Climate change – our approach to risks and opportunities

As an international insurance underwriter and investor, the physical, transition and liability impacts of climate change are of strategic importance to QBE. We consider climate change to be a material risk for our business as well as a driver of significant opportunities.

We continue to support the objectives of the Paris Agreement and the Nationally Determined Contributions of the countries in which we operate. We fully support the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and, in 2018, we publicly committed to enhancing our disclosures in line with the TCFD recommendations. This report details our approach to managing our climate-related risks and opportunities, including our progress and performance against our Climate Change Action Plan.

Consistent with our governance practices, we are developing appropriate strategic and risk management approaches to the climate-related risks and opportunities we have identified in order to strengthen the resilience of our business and support our customers.

QBE's Climate Change Action Plan

In 2018 we released our Climate Change Action Plan. During 2019, our focus was on progressing our understanding of climate-related risks and opportunities and considering our strategic response.

	DESCRIPTION	ACTION	2017	2018	2019	2020
Governance	**Disclose the organisation's governance around climate-related risks and opportunities**	**Board:** • Strengthen Group Board and Committee oversight of climate-related issues		Action completed		
		• Strengthen divisional governance of climate-related issues		Action completed		
		Management: • Establish senior cross-functional, cross-divisional Climate Change Working Group to support the Board and management in identifying and managing climate-related risks and opportunities	Action completed			
		• Sign TCFD Statement of Support with commitment to begin disclosures in February 2019		Action completed		
Strategy	**Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material**	• Complete high level impact assessment of physical, transition and liability risks and opportunities across the business over the short, medium and long-term		Action completed		
		• Review investment strategy to ensure it appropriately reflects consideration of climate-related risks and opportunities		Action completed		
		• Complete further detailed analysis of climate-related risks and opportunities in priority underwriting portfolios. Refer pages 34 to 37			Action completed	
		• Review underwriting strategy in line with detailed analysis of climate-related risks and opportunities. Refer pages 34 to 37			Action completed	
		• Participate in the UNEP FI insurance industry TCFD pilot group on scenario analysis. Refer page 37		Commencement date	Continued in progress	Target completion date
		• Integrate additional climate-related scenario analysis into strategic planning across the business			Commencement date	Target completion date
Risk Management	**Disclose how the organisation identifies, assesses and manages climate-related risks**	• Establish ESG Risk team to coordinate ongoing integration of climate-related risks and opportunities across the business		Action completed		
		• Review Enterprise Risk Management Strategy and Framework to ensure they appropriately reflect climate change considerations		Action completed		
		• Review risk classes, risk appetites and risk management standards and processes to ensure that climate change risks are properly reflected		Action completed		
		• Integrate multi-year scenario analysis into risk management strategy			Commencement date	Target completion date
Metrics & Targets	**Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material**	• Disclose scope 1, 2 and 3 operational greenhouse gas emissions	Action completed			
		• Evaluate metrics and targets for assessing climate-related risks and opportunities that are in line with strategy and risk management processes			Commencement date	Target completion date
		• Disclose metrics and performance against targets for assessing climate-related risks and opportunities				Commencement date / Target completion date

KEY Commencement date · Continued in progress · Target completion date · Action completed

Governance

Our climate governance framework clearly defines the roles and responsibilities for effective oversight and management of climate-related risks and opportunities at the Board and senior management levels.

The Board Risk & Capital Committee and the Executive Non-Financial Risk Committee received quarterly reports on environment, social and governance (ESG) issues, including climate change. This year, we established three working groups under the Climate Change Steering Committee to focus our work in the key areas of physical, transition and liability risk. These cross functional groups comprise representatives from our underwriting, finance, investment, risk, sustainability, strategy, reinsurance and product development teams and reach across all our divisions. Further detail on the work undertaken this year by the working groups is outlined in the Strategy section of this report on pages 34 to 37.

