire abatement carbon offset certificates to cover residual emissions for a defined inventory [3] of greenhouse gas emissions related to our global operations, as described in our data book.

Our net zero roadmap



Supply chain

In 2023, we began climate-related discussions with strategic suppliers across our global supply chain, centred around climate risks, opportunities and measuring and reducing emissions. Initially, a pilot supplier engagement project for 55 suppliers was launched in the Australia Pacific division for the Claims and Indirect Procurement teams, and the Global IT Procurement team. Strategic suppliers were selected, based on QBE's annual spend and importance to QBE's operations. Engagement involved sending a survey out to the selected suppliers with an invitation to join an engagement session to discuss QBE's public targets and obtain details of the supplier's approach to transitioning to a low-carbon economy. Details of emissions calculations, target setting and ongoing sustainability initiatives were collected from the suppliers. This program was then extended to 74 more strategic suppliers from our global supply chain across the Procurement teams in other divisions.

Through this engagement we have identified several emission reduction opportunities that are being explored within the business. Going forward, we are focusing on addressing these opportunities and working to set targets for these suppliers by the end of 2025.

1 Please refer to our data book (Focus Area 1 and Metrics Criteria) for all definitions, calculations, assumptions and methodologies.
2 Based on the RE100 Climate Group's materiality threshold guidance which excludes countries with small electricity loads (<100MWh/year and up to a total of 500MWh/year) and where it is not feasible to source renewable electricity via any credible sourcing options. We meet our RE100 commitment through a combination of contracts with electricity suppliers and purchasing unbundled energy attribute certificates.
3 Defined inventory includes some purchased goods and services, capital goods, fuel- and energy-related activities, waste generated in operations, business travel, employee commuting and downstream leased assets.

Investments

At QBE we are driven by our purpose of enabling a more resilient future. QBE seeks to responsibly invest our proprietary assets, including our premium income, across the globe. Climate change continues to be the most material ESG risk for QBE, and addressing the risks and opportunities associated with climate change will be essential towards aligning our investments portfolio to a net-zero economy. This aligns with our first sustainability focus area, to foster an orderly and inclusive transition to a net-zero economy, and QBE aims to do this through our target setting and tracking, scaling investments in climate solutions, assessing our portfolios' exposures to climate risks and opportunities and engaging with investees to decarbonise their operations.

Net-zero in investments

Aligned with our broader climate strategy and our commitment to impact and responsible investments, QBE became a member of the Net Zero Asset Owners Alliance (NZAOA) in 2020, joining a growing group of institutional investors committed to transitioning their investment portfolios to net-zero emissions by 2050. To deliver on our commitment to transition our investment portfolio to net-zero by 2050, we set our initial 2025 intermediate targets in 2021 on sub-portfolio, engagement and financing the transition metrics, aligned with the NZAOA Target Setting Protocol.

In 2023, we have progressed towards our 2025 intermediate targets. We continued to invest in climate solutions through an addition of $117 million in green bonds in our portfolio and in 2024 we will explore strategies to set our 2030 target. For sub-portfolio [1], we have continued to reduce our equities carbon emissions by moving from passive strategies via exchange traded funds to tailored mandates with external developed market equity managers. Engagement continues to be a critical component of our net-zero approach, and we prioritise engagement with our highest emitters in our investment grade corporate credit portfolio, and all external managers, with a key focus on our net-zero 2050 commitment and transition planning. A further update on our progress can be found in the metrics and targets section on page 33, with further information on our engagement strategy and outcomes below.

Engagement

As asset owners, we have a unique role at the top of the investment value chain, and we acknowledge both the responsibilities and opportunities that come with this role. Because of this, engagement is our preferred method of eliciting impactful change as we believe that engaging in conversation with our investees to implement sustainable practices in the transition to net-zero will ultimately be more impactful than divestment.

In 2023, we continued to engage with all our external managers across key climate-related issues and have seen increased ambition in net-zero commitments, enhancement to scenario analysis capabilities and Scope 3 measurement. For our top 20 highest emitters in our investment grade corporate credit portfolio, we focused on challenging them to set short-, medium-, and long-term science-based emissions reduction goals. We are also in discussion with them on a reduction in Scope 1, 2 and material Scope 3 emissions and the formulation of a decarbonisation strategy with clear demonstration that capital expenditure is consistent with achieving net-zero emissions by 2050.

