Climate change – our approach to risks and opportunities

QBE's approach to climate change is being embedded into our strategic priorities and risk management framework and supports our purpose of enabling a more resilient future. One of our three sustainability strategy focus areas is to foster an orderly and inclusive transition to a net-zero economy which directly supports our climate activities. We continue to develop our metrics, taking data availability and reliability into account, as well as set targets and make progress against our commitments.

Governance

The Board approves QBE's strategic priorities, which includes consideration of climate risks and opportunities. The Group Executive Committee (GEC) is accountable for developing and implementing the strategy.

The Board and the GEC receive regular reporting on sustainability issues and our progress towards our sustainability and climate-related goals and targets, as outlined in our 2022 Sustainability Scorecard. The GEC is supported by the Environmental and Social GEC Sub-Committee which focuses on environmental and social strategic issues including climate change. The Sub-Committee is chaired by our Group Executive, Corporate Affairs and Sustainability and meets at least every two months.

As part of the oversight of the Group's Risk Management Strategy, the Board Risk & Capital Committee (BRCC) and the Executive Risk Committee (ERC) receive regular reports on environmental, social and governance (ESG) risks, including deep dives on climate change risk, QBE's approach to managing this risk, and our scenario analysis for 2022. The ESG Risk Committee continues to play a key role in supporting the ERC in its identification and management of ESG risks, including climate change. The ESG Risk Committee is chaired by the Group Chief Risk Officer and has oversight of the Environmental and Social Risk Framework and its implementation, as well as climate scenario analysis and climate disclosures.

Our Board and Executives participate in regular training to enhance climate change capability. In 2022, the BRCC and ERC joined externally facilitated education sessions covering the evolving and accelerating liability landscape, board and management duties and exposures, reporting and disclosure, and regulatory expectations.

Strategy

QBE has committed to be a net-zero emissions organisation across our operations by 2030, and across our underwriting and investment portfolios by 2050. Addressing the risks and opportunities associated with climate change is a priority for QBE and our stakeholders.

In 2022, climate change was a key consideration in the evolution of our sustainability strategy and is highly relevant to our three areas of focus:

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**

We recognise the importance of addressing climate change and incorporating climate-related risks and opportunities into our strategic priorities, business planning and decision-making to meet our environmental and social commitments and enable a resilient future for our business and our customers.

To underpin 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 physical risks and how we price for and manage the accumulation of this risk.

This year, 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. There are environmental and social benefits to an orderly transition to 1.5^{O}C through greater economic stability and lower physical risks of climate change. 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.

QBE's sustainability commitments in relation to these focus areas for 2023+ are detailed in our 2022 Sustainability Report.

QBE Foundation

This year, QBE announced a three-year extension to its global disaster relief and climate resilience partnership with two of the world's leading humanitarian agencies, Red Cross and Save the Children.

This partnership enables rapid mobilisation of funds for relief activities during disasters and supports preparedness and climate adaptation initiatives for communities around the world. We work together with communities to build resilience and save lives by improving their capacity to prepare, anticipate, respond and recover from disasters.

To date, the partnership has been activated in 19 of the 27 countries in which QBE operates and has reached over 490,000 people through the deployment of $2.7 million in funding and a further $2 million in investments through the Save the Children Impact Investment Fund. Our strategic framework outlines four key pillars: Disaster Preparedness and Risk Reduction, Anticipatory Action and Mitigation, Disaster Response and Disaster Recovery, underpinned by the Sendai Framework for Disaster Risk Reduction, UN Sustainable Development Goals and our organisational policies and frameworks.

Our strategy seeks to address:

Building community resilience

Local communities facing increased risk of natural disasters and emergencies are supported to effectively implement systems and practice

Disaster financing

By developing forecast-based funding models, we can minimise impact and reduce human suffering and losses from disasters

Underinsurance

Supporting customers to prepare for disasters and avoid significant impacts

Responding to disasters

Communities across 27 countries are supported to respond to disasters effectively

Scenario **analysis**

Physical | **Transition**

Scope of portfolios

Physical:

Underwriting (property)
Investment (unlisted property funds)

Transition:

Underwriting (casualty, financial lines)
Investment (fixed income)

Scenarios

Physical:

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

Transition:

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: 2030, 2050 and 2090

Transition: 2025, 2030, 2040 and 2050

Scope of assessment

Physical:

Hurricane/ cyclone/ typhoon	Australia, North America, Japan
Convective storm/hail	Australia, North America
Windstorm	Europe
Flood	Australia, Europe
Bushfire	Australia
Wildfire	North America

Transition:

The impact of climate change on sectoral profit at a global level.