Group Board

Risk & Capital
Climate-related risk management

Audit
Climate-related financial reporting

Investment
Climate-related investment risks and opportunities

Operations & Technology
Climate-related operational risks and opportunities

Group Executive Committee

Accountable for implementing climate change strategy
Receiving and reviewing progress reports

Group CRO
Accountable for embedding climate-related risk into the Group's risk management framework

Group CFO
Accountable for reviewing climate-related disclosures including TCFD

Group CUO
Accountable for embedding climate-related risks and opportunities within underwriting decisions

Group Executive, Corporate Affairs and Sustainability
Accountable for embedding climate strategy into company brand, narrative and engagement

Executive Non-Financial Risk Committee
Accountable for overseeing the integration of ESG risk into business processes

Head of ESG Risk
Integrating climate-related risks and opportunities into business processes

Delivering and reporting on the Climate Change Action Plan

Group Chief Investment Officer
Integrating climate-related risks and opportunities into investments

Group Head of Sustainability
Aligning climate-related strategy with overall sustainability strategy

External reporting and stakeholder engagement

ESG Risk Committee
Reviewing ESG business policies and strategies, including climate-related policy positions, and providing recommendations to the Executive Non-Financial Risk Committee for approval

Climate Change Steering Committee
Overseeing the identification and management of climate-related risks and opportunities, reporting and working group activities.

Climate change and remuneration

A component of our Group Executive Committee's (GEC) short-term incentive (STI) outcome is determined with reference to the achievement against strategic priorities. 75% of our Group Chief Risk Officer's STI outcome, and 35% of the outcome for all other members of the GEC, is determined in this manner.

QBE's 2019 strategic priorities include managing risk (including implementation of our Climate Change Action Plan) and operating sustainably (including the effective management of climate-related risks and opportunities).

Specific roles within QBE that are responsible for integrating the identification and management of climate-related risks into business processes and developing, managing and implementing the strategy to address the environmental impacts of our operations include QBE's Head of ESG Risk and QBE's Head of Environment respectively. The performance objectives for these roles, and their achievement of those objectives, is a key reference when determining incentive outcomes.

Time horizons

Taking into account average policy duration allowing for renewals, as well as the average term of its investments, QBE defines short, medium, and long-term risk time horizons as follows:

Short-term:
0 to 3 years

Medium-term:
3 to 8 years

Long-term:
8+ years

Strategy

In 2019, we have continued to progress our Climate Change Action Plan, with a focus on identifying risks and opportunities and developing our strategic responses across both underwriting and investment management.

Underwriting

This year we focused on identifying climate-related risks and opportunities across some of our key underwriting portfolios. This work has been driven by our physical, transition and liability working groups.

Physical risks

Climate change will increase the frequency and severity of acute weather-related events such as floods, bushfires, tropical cyclones, hail, storms and coastal inundation, as well as lead to chronic changes such as sea level rise, increased heat waves and droughts over time. During 2019, we saw severe drought and extensive bushfires across Australia and wildfires in North America, as well as severe flooding in the UK. As an international provider of insurance such as property, crop, marine and aviation, QBE is exposed to these risks.

QBE assesses the impact of weather-related events using catastrophe models. Our catastrophe modelling team uses sophisticated computer simulations of natural catastrophes to estimate their financial impact. By allowing for scientific predictions of the impact of climate change under different climate scenarios, we also use those computer models to quantify the financial impact of climate change on weather-related events. One key component of a catastrophe model is the hazard module that generates weather events such as cyclones, flood and hail which are the foundation for simulating damages to the properties we insure and estimating claims under the insurance policies protecting our clients' assets.

QBE has long recognised that climate change has a direct impact on the unpredictability and extremity of weather conditions around the world. In 2014, our Annual Report included a spotlight on catastrophe modelling. Since then, QBE has continued to invest in and greatly increase our natural catastrophe modelling capabilities as well as embed the insights into our strategic planning and operational management.