Engagement

All external managers
across our investment portfolio

20 highest emitters
in our investment grade corporate credit portfolio

Financing the transition

↑ 5% by 2025

of assets under management in climate solutions investments

Carbon intensity reduction

↓ 25% by 2025

of our Scope 1 and 2 emissions in our equity portfolio

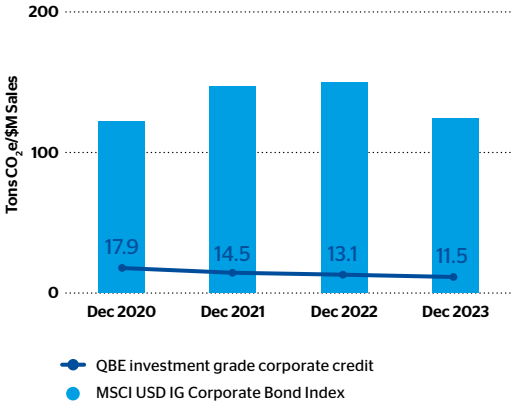
1 Sub-portfolio is one of the four categories of the Net Zero Asset Owners Alliance target setting approach.

Climate analysis

We have continued to undertake climate-related analysis of our investments portfolio, such as carbon footprinting and high emitting sector exposure, to assess our overall exposure to climate risks and opportunities. In 2023, as a result of the implementation of our new investments system, we have been able to undertake analysis on additional asset classes due to an increase in data coverage. As data coverage continues to increase and mature, we too will look to undertake additional analysis.

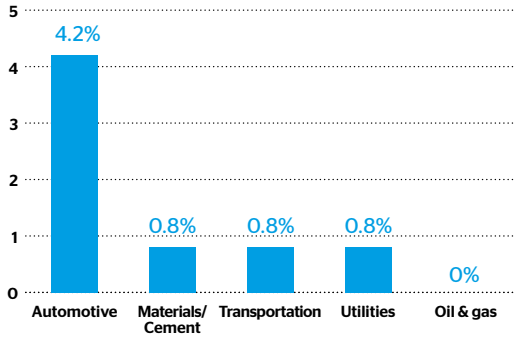
Carbon footprinting

We have assessed the carbon footprint [1] which remains in line with our commitment to maintaining a low carbon risk rating [2]. We use weighted average carbon intensity (WACI), which calculates the weighted average emissions of a portfolio normalised by revenue and measures our portfolio's exposure to carbon-related potential market and regulatory risks. Our WACI of 11.45 tCO_2e/$m sales is significantly below the MSCI USD Investment Grade Corporate Bond Index of 124.4 tCO_2e/$m sales due to our low exposure to high-emitting sectors.



High-emitting sector exposure

To assess our transition risk, we have also looked at the exposure to high-emitting sectors [3]. We expanded our analysis in 2023 to include our high yield debt, emerging market debt and developed market equities portfolios, in addition to investment grade corporate credit. Understanding our exposure to these industries will enable us to continue to target our engagement strategies. Our transition risk remains low, with 6.6% of our portfolio exposed to these high-emitting sectors, as a result of our fossil fuel exclusions screening criteria.



1 Our carbon footprinting analysis has been completed on the Scope 1 and 2 weighted average carbon intensity of our investment grade corporate credit portion of our AUM.
2 Carbon risk rating measures exposure to carbon intensive companies. MSCI Carbon Risk is categorised as Very Low (<15), Low (15 to <70), Moderate (70 to <250), High (250 to <525) and Very High (>=525).
3 We use Global Industry Classification Standard (GICS) for our high-emitting sector classification, a decision which is informed by the NZAOA Target Setting Protocol and its annex.

Underwriting

Although QBE withdrew from the Net Zero Insurance Alliance (NZIA) in May 2023, QBE's focus on our sustainability agenda remains unchanged and continues to be driven by our purpose of enabling a more resilient future. Our commitment of a net-zero underwriting portfolio by 2050 aligns with our commitment to a net-zero investment portfolio by 2050 and net-zero in our own operations by 2030. This is subject to the availability of relevant methodologies, data quality and external factors such as development of technologies.