Climate scenario analysis

Catastrophe models
Business planning
Portfolio optimisation
NZIA target setting

Capital models and planning

Reinsurance programs

Physical risks and opportunities

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.

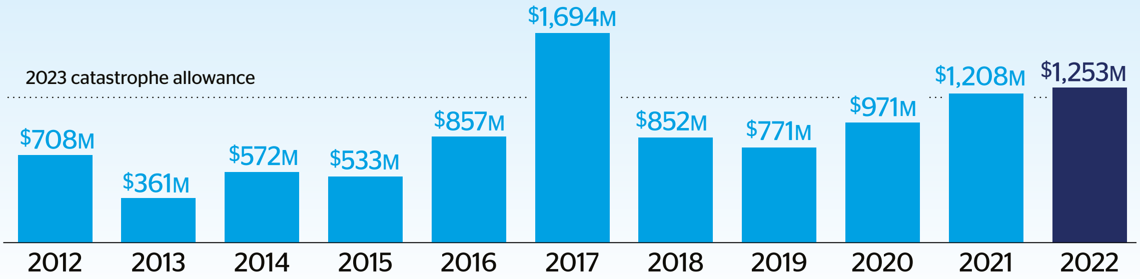
Our analysis concludes that the impact of climate change will differ significantly across both regions and the type of catastrophes. From the perils and regions studied so far, flood claims in Europe and Australia potentially could be the most impacted, while cyclones and convective storms in North America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

As part of our portfolio optimisation, we have reduced our exposure to North American hurricane given its significance in terms of its exposure to physical climate risk and driving potential losses for our business.

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 short-term variability in weather and natural catastrophes. QBE looks to manage for natural catastrophe volatility by considering a wide range of event frequency and severity scenarios in our capital planning. We also purchase a comprehensive Group catastrophe reinsurance program. Our catastrophe allowance in 2023 has been established at well above the long-term average of our modelled catastrophe costs. We effectively planned for the elevated level of catastrophe activity experienced in recent years.

2023 catastrophe allowance 'as-if' analysis

Annual catastrophe claims restated using 2023 reinsurance program



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 [1].

We then overlayed QBE's exposure, where data allowed, 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.