Crop insurance in the US

QBE is a significant provider of crop insurance to the US market. Under this federally funded program, the federal government sets all pricing, and while participating insurers are required to offer coverage, they have options following underwriting assessment to substantially reduce their exposure to individual contracts. The crop insurance business is exposed to physical risk through long-term trends in climatic conditions including hail events; however, there are a number of mitigating factors that reduce the physical risk to the portfolio. The government pricing practices for the program are designed to ensure that premium rates reflect risk, and are updated in line with trends in annual experience for individual farms and crops, so that any adverse trends in claims due to climate change will be met with increased premiums and/or changing coverages. As yields improve or decline, farmer coverages change accordingly. This is known as a change in the farmer's actual production history, which drives coverage levels.

There is strong political support for the program, and therefore the federal government is expected to continue to subsidise premiums sufficiently to ensure carriers will continue to participate and be able to achieve reasonable returns for their participation. Technological improvements in farming practice, seeds, and weather and climate information continue to drive resilience in agricultural production, which can potentially mitigate adverse climate trends. QBE continues to work with its crop insurance customers to drive technological improvements and ensure the sustainability of the business.

Analysis: hurricanes in North America and tropical cyclones in Australia

What did we do?

In 2019, in partnership with catastrophe modelling firm RMS, we assessed the impact of hurricanes in North America and tropical cyclones in Australia, which represent some of our largest exposures to weather-related events. We considered impacts on our existing portfolio up to 2100 under scenarios consistent with a 2–3°C global mean temperature rise. This initial analysis did not show material increases in our expected claims costs before 2050. During 2020, we will continue to assess the impact, allowing for alternative emissions scenarios. We will also extend the analysis to other weather-related exposures in our portfolio.

What did we find?

Our initial work supports the strong likelihood of a material increase in tropical cyclone-related claims under all scenarios. Annual claims cost related to hurricanes and tropical cyclones could go up by more than 50% in the second half of the century, with a wide variation in local impact, and a rate of change that will depend on how the global community addresses this critical challenge. However, in the short to medium-term, the impact on tropical cyclone claims will be difficult to assess due to the inherent volatility of cyclones, which have a relatively low frequency and large variability in cost driven by whether or not they make landfall and impact on population centres.

How are we responding?

We have started to adjust our catastrophe models to factor in the expected impacts of climate change until 2100. While we already have a robust quantification of QBE's exposure to weather events, this refinement of our models can provide insights into the magnitude and timing of the impact that climate change will have on our business.

In the short-term, QBE will manage the high volatility of natural catastrophe claims by considering a wide range of event frequency and severity in our capital planning, and by deploying a comprehensive Group catastrophe reinsurance program.

Over the long-term we anticipate that the physical impacts of climate change – even under scenarios consistent with the achievement of the Paris Agreement – will result in our customers seeking increased insurance for the protection of their assets and the services they provide. We also recognise that over the longer-term, climate change will impact our customers and the communities that we serve. This may cause insurance premiums to become unaffordable, especially for customers in areas more exposed to weather-related events, potentially resulting in a loss of revenue. In order to address this risk, QBE is engaging with external stakeholders, including national and local governments, to encourage adaptation and resilience measures against weather-related events.

What are our next steps?

During 2020, we will continue to adjust our catastrophe models for a broader range of weather phenomena and geographies, and participate in the development of scenario analysis as part of the United Nations Environment Programme Finance Initiative Principles for Sustainable Insurance (PSI) TCFD Pilot project.

A$500,000

QBE support for bushfire relief

Australian bushfires

The bushfires over the Australian summer of 2019–2020 had a devastating impact on many of our customers and their communities and we have worked with them to help them recover and rebuild their lives. In the immediate aftermath of these fires, QBE deployed additional resources to ensure insurance claims could be handled as quickly as possible, while emergency assistance payments and temporary accommodation assistance and mental health support services were also available to our customers. Given the unprecedented scale of the fires, and to reduce the burden for our customers, we waived excesses for individual customers making bushfire-related claims for their personal insurance. This included personal insurance claims for home buildings, contents, landlords, motor vehicles for private use and caravans. In addition, QBE pledged A$500,000 to the bushfire support and recovery services of our disaster relief partners, Red Cross and Save the Children.