Our net-zero in underwriting strategy focuses on three important areas:

1. **Customer engagement and insights**: understanding our priority customers' net-zero ambitions and plans.
2. **Innovative products and services**: exploring opportunities to further expand our offerings in support of the transition.
3. **Emissions modelling and tracking**: understanding and tracking the emissions of our underwriting portfolio and how we can identify and address material data gaps.

Customer engagement and insights

Engagement is key because our ability to reach a net-zero underwriting portfolio is dependent on our customers' ability to reduce their own emissions and ultimately become net zero. Initially, we are focused on customers in our Australasia, Canadian and European businesses which:

- we have a material commercial relationship with, based on gross written premium; and
- operate in higher-emitting sectors (e.g. fossil fuel extraction and use; transportation; agriculture), defined as priority customers.

Engagement with customers allows us to better understand how we can help support them to reduce their emissions. We look to engage at least 50 priority customers at the time of renewal to gather data that we have not previously captured to understand their net-zero ambitions and how they plan to achieve these through decarbonisation efforts.

Customer insights are invaluable in refining our net-zero underwriting approach, helping us to identify areas for improvement, guiding product and service innovation, and aligning our efforts with customers' expectations by co-creating solutions.

Innovative products and services

In July 2023, we took another step towards aligning our underwriting capabilities with the transition by launching insurance for Australian renewable energy projects. We were the first insurer in the Australian market to offer 'cradle to grave' coverage across a project's lifecycle: from construction of renewable energy infrastructure, through to operation, upgrading and decommissioning.

Emissions modelling and tracking

We support emissions reporting to provide transparency and to enable progress on transition planning across our value chain, but recognise that poor data capture and quality may result in inaccurate estimations of emissions and of progress on reductions. Insurers, such as QBE, have a material data challenge in measuring and disclosing attributable emissions in relation to their underwriting portfolios as policyholders can range from small and medium enterprises (SMEs), with limited publicly available emissions data, through to large corporates, where emissions disclosures are yet to be standardised. The initiative focuses on commercial lines and private motor, subject to available methodologies, data and regulations.

Our work is ongoing, as emissions data coverage and quality is expected to continue to improve globally, driven predominantly by growth in sustainability reporting regulations. QBE remains focused on supporting an orderly and inclusive transition to a net-zero economy through better data and reporting to inform decision-making.

Catastrophe modelling

QBE has a global Catastrophe Accumulation Management team. This year we established a Catastrophe Modelling Research team, which will advance our in-house ability to validate and customise our models, including considerations for potentially unaccounted impacts of climate change. We also continue to collaborate with the external partners (model vendors, reinsurance brokers, science community) to stay across advancements in science and technology. The Catastrophe Accumulation Management team regularly refreshes the catastrophe models to keep them aligned with the evolving extreme weather risk we are facing. The new research team has increased rigour and scientific knowledge to the model maintenance process.

Our approach to managing climate risk in underwriting

We expect climate change will increasingly impact the frequency and severity of weather-related natural catastrophes over the long term. In the short term, it is often difficult to distinguish the impact of climate change versus the normal variability in weather and natural catastrophes. Our underwriting approach, implemented through the business planning process, aims to diversify and manage insurance risks accepted and reduce volatility of returns. Climate change is changing our approach to plan for catastrophe risk as outlined below.

Portfolio management

Annual renewability

As our insurance policies typically renew annually, we can continuously adjust our pricing or underwriting appetite.

Pricing

The Catastrophe Accumulation Management team provides technical catastrophe pricing for a large number of commercial property policies. Pricing factors are refreshed annually to reflect current catastrophe accumulations, reinsurance costs, required return on capital, and use the best updated catastrophe models available. Policies are modelled individually based on detailed location level information. With the continued elevated catastrophe activity, there is an opportunity to better align our technical pricing on more recent activity rather than longer-term average annual losses.

Underwriting appetite

We reduced our property exposure to hurricane risks in North America given its significance in terms of its exposure to physical climate risk and driving potential losses for our business, and we are leveraging our in-demand QBE Re catastrophe capacity to gain access to ancillary lines to better manage volatility. As part of our underwriting and investment process, QBE applies exclusions to activities that are outside of our risk appetite, depending on the specific conditions and circumstances of the risk being evaluated. For example, through our positions in the Environmental and Social Risk Framework we have committed to reduce our exposure to higher transition risks in the energy sector including no new coal and oil sands projects.