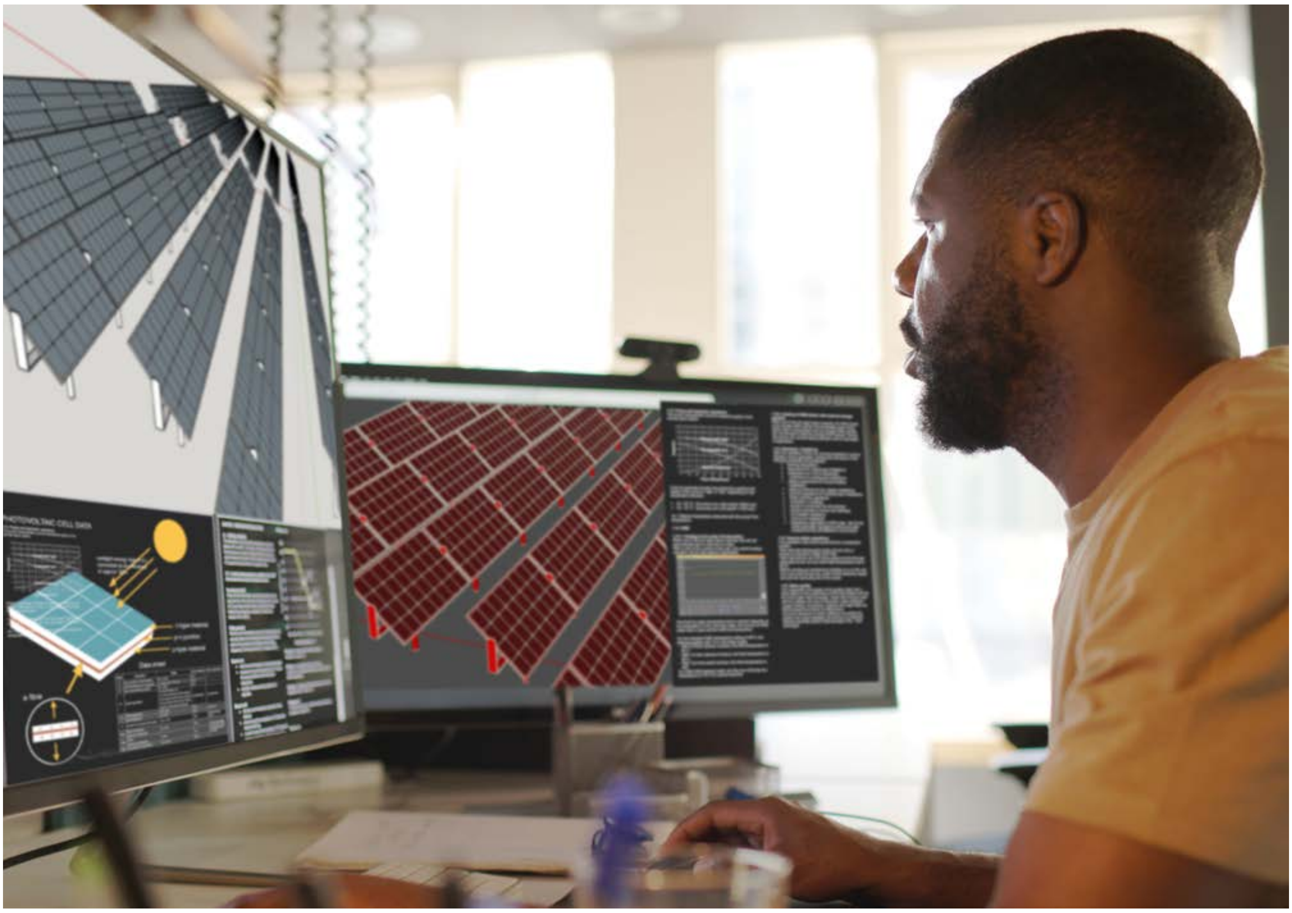
For investment, this was the fixed income (core fixed income (ex cash and cash equivalents), high yield, emerging market debt and private credit) portfolio and for underwriting it was the casualty and financial lines portfolios. The portfolios initially covered represent the material proportion of the underwriting portfolio that is likely to be affected by transition risk. Our property portfolio is more exposed to physical risk and we assess that separately, as outlined in this report.

In 2022, we have made a significant investment in data, people and systems to allow us to better understand our underwriting exposure at a sectoral level.

This work is ongoing as it supports our insurance-associated emissions baseline and target setting. We expect that data coverage and reliability will improve over time.

QBE has a diverse portfolio and operates in many industry sectors and geographies. In relation to the in-scope portfolios, QBE continues to be resilient with respect to climate transition risks as both our investment and underwriting portfolios broadly have limited exposure to highly impacted sectors.

There is an expectation that governments will follow through on their own commitments under the Paris Agreement and the transition will require insurance capacity to support activities essential to the global economy and society. We need to work with the most impacted industry sectors to transition in an orderly and inclusive manner to achieve a net-zero economy.



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[1] Further details on the scenarios is available here: www.ngfs.net/ngfs-scenarios-portal/

Underwriting

In January 2022, we announced the commitment to transition our insurance and reinsurance underwriting portfolios to net-zero GHG emissions by 2050. We also became the first listed Australian insurer to join the NZIA, a group of leading insurers and reinsurers that have pledged to help accelerate the transition to net zero within insurance and reinsurance underwriting portfolios.