It is well recognised that climate change will increase the frequency and severity of bushfires, driven by rising temperatures and drier conditions, and result in more damage to ecosystems, property and people.[1] We will continue to increase our understanding of physical climate risk, including bushfire, and contribute to the transition to a low carbon economy. We also acknowledge that minimising disaster risk and building resilience requires a collective effort with public, private and community sectors. Where we cannot help our customers directly, we will continue to play an active role in advocating, both independently and through our industry associations, all levels of government for initiatives to reduce the risks and impacts of climate-related disasters. We will actively participate in, and provide our insights to, bushfire inquiries on issues such as enhancing the efficiency of the recovery process, addressing the risks of natural disasters and the impact of climate change, and resilience options to address bushfire risks.

Transition risks and opportunities

Through our insurance and investment activities, we are exposed to the risks and opportunities arising from the transition towards a low carbon economy. Some sectors will require a bigger transition than others. We seek to collaborate with government, industry and our customers to support an orderly transition.

Analysis: transition risks and opportunities in emissions intensive industries

What did we do?

In 2019, we undertook scenario analysis to identify the risks and opportunities associated with the transition to a low carbon economy. We focused on three industries which will require significant changes if the world is to meet the goals of the Paris Agreement – energy, transport and heavy industry.

We developed two qualitative scenarios consistent with meeting the objective of the Paris Agreement. The first scenario is early and coordinated transition driven by political ambition, regulatory and policy support. The second scenario presented a delayed and uncoordinated transition, with ambitious action around 2025–30. We then held deep dive workshops to identify the risks and opportunities associated with each of the three industries.

What did we find?

We identified a range of opportunities and risks across underwriting and investment, both at a high level and at an industry specific level. Opportunities include development of new insurance products, and investment opportunities in renewable energy and low emissions transport. Risks include changes to insurance premiums in declining sectors, stranded assets and regulatory and reputation risks.

How are we responding?

In 2019, we developed a Group Energy Policy (see page 38 for more detail) to respond to the risks in the energy sector, including targeting zero direct investment in, and phasing out insurance for, the thermal coal industry. We have continued to grow our investment exposure to low carbon projects through Premiums4Good (see page 38 for more detail).

What are our next steps?

We will continue to develop and embed our response to the risks and opportunities identified into our strategy and risk management processes.

For examples of solutions we offer to support our customers' transition to a low-carbon economy and manage the risks associated with climate change, refer to QBE's 2019 Sustainability Report.

1 2014, Fifth Assessment Report, Intergovernmental Panel on Climate Change; 2008, The Garnaut Climate Change Review.

Liability risks

Liability risks are a specific type of transition legal risk that impact general insurers. As climate change effects become more apparent, parties who have suffered loss and damages from climate change could seek recovery from parties they believe to be responsible. Any successful actions could potentially lead to responsible parties seeking to recover these costs under insurance policies.

Legal action on climate change has been most active in the US and primarily relates to regulatory or similar actions against energy companies that are alleged to have not disclosed or managed climate-related risks. In Australia, legal action has been taken against superannuation funds, alleging that the trustees have breached their fiduciary duties by failing to adequately consider climate change risks.

Climate-related liability claims may arise on professional indemnity contracts where professionals may have failed to take climate change into account when providing advice. The increased frequency or severity of weather-related events due to climate change increases the potential for liability claims. Such indirect liability claims have the potential to arise in the short-term as climate change begins to be more widely understood, but we do not expect this to have a material financial impact in the short-term.

Analysis: climate litigation

What did we do?

This year, the liability working group reviewed cases of litigation in the US, and identified our potential exposures by product, economic sector and state. Additionally, the group reviewed our exposure to potential claims outside the US by assessing our products and exposure as well as developing a framework for the ongoing monitoring of claims.

What did we find?

To date there have been no successful material insurance claims, and we do not anticipate any such climate-related liability claims in the short-term.