Reinsurance

In the short term, we manage the volatility of natural catastrophe claims by deploying a comprehensive Group catastrophe reinsurance program and considering a wide range of event frequency scenarios in our capital planning. In the reinsurance market, we continue to see a reduced appetite to provide coverage for a frequency of catastrophe events which is reflected in recent changes to our reinsurance structure. These dynamics are factored into our pricing strategy.

Catastrophe allowance

To reflect the elevated level of catastrophe activity experienced in recent years, we aim to establish our annual catastrophe allowance above the long-term average of our modelled catastrophe costs, helping to improve the reliability and consistency of our results. In 2023, despite a year of heightened catastrophe costs and extensive secondary peril activity for the industry, our catastrophe costs of $1,092 million were below the Group's allowance of $1,175 million. In 2024, our catastrophe allowance is $1,280 million.

Climate-related risks and opportunities

As one of the world's largest insurance and reinsurance companies, with operations in all major insurance markets, there are a range of risks and opportunities associated with climate change that will present over the short (0–3 years), medium (3–8 years) and long (8+ years) term. These timeframes align with the shorter time horizons for business planning and the longer time horizons considered in scenario analysis.

The table below provides a summary of the key risks and opportunities presented by climate change, and these are supported by our climate scenario analysis which is outlined on page 29, as well as our risk processes which are outlined on page 32. These risks and opportunities are used to guide our strategy and risk management as well as the development of products and services, and investment decision-making. A summary of our strategic responses are identified for each risk and opportunity below.

RISKS AND OPPORTUNITIES	RISK CATEGORY	POTENTIAL IMPACT	STRATEGIC RESPONSE AND RESILIENCE
Risk: Significantly increased frequency and severity of events related to certain perils and regions, particularly flood in Europe and Australia, and cyclones in North America.	Physical	**Timeframe:** Short to medium term **Impact:** Increased claims and reinsurance costs.	• Reduced exposure to North America hurricane risk as part of portfolio optimisation initiatives. • Manage natural catastrophe volatility by considering a wide range of event frequency and severity scenarios in capital planning, and through the purchase of reinsurance. • Establish catastrophe allowance as part of the business plan with input from modelled natural catastrophe scenarios.
Risk: Potential increase in climate-related litigation for our customers.	Transition	**Timeframe:** Short to medium term **Impact:** Increased claims, reputation risk.	• Monitor policy wordings and climate-related claims.
Opportunity: Better support our customers through enhancing existing, and offering new products and services as market demand shifts and technology evolves as part of the transition to a net-zero economy.	Transition	**Timeframe:** Short to medium term **Impact:** Better support our customers in transition towards a net-zero economy.	• Established the Sustainable Energies Unit within our International Division in 2022, and in 2023 launched the renewable energy solutions in our Australia Pacific Division.
Opportunity: Support the financing of the transition through our investment decisions and opportunities.	Transition	**Timeframe:** Short to medium term **Impact:** Support the transition to a net-zero economy.	• Increase our exposure to climate solution investments to 5% of assets under management to support financing the transition. • Evaluate potential opportunities including investing in industries that contribute to reducing emissions, for instance forestry, as well as energy efficiency and exploration of carbon markets.
Opportunity: Reduce our operational emissions, and potential cost savings, through optimising building energy efficiency, changes to energy sources, and transition to a hybrid and electric fleet.	Transition	**Timeframe:** Short to medium term **Impact:** Support the delivery of a net-zero economy, reduced operating expenses.	• Continue to deliver on our net-zero operational commitments to 2025 and refresh our roadmap to net-zero operations by 2030 across Scope 1, 2 and a defined inventory of Scope 3 emissions. • Introduced an internal carbon price.
Risk: Regulatory pressures continue to grow, as policy action and stakeholder expectations around disclosures evolve.	Transition	**Timeframe:** Short to medium term **Impact:** Increased operating expenses; reputational damage from failure to apply appropriate standards.	• Develop a gap assessment and roadmap for adopting Australian Sustainability Reporting Standards and other jurisdiction specific requirements. • Closely monitor climate-related regulations which impact QBE's investments, underwriting and operations. • Continue to enhance our assessment on climate-related impacts and improve the quality and availability of data.