This cemented our ongoing commitment to help support the transition of our customers, encouraging businesses to decarbonise and adopt more sustainable business models. NZIA's key objective is to set a common global standard to assess, understand and disclose the emissions intensity for underwriting, and a protocol based on science-based targets. This establishes a foundation and enables the insurance industry to set interim decarbonisation-related targets every five years, with the first interim target being 2030, and begin the process of annual reporting.

Our involvement in the NZIA has enabled participation within the working groups centred around delivering the NZIA's key objectives. QBE has been part of the collaborative working group between PCAF and NZIA to develop the first GHG gas accounting and reporting standard to measure and disclose insurance-associated emissions for specific commercial lines classes of business and private motor, published in November 2022. QBE led the reporting and metrics sub-working group on the methodology work, is a member of the NZIA target-setting protocol working group that commenced in September 2022 and was co-lead for the focus group on setting the overall emissions target for the NZIA Target-Setting Protocol. In January 2023, the NZIA published the Protocol and QBE is expecting to develop and disclose interim targets in line with this Protocol.

This is uncharted territory for the insurance industry, and we recognise that there is a material gap in emissions data reported, especially by private corporations and small to medium enterprises. Despite these challenges, we expect, with appropriate engagement and changes in government policy, this should improve over time.

We are also cognisant that the world needs a sustained shift in energy supply away from fossil fuels and towards low carbon. The situation in Ukraine and its impact on energy supply further underlines the need to find alternative, sustainable sources of energy. Our net-zero re/insurance strategies consider the social consequences, aligned to our sustainability focus area of fostering an orderly and inclusive transition to a net-zero economy. We recognise that not all countries or communities can be expected to transition at the same pace. Our internal target setting strategies will seek to look to minimise these disparities and achieve overall emissions reductions in line with our commitment.

Refer to the 2022 Sustainability Report for more information.

Insuring the transition

In 2022, QBE launched a Sustainable Energy unit to support customers as they transition to lower carbon energy. The unit aligns QBE underwriting capabilities with the growing range of companies and energy systems that form part of a rapidly changing energy mix throughout the world.

Helping our customers adapt

As a business, we continually explore new ways to support our customers on their mitigation and adaptation journeys.

To encourage green home ownership and increase affordability of green home ownership, this year we launched a new benefit for lenders' mortgage insurance (LMI) customers. Customers who purchase or refinance a home with a green mortgage (through our participating partners) receive a premium reduction for their LMI. 100% of the LMI premiums for green mortgages are contributed to our Premiums4Good initiative.

Operations

In 2022, we continued to deliver on our net-zero roadmap and broaden our focus, extending our 2030 commitment to net zero for our global operations to include material Scope 3 emissions (in addition to Scope 1 and 2 emissions). We have also committed to commencing engagement on net-zero progress with large suppliers in our global supply chain, with the goal of setting targets for those large suppliers by 2025 and developing our approach for 2023 to 2025.

Further details on our approach to net zero within our operations is available in the 2022 Sustainability Report.

ICA climate change roadmap

To support broader action across the Australian general insurance sector, QBE has, through our role as co-chair of the Insurance Council of Australia's (ICA) Net-Zero Working Group, worked with our peers and the ICA to develop a climate change roadmap for the sector. The roadmap provides guidance for ICA members on the role they can play in the decarbonisation of the Australian economy and is aligned with our broader global commitments, including our commitments through the NZAOA and NZIA.

Investments

Net-Zero Asset Owner Alliance

Aligned with our broader climate strategy and our commitment to impact and responsible investments, QBE was the first Australian-headquartered insurance company to become a member of the NZAOA in 2020, joining a growing group of institutional investors committed to transitioning their investment portfolios to net-zero emissions by 2050. 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. In 2022, we have continued to utilise guidance, tools and support of the NZAOA, as well as collaborated with other members, both one on one, and in the relevant NZAOA working groups with which QBE is involved. In 2021, to deliver on our commitment to transition our investment portfolio to net zero by 2050 and set our initial intermediate targets, we established cross functional working groups. In 2022, these working groups continued this work with a key focus on implementation.