How are we responding?

We continue to monitor litigation activity and changes in the legislative and regulatory environment that may affect our exposure to climate-related liability risk.

What are our next steps?

During 2020 we will consider our underwriting strategy with respect to climate-related claims by reviewing risk selection, underwriting appetite and pricing.

Partnerships and initiatives

We are involved in a range of initiatives, allowing us to contribute our expertise, support the development of our strategic climate responses and advocate for climate mitigation and resilience measures on behalf of our customers.

Industry

- Insurance Council of Australia's Climate Change Action Committee
- Actuaries Institute Climate Change Working Group
- Australian Sustainable Finance Initiative
- ClimateWise
- Climate Measurement Standards Initiative
- Australian Government National Resilience Taskforce

Operations

- CDP
- RE100

Investment

- UNEP FI Principles for Responsible Investment
- Investor Group on Climate Change
- Responsible Investment Association Australasia

Underwriting

- UNEP FI PSI
- UNEP FI PSI TCFD Pilot Group

UNEP FI PSI TCFD Pilot Group

QBE is part of the UNEP FI PSI TCFD Pilot Group with the objective of building scenarios and approaches for insurers and reinsurers to assess climate-related risks and opportunities. The Pilot has progressed more slowly than we anticipated in our Climate Change Action Plan and we expect it to be completed by the end of 2020. The work undertaken as part of the Pilot will help to inform our scenario analysis and strategic responses in 2020.

For further detail on our collaboration on climate change, sustainable finance and resilience, refer to QBE's 2019 Sustainability Report.

Responsible investment

We are a signatory to the UN Principles for Responsible Investment. We have a dedicated Impact and Responsible Investments team.

Signatory of: PRI Principles for Responsible Investment

Premiums4Good

Ambition to grow our impact investments to

$2B by 2025

Investment management

QBE manages a multi-asset, multi-currency portfolio. Our fixed income portfolio represents approximately 85%–90% of our overall investment assets and is mostly managed directly using in-house portfolio managers and analysts. Growth assets comprise the remaining 10%–15% of our investment assets, and we mostly use external investment fund managers and passive index vehicles to access a variety of asset classes.

In 2018 within our manager selection and due diligence program, we strengthened our external fund manager reviews and extended our annual ESG review for all existing managers. In 2019, we continued our ESG reviews and engagement with our external managers, including understanding their progress on TCFD disclosures.

In 2019 we completed an initial carbon footprint of our fixed income (corporate credit) portfolio based on weighted average carbon intensity, including a retrospective analysis which considered the carbon intensity of the corporate credit portfolio for the past five years. This baseline identified that the corporate credit portfolio's exposure to carbon risk is low and so is well positioned for the transition to a low carbon economy relative to the broader corporate bond market. We also established processes for the ongoing monitoring of our portfolio and we continue to engage with issuers identified as the highest emitters in our corporate credit portfolio.

In 2019, we developed a Group Energy Policy (further details below) which includes commitments for investment management.

To monitor compliance with the commitments outlined within the policy and enhance our ESG risk screening processes, we have established new investment monitoring processes and started using new third party data sources to both enhance the negative screening and exclusions and to monitor progress. As at 31 December 2019, we have no direct investment in the thermal coal sector and we retain less than 0.5% of total funds under management in the thermal coal sector.

Premiums4Good

Premiums4Good is an innovative QBE initiative whereby we invest up to 25% of our customers' premiums into investments that have additional social or environmental benefits at no extra cost to our customers. Our investments which support the transition to a low carbon economy are $356 million and include green bonds, renewable energy projects and sustainable infrastructure. We have expanded our ambition to grow our impact investing allocation to $2 billion by 2025.

Further detail on Premiums4Good as well as case studies on some of our climate-related investments are in the Premiums4Good Investment Impact Report 2018–19.