Risk category: Physical Transition **Timeframe:** Short to medium term Medium to long term

Scenario analysis

Physical	Transition

Scope of portfolios

Physical	Transition
Underwriting (property) Investment (unlisted property funds)	Underwriting (casualty, financial lines) Investment (fixed income, high yield debt, emerging market debt)

Scenarios

Physical	Transition
less than 2°C, low emissions consistent with Representative Concentration Pathway (RCP) 2.6 **greater than 2°C** (3.2°C to 5.4°C), high emissions consistent with RCP 8.5	**Network for Greening the Financial System**

Orderly	Net zero 2050	**1.5°C**
	Below 2°C	**1.7°C**
Disorderly	Divergent net zero	**1.5°C**
	Delayed transition	**1.8°C**
Hot house world	Nationally Determined Contributions	**2.4°C**
	Current policies	**3.0°C+**

Timeframe

Physical	Transition
2030, 2050 and 2090	2025, 2030, 2040 and 2050

Scope of assessment

Physical	Transition
Hurricane/cyclone/typhoon Australia, Japan, North America **Convective storm/hail** Australia, North America **Windstorm** Europe **Flood** Australia, Europe **Bushfire** Australia **Wildfire** North America	**The analysis considers the impact of climate change on the profit of each sector globally.**

Climate scenario analysis

Catastrophe models	Capital models and planning	Reinsurance programs
Business planning Portfolio management		

Physical risks and opportunities

Climate change is one of several drivers of the increasing costs of natural disasters globally. This can create volatility in QBE's profitability and is addressed through modelling and understanding the risk to grow a portfolio with diversity of location and risk, through our pricing and risk selection and through our reinsurance and capital management. The global insurance market pricing for natural disaster risk has been increasing for a range of reasons including concentration of properties in areas prone to risk, increasing building costs and increasing scarcity of labour and materials, especially where the same region is impacted over the short term. Increasingly, regulators of financial services industries are seeking to understand how climate risk can contribute to an insurance protection gap impacting a greater proportion of the population. As insurance often enables investment and credit flows, a growing protection gap can contribute to financial challenges through compounding factors such as a series of natural disasters, with sea level rise in the future.

QBE is investing in models and talent to better manage our risk and sharing our knowledge and expertise to attract investment towards adaptation and emissions reduction for a more resilient future.

To better understand the potential impact of climate change on specific perils and regions, over the past few years, we have partnered with catastrophe modelling vendors Risk Management Solutions, Inc. and AIR Worldwide, and with Aon to analyse the scientific literature related to the potential impact of climate change on specific perils and regions. We have then enhanced our catastrophe models to better understand how extreme weather risk may evolve as the climate continues to change over the next 30+ years. The scope, scenarios and timeframes analysed are summarised on page 29.

These scenarios do not represent forecasts of the impact of climate change, and instead are indicative of the potential outcomes assuming the scenario occurs.

Following the conclusion of our analysis, our catastrophe models were recalibrated to reflect the potential change indicated by scientific literature in order to determine the potential impact to net claims costs under each scenario. We have concentrated our analysis on the perils and regions relating to QBE's extreme weather exposure.

QBE's property exposures most impacted by shorter-term physical risks of climate change are typically driven by exposure to North American hurricanes, and perils such as floods, bushfires and convective storms. The evaluation of the impact is supported by our accumulations management process, including regularly updated natural perils models, monitoring of property accumulations across the portfolio to simulate weather-related loss potential, budgeting, price setting, and the use of reinsurance to protect capital and reduce earnings volatility.

Our analysis concludes that the impact of climate change will differ significantly across both regions and the type of catastrophes. From the perils and regions studied so far, flood claims in Europe and Australia potentially could be the most impacted; while cyclones and convective storms in North America and Australia may take a little longer (mid-century) before the impact of climate change becomes more significant.

We have experienced a series of low probability events, including Cyclone Gabrielle and the North Island flooding events in New Zealand, alongside a series of convective storms in North America. However, we remained within our planned catastrophe allowance for 2023 and continue to plan for elevated catastrophe activity.