Engagement

All external managers

across our investment portfolio

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20 highest emitters

in our investment grade corporate credit portfolio

Engagement

We believe that having meaningful dialogue on climate change is a critical component of our responsibility as an asset owner and in ensuring sustainable financial outcomes. We have been engaging with our external managers on climate-related issues since 2019 and each year we evolve the conversation by improving, expanding and tailoring the questions we ask. In 2021, as part of our target setting work, we engaged all our external managers across our investment portfolio and our 20 highest emitters in investment grade corporate credit, providing a baseline for us to monitor progress. In 2022, we have further enhanced our engagement approach by including asset class specific climate due diligence questions. Each year, we will engage with all of our external managers to continue to track progress across key climate-related issues, including net-zero commitments and emissions target setting. For our top 20 highest emitters in our investment grade corporate credit portfolio, we enhanced our engagement approach to be more tailored, identifying material areas of focus per issuer and directing targeted questions to each company allowing for more meaningful and relevant dialogue.

Financing the transition

↑ 5% by 2025

of assets under management in climate solutions investments

Financing the transition

We have set a target to increase our exposure to climate solution investments that will finance the transition. These investments will directly contribute to climate change mitigation and/or adaptation and follows guidance from the NZAOA Target Setting Protocol. In 2022, this has increased to 4.8% from 3% at the end of 2021. Notably, in 2022 we added $134 million in green bonds. Green bonds fund projects that have positive environmental benefits and support the transition to a net-zero economy. We will continue to actively invest in green bonds as well as search for additional opportunities that support the transition to a net-zero economy including negative emissions investments.

Carbon intensity reduction

↓ 25% by 2025

of our Scope 1 and 2 emissions in our equity portfolio

Carbon intensity reduction

QBE has set the target of 25% reduction in the carbon intensity of our developed market equity portfolio by 2025, relative to a 2019 baseline. Over the course of 2022, we worked towards developing a more resilient portfolio by changing the way we will primarily invest in developed market equity by moving from passive strategies via exchange traded funds to tailored mandates with external equity managers. As part of our due diligence, we considered prospective managers' commitments to net zero and decarbonising the real economy as well as their ability to incorporate our emissions reduction targets into the investment management agreements. We expect to make this transition of our investment approach in 2023. Over the course of 2023 we will continue to progress and expect to set additional asset class emissions reduction targets in line with the NZAOA Target Setting Protocol.

Data, monitoring and reporting

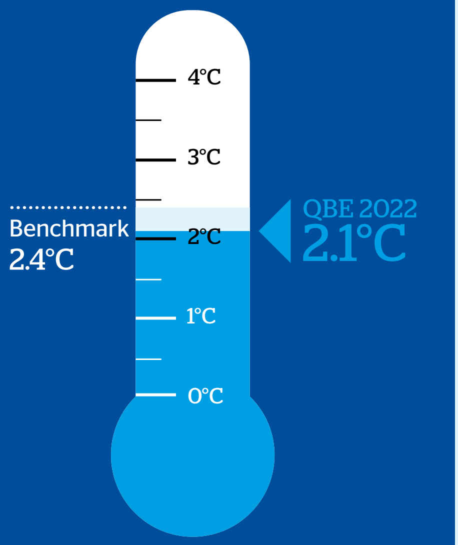
As part of our learnings from the work we undertook in 2021, we also introduced a new working group, to deliver our data, monitoring and reporting requirements. The working group is focused on the sourcing and gathering of relevant data as well as implementing system solutions for monitoring and reporting to support decision making and progress tracking to achieve our goals. A key output for the working group this year has been the development of tools to provide attribution, monitoring and overall tracking of emissions across the developed market equity portfolio. We are also in the process of implementing a new investment system, which will provide enhanced data capabilities, consistency of reporting and ongoing accuracy to improve the way we incorporate climate-related considerations into our investment process to achieve our commitment to decarbonisation.

Climate scenario analysis

We have continued to undertake climate-related analysis of our investments portfolio, such as scenario analysis, temperature alignment and carbon footprinting to assess our overall exposure to climate risks and opportunities.