Risk management

Climate-related risk is a type of strategic risk, which we identify, assess and manage using our Enterprise Risk Management (ERM) framework and ESG business practices. Climate-related risk is also implicitly considered within the insurance, credit, market, liquidity and operational risk classes.

For further detail on how we embed ESG into our ERM framework, refer to the Sustainable Insurance section of QBE's 2019 Sustainability Report.

This year we have undertaken both transition and physical scenario analysis to understand the risks and opportunities associated with climate change in our priority portfolios and geographic regions.

Further details of what we did, what we found and how we are responding are in the Strategy section on pages 34 to 37.

Group Energy Policy

In early 2019 we developed our Group Energy Policy, which focuses on support for our customers in the transition to a low carbon economy consistent with the objectives of the Paris Agreement. We do this by providing insurance services and investing in renewable energy and other technologies that support the transition to a low carbon economy. Our Policy will also minimise our exposure to transition risk arising from the phasing out of thermal coal. Our commitments include:

- zero direct investment in the thermal coal industry by 1 July 2019[1];
- no new direct insurance services for new construction projects for thermal coal mines or power stations or thermal coal transport infrastructure, except for statutory or compulsory insurance; and
- phasing out all direct insurance services for thermal coal customers by 1 January 2030, except for statutory or compulsory insurance.

We will continue to review our investment and insurance policies to ensure our approach is in line with our risk appetite.

1 We will maintain a margin of up to 0.5% of total funds under management in order to allow for inadvertent exposures via our indirectly managed investments, such as through equity index funds.

Regulatory oversight of climate risk

During 2019, insurance supervisors in our markets began to introduce regulatory requirements in relation to climate-related risks. We continue to consult with supervisors and have commenced planning and implementation to ensure we meet these requirements. In September 2019, we participated in an International Association of Insurance Supervisors and Sustainable Insurance Forum workshop on TCFD implementation within the insurance industry in Zurich. Our participation enabled us to advocate for efficient and effective regulation, to develop best practice, and to minimise regulatory risk for QBE.

UK Prudential Regulation Authority (PRA) Supervisory Statement

The UK PRA Supervisory Statement SS3/19, *Enhancing banks' and insurers' approaches to managing the financial risks from climate change* took effect on 15 April 2019. This impacts our PRA-regulated entities, QBE European Operations plc and QBE UK Limited. QBE has submitted its roadmap to the PRA, which aligns with our Climate Change Action Plan activities. We have also undertaken a General Insurer Stress Test in line with the UK PRA requirements.

ESG risk training

In 2019, we developed and delivered internal training and information sessions on ESG risks, including climate change, to build capability for our employees and Board members. This will be further enhanced and rolled out more broadly.

Metrics and targets

This year, QBE set new climate-related operational performance targets. In 2020, QBE will identify metrics to measure and monitor climate-related risks and opportunities relating to our investments and underwriting activities.

In 2019, QBE also became the first Australian-headquartered insurer to join the RE100 initiative, committing to source 100% of our electricity requirements from renewable sources by 2025.

Progress towards our climate-related targets is presented below.

MEASURE	TARGET	2019 PROGRESS	STATUS
Energy use (GJ)	15% reduction by 2021 (from 2018 levels)	153,296 (-14%)	On track
Net scope 1 & 2 emissions (1.5°C trajectory aligned science-based target) (tCO_2-e)	30% reduction by 2025 (from 2018 levels)	12,772 (-57%)	Achieved
Renewable electricity use (MWh)	100% by 2025	18,876 (63%)	On track
Air travel (tCO_2-e)	Reduce air travel by 20% by 2021 (from 2017 levels)	12,160 (-31%)	Achieved
Investment in thermal coal industry	Zero direct investment by 1 July 2019	Direct investment in thermal coal is zero	Achieved
Impact investing ambition	$2 billion by 2025	$663 million	On track

More detail on QBE's Sustainability Framework and our performance and progress is available in QBE's 2019 Sustainability Report.

In 2019, we maintained our carbon neutral status

28,931
tCO_2-e

offset through the Qantas Future Planet program