Transition risks and opportunities

In 2022, we refreshed our climate transition scenario analysis to align with six of the latest Network for Greening the Financial System scenarios, supported by an external consultant. The results show an estimated sectoral impact, measured based on percentage change in profit over 2025, 2030 and 2050. This was used to better understand which segments of our insurance and investment portfolios may be exposed to high growth or contraction sectors as a result of the transition to a net-zero economy.

Investments

We assessed QBE's core fixed income (excluding cash and cash equivalents), high yield debt and emerging market debt (collectively referred to as 'in-scope assets'), which represents 88% of Group Investments assets under management (AUM).

The sector impacts shown against the investment portfolio are based on the 'divergent net zero' scenario, which aligns with our commitment to net-zero, and assumes a disorderly transition which is more aligned with the current state of global markets and regulation around climate transition.

In relation to the in-scope assets, QBE continues to be resilient with respect to climate transition risks as our investment portfolio has limited exposure to highly impacted sectors. 83% of QBE's in-scope assets are exposed to the Finance and Insurance and Central Banks/Sovereign sectors, which are not expected to be significantly impacted by the climate transition.

Climate change transition and emissions reductions are included in our broader sustainability considerations within our investment decision-making process.

Our overall exposure to climate-related risks and opportunities is assessed through further analysis of our investments portfolio, including carbon footprinting and reviewing residual exposures to high-emitting sectors. Further details are outlined on pages 24 and 25.

Underwriting

The ability to classify the Group's underwriting data at a sectoral level remains a challenge and we continue to make investment in data, people and systems to allow us to better understand our underwriting exposure at a sectoral level.

We are developing our capability for baselining and measuring insurance-associated emissions based on industry methodologies, and approaches to address data gaps, as this will be a key input for developing our transition plan.

Transition risks result from the relative uncertainty created by the global shift towards a more sustainable, net-zero economy. Transition risks are very broad in nature and can be difficult to quantify or model. For instance, regulatory, geopolitical, and social pressures can create material impacts on the operations of a business, its reputation, and the value of its assets.

QBE covers risks across the globe and across many sectors. Our analysis continues to focus on where we have a heightened transition risk as well as how we can support the transition. This includes our evolving product offering, for example, the 2023 launch of the renewable energy offering in Australia. Transition risk analysis may also support us in reviewing our underwriting strategy and portfolio mix.

Further details are outlined on pages 26 and 27.

Risk management

QBE manages climate risk through integration into decision-making and our risk management processes and frameworks.

QBE has a Risk Management Strategy to ensure we achieve our strategic priorities while also establishing effective governance and fundamental principles for the management of risk across all levels of the organisation. Climate change is a component of ESG risk, which is classified as a strategic risk sub-class in our Risk Management Strategy.

Climate risk management is overseen by the ESG Risk Committee, the Executive Risk Committee at a management level and the Board Risk & Capital Committee at a Board level.

Identifying and assessing climate risks

We have a range of tools and processes to assist with identifying and assessing climate risks.

	UNDERWRITING	INVESTMENT	SUPPLY CHAIN	OPERATIONS
Environmental and Social (E&S) Risk Framework (application, referrals, monitoring)	✓	✓	–	–
Climate scenario analysis	✓	✓	–	–
Risk and Control Self-Assessments	✓	✓	✓	✓
ESG risk horizon scan	✓	✓	✓	✓

Each year we undertake an ESG risk horizon scan to identify and assess risks and understand how we are mitigating our top ESG risks. Climate change continues to be our top ESG risk. Climate change has also been identified again this year as one of the top risks facing the organisation, as set out in the risk management section on pages 16 to 19.

QBE's Group Risk and Control Self-Assessment (RCSA) Standard sets minimum requirements for identifying, documenting, and assessing key risks that QBE faces in delivering our strategic and business objectives. The RCSA process also requires an assessment of the effectiveness of the controls in place to manage those risks. This year we have documented the climate-related risks and controls which will be drawn upon in RCSAs going forward.

Scenario analysis is a key tool we use to better understand the future potential impacts of climate change from a physical and transition perspective. We have undertaken extensive climate scenario analysis and the results have been an input into a range of strategic and risk processes including catastrophe models, executive briefings, business planning, net-zero planning and portfolio optimisation.