Temperature alignment

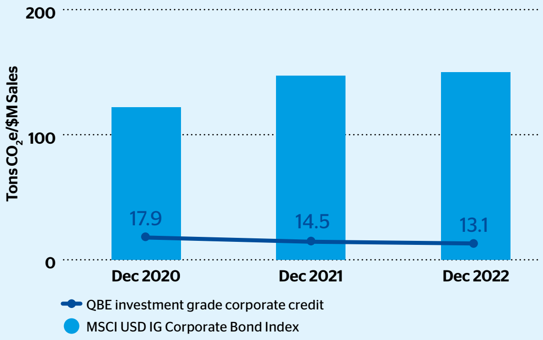
We have commenced implementation of a new investment system which has allowed us to undertake a new temperature alignment assessment of the investment grade corporate credit portfolio. This forward-looking analysis was undertaken utilising the temperature alignment metric[1] which shows how well aligned an issuer's, and also a portfolio's, emission projections are to the Paris Agreement. This level of analysis will allow us to target our engagement to those companies that are not aligned and work with them to decarbonise. Our investment grade corporate credit temperature alignment is 2.1°C, against a benchmark of 2.4°C. We will continue to engage with our highest emitters in pursuit of 1.5°C alignment.



Carbon footprinting

We assessed the carbon footprint of our investment grade corporate credit portfolio, which constitutes over 50% of assets under management, and remains in line with our commitment to maintaining a low carbon risk rating[2]. We use weighted average carbon intensity[3] (WACI) as a measure of our portfolio's exposure to carbon-related potential market and regulatory risks. The WACI is significantly below the MSCI USD Investment Grade Corporate Bond Index, given our low exposure to high emitting sectors.

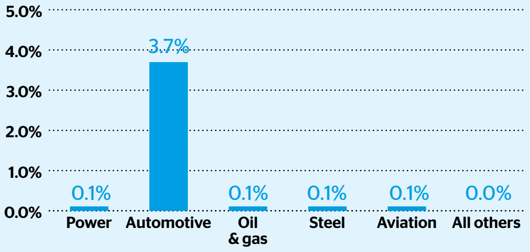
Weighted average carbon intensity



High emitting sectors

To assess our transition risk, we have looked at the exposure of our investment grade corporate credit, high yield debt and emerging market debt portfolios (approximately 53% of our total assets under management) to high emitting sectors using the Paris Agreement Capital Transition Assessment (PACTA) tool. Collectively, these sectors account for about 75% of global emissions and understanding our exposure to these industries will enable us to continue to target our engagement strategies. Our transition risk remains low, with less than 5% of our portfolio exposed to these high emitting sectors.

High emitting sector exposures (PACTA)[4]



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[1] Temperature alignment is calculated as the weighted average of each portfolio company's individual contribution to rising temperatures.

[2] Carbon risk rating measures exposure to carbon intensive companies. MSCI Carbon Risk is categorised as Very Low (0 to <15), Low (15 to <70), Moderate (70 to <250), High (250 to <525) and Very High (>=525).

[3] WACI is calculated as the sum product of the portfolio companies' carbon intensities and weights (tCO_2-e/$M sales).

[4] Data sourced as of 30 September 2022.

Risk management

The risk of inaction on climate change continues to be a significant global risk. QBE manages climate risk through integration into decision-making and our processes and frameworks.

Managing climate risk is integrated into our assessment of natural perils modelling, our management of exposure accumulations, the design of our reinsurance program and our portfolio optimisation and sustainable growth strategic priorities. Further, managing the risks and opportunities of climate is integrated into the three focus areas of our sustainability strategy.

The sustained increase in the frequency and severity of natural catastrophes represents a challenge where we provide cover for physical loss or damage to assets. It also increases the potential for third party injury and/or damage. Given this, we have spent considerable time over the past two years analysing what the potential impacts of climate change may be from a physical, liability and transition risk perspective, and we have used this analysis to assess the resilience of our strategic responses, improve our underwriting, pricing and business planning, and to set our risk appetite.

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 part of ESG risk, which is classified as a strategic risk sub-class in our Strategic Risk Policy and Risk Management Strategy. Climate-related risks are also considered across our other risk classes such as insurance, credit, market and operational risk.

Our approach to identifying and managing ESG risks, including climate-related risks, is outlined in our Group ESG Risk Standard. Climate change continued to be our top ESG risk in 2022, alongside modern slavery and human rights, biodiversity, and sustainable procurement.

One of the ways we can identify and assess ESG risks is through the Group Risk and Control Self-Assessment (RCSA) process. QBE's Group RCSA Standard sets minimum requirements for identifying, documenting, and assessing key risks that QBE faces in delivering our strategic and business objectives. The Standard is also used to assess the effectiveness of the controls in place to manage those risks.

Training

This year, training modules were developed and rolled out Group-wide on ESG risk and climate change. These are voluntary and available to all employees with the aim of improving the understanding of what are ESG and climate risks, and QBE's approach to identifying and managing these risks.

Environmental and Social Risk Framework

Our Environmental and Social Risk Framework came into effect on 1 January 2022. Through our positions in the Framework, we have committed to reduce our exposure to higher transition risks in the energy sector. QBE has no direct investments in coal, oil or gas and will no longer directly invest in these sectors. We no longer underwrite new coal and oil sands projects, and only support oil sands and Arctic drilling where the company is on a pathway consistent with achieving the Paris Agreement objectives.

Metrics and targets

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

ℹ **More details on QBE's Sustainability Framework and our performance and progress are available in QBE's 2022 Sustainability Report.**

MEASURE	TARGET	2022	2021	STATUS
Operations				
Energy use (GJ)	25% reduction by 2025 [1] *2019 baseline*	**192,429** ⬇ *20%*	180,004	On track
Renewable electricity use (MWh)	100% by 2025 [2]	**18,513** *100%*	20,199	Achieved
Scope 1 and 2 emissions (1.5°C trajectory aligned science-based target) (tCO$_2$e)	30% reduction by 2025 [3] *2018 baseline*	**7,732** ⬇ *75%*	6,880	Achieved
Scope 1 and 2 emissions	Net-zero emissions (Scope 1 and 2) across operations by 2030 [4] *2019 baseline*	**7,732** ⬇ *45%*	6,880	On track
Operational Scope 3 emissions	Net-zero emissions on material Scope 3 by 2030 [5]	**15,896**	2022 baseline	New target
Underwriting				
Underwriting portfolio emissions	Net-zero emissions (Scope 1 and 2) in underwriting portfolio by 2050	**N/A**	N/A	Interim targets to be set
Investments				
Engagement	• All external managers across our investment portfolio • 20 highest emitters in investment grade corporate credit portfolio	**Achieved**	N/A	Ongoing
Financing the transition	Increase our climate solutions investments to 5% of assets under management by 2025	**4.8%**	N/A	On track
Carbon intensity reduction	25% reduction by 2025 of Scope 1 and 2 emissions in equity portfolio [6]	**In progress**	N/A	Ongoing
Impact investing ambition	$2 billion by 2025	**$1.6 billion**	$1.4 billion	On track

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[1] In 2022, we broadened our energy use indicator to include company vehicle fuel consumption, in addition to electricity and gas usage. As a result, the 2019 baseline has been restated to include 86,228 GJ of company vehicle fuel consumption.

[2] Based on RE100 Materiality Threshold guidance and excludes electricity use from countries with small electricity loads (<100 MWh/year) up to a total of 500 MWh/year and where it is not feasible to source renewable electricity.

[3] In 2022, we reclassified previously reported Scope 3 – indirect gas to Scope 2 – heat for disclosure purposes. The 2018 baseline has been restated to include 1,186 tCO$_2$e of Scope 2 – heat.

[4] In 2022, we reclassified previously reported Scope 3 – indirect gas to Scope 2 – heat for disclosure purposes. The 2019 baseline has been restated to include 1,274 tCO$_2$e of Scope 2 – heat.

[5] Net-zero emissions on material Scope 3 includes emissions related to business travel, fuel-and energy-related activities and capital goods. Refer to the 2022 Sustainability Data Book – Metrics Criteria for details.

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