Managing climate risks

We use a range of tools and processes to manage and monitor our climate risks, across our underwriting, investment, supply chain and our own operations. This year we have introduced an ESG risk dashboard to support management reporting with quantitative indicators, where data allows; and we will continue to evolve the dashboard as our data coverage and quality improves.

	UNDERWRITING	INVESTMENT	SUPPLY CHAIN	OPERATIONS
Risk appetite as per E&S Risk Framework	✓	✓	–	–
Management reporting	✓	✓	✓	✓
Engagement on climate transition and net-zero	✓	✓	✓	–
Business continuity plans	–	–	–	✓
Portfolio management including annual renewability, pricing, underwriting appetite	✓	–	–	–
Catastrophe allowance and reinsurance	✓	–	–	–
Greenwashing risk principles	✓	✓	✓	✓

Metrics and targets

We continue to set relevant targets and assess our progress and performance against them.

MEASURE	TARGET	2023	2022	STATUS
Operations				
Energy use (GJ)	25% reduction by 2025 *2019 baseline*	**182,978** **▼ 24%**	192,429	**On track**
Renewable electricity use (MWh)	100% by 2025 [1]	**17,154** **100%**	18,513	**Achieved**
Scope 1 and 2 emissions (1.5°C trajectory aligned science-based target) (tCO_2e)	30% reduction by 2025 *2018 baseline*	**7,715** **▼ 75%**	7,732	**Achieved**
Scope 1, 2 and material Scope 3 emissions (tCO_2e) [2]	Net-zero operational emissions (Scope 1, 2 and material Scope 3) by 2030 *Restated baseline* [3]	**27,070** **▼ 10%**	23,627	**In progress**
Underwriting				
Customer engagement	Engage at least 50 priority customers at time of renewal in our Australasia, Canadian and European businesses with which we have a material commercial relationship, based on gross written premium; and who operate in higher emitting sectors	**Ongoing**	N/A	**New target**
Investments				
Engagement	• All external managers across our investment portfolio • 20 highest emitters in investment grade corporate credit portfolio	**Achieved**	Achieved	**Achieved**
Financing the transition	Increase our climate solutions investments to 5% of assets under management by 2025	**4.6%** [4]	4.8%	**On track**
Carbon intensity reduction	25% reduction by 2025 of Scope 1 and 2 emissions in equity portfolio [5]	**In progress**	In progress	**On track**
Low carbon risk rating	Maintain a low carbon risk rating in the Scope 1 and 2 weighted average carbon intensity of our investment grade corporate credit portfolio [6]	**11.45** tCO_2e/$m sales	13.1 tCO_2e/$m sales	**Achieved**

1 2023 percentage of renewable electricity is based on the RE100 Climate Group's Materiality Threshold guidance which excludes countries with small electricity loads (<100 MWh/year and up to a total of 500 MWh/year) and where it is not feasible to source renewable electricity via any credible sourcing options. We meet our RE100 commitment through a combination of contracts with electricity suppliers and purchasing unbundled energy attribute certificates. This is the total percentage of renewable electricity sourced, not a year-on-year percentage change.

2 Net-zero emissions on material Scope 3 includes emissions related to business travel, fuel and energy-related activities and capital goods. Refer to the 2023 Sustainability Data Book – Metrics Criteria for details.

3 In 2021, QBE committed to net-zero 2030 for Scope 1 and 2 emissions for our global operations, from a 2019 baseline year. This target was extended to include material Scope 3 emissions in 2022. Due to the inclusion of additional Scope 3 emissions sources such as those from fuel and energy-related services and capital goods in 2022, we have used 2022 as a baseline for QBE's material Scope 3 2030 commitment.

4 Our infrastructure assets contribution to Climate Solutions is calculated as at 30 September 2023.

5 We have worked with preferred managers to ensure these are considered in mandate design and implementation, and will continue to track and monitor.

6 Carbon risk measures exposure to carbon intensive companies. MSCI Carbon Risk is categorised as Very Low (<15), Low (15 to <70), Moderate (70 to <250), High (250 to <525) and Very High (>=525).

More details on QBE's Sustainability Framework and our performance and progress are available in QBE's 2023 Sustainability Data Book.