Climate change action plan

Consistent with the scientific reports of the Intergovernmental Panel on Climate Change, QBE recognises that a failure to rapidly decarbonise our economies will lead to increasingly volatile and severe weather-related events with significant economic consequences. Climate change is a material business risk for QBE, impacting our business and customers. We support the international climate agreement developed at the 2015 Paris Conference as well as the Nationally Determined Contributions of the countries in which we operate.

Our climate journey

In early 2018, QBE signed the public Statement of Support for the Task Force on Climate-related Financial Disclosures (TCFD) recommendations and we published an action plan in our 2018 Half Year Report to implement the recommendations over a three year period. This report describes our progress in meeting our commitments.

QBE's climate change action plan

	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		✓		
		• Strengthen divisional governance of climate-related issues		✓		
		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	✓			
		• Sign TCFD Statement of Support with commitment to begin disclosures in February 2019		✓		
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		✓		
		• Review investment strategy to ensure it appropriately reflects consideration of climate-related risks and opportunities		✓		
		• Complete further detailed analysis of climate-related risks and opportunities in priority underwriting portfolios		○ •••	●	
		• Review underwriting strategy in line with detailed analysis of climate-related risks and opportunities			○ ••• ●	
		• Participate in the UNEP FI insurance industry TCFD pilot group on scenario analysis		○ •••	••• ●	
		• Integrate additional climate-related scenario analysis into strategic planning across the business			○ •••	••• ●
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		✓		
		• Review Enterprise Risk Management Strategy and Framework to ensure they appropriately reflect climate change considerations		✓		
		• Review risk classes, risk appetites and risk management standards and processes to ensure that climate change risks are properly reflected		✓		
		• Integrate multi-year scenario analysis into risk management strategy			○ •••	••• ●
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	✓			
		• Evaluate metrics and targets for assessing climate-related risks and opportunities that are in line with strategy and risk management processes			○ •••	••• ●
		• Disclose metrics and performance against targets for assessing climate-related risks and opportunities				○ ••• ●

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.

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 implementation of climate change strategy

Receive and review 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 COO
Accountable for embedding climate-related risks and opportunities within operations

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

Delivery and reporting on the climate change action plan

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

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

External reporting and stakeholder engagement

ESG Business Policy Committee
A new committee to review ESG business policies and strategies, including climate-related policy positions, and provide recommendations to the Group Executive Risk & Capital Committee for approval

Climate Change Working Group
Cross-functional working group on climate change, including senior representatives from sustainability, underwriting, investments, finance, risk, regulatory and operations

Group and divisional boards

In line with its charter, the Group Board is responsible for overseeing QBE's social, ethical and environmental responsibilities, including climate change. The Group Board committees oversee the disclosure, risk management, investment and operational aspects of climate change, as summarised in the graphic above.

The divisional Board Risk & Capital Committees regularly receive and review reports on climate-related risks and opportunities affecting each division.

Management

The Group Chief Executive Officer and Group Executive Committee (GEC) are responsible for implementing QBE's climate change strategy. The GEC receives regular updates on our approach and performance in managing climate-related risks and opportunities and reviews progress in achieving the action plan. The GEC is supported by the Group Chief Risk Officer, the Group Chief Financial Officer, the Group Chief Underwriting Officer, the Group Chief Investment Officer, the Climate Change Working Group, the Environmental, Social and Governance (ESG) Business Policy Committee, the Head of ESG Risk and the Group Head of Sustainability.

High-level impact assessment

In 2018, we worked with Deloitte to undertake a high-level impact assessment of QBE's climate-related risks and opportunities in the short, medium and long-term. We considered the physical, transition and liability risks that may impact QBE's key products and services, customer groups, geographic locations and business operations including a review of changing stakeholder needs and expectations. The high-level impact assessment informed our ongoing discussions with the Group Board and GEC and formed the basis for the development of our climate change action plan. In addition to reviewing our governance, risk management and metrics & targets, this plan provides a roadmap for addressing the different types of risks and opportunities we identified. These risks are highlighted below.

Liability risk

As climate change impacts become more apparent, parties who have suffered loss and damages from climate change could seek recovery from parties they believe responsible. Any successful actions could potentially lead to responsible parties seeking to recover these costs under insurance policies.

We note that there have already been legal actions against large energy companies by regulators, especially in the United States, and against directors of financial services companies. To date litigation outcomes have been in favour of the defendants and no significant liability claims have arisen. As a result, we do not currently regard liability risk to be significant but continue to closely monitor developments in this area. While our products are not necessarily designed to cover such claims, we expect the potential for liability risks to increase over the next 10 years.

Physical risks and opportunities

In line with the scientific evidence, we recognise that climate change is likely to increase the frequency and severity of weather-related natural perils such as floods, bushfires, tropical cyclones, hail, storms, coastal inundation and droughts, as well as leading to sea level rises and increased heat waves over time. By offering insurance products such as property, crop, marine, aviation and lenders' mortgage insurance (LMI), QBE is exposed to these climate-related physical risks which, in line with the scientific evidence from the Intergovernmental Panel on Climate Change, are expected to increase in the medium to long-term (6-10+ years).

Except for LMI, QBE's business is primarily written and repriced on an annual basis, which enables us to re-assess our prices to appropriately reflect any expected increases in weather-related natural perils and thereby reduce our exposure to climate-related risks. The annual risk of higher than expected claims is managed through the Group's reinsurance program.

LMI policies are for the term of the mortgage, but typically carry minimal risk after 10 years. Our LMI policies exclude the coverage of repairs to buildings from natural perils. If increased natural disasters result in falls in house prices for properties exposed to such events, then the severity of LMI claims may increase. Our LMI business purchases external reinsurance protection to help manage this risk.

Over the longer term, QBE recognises that climate change may cause insurance premiums to increase and for properties to become uninsurable, especially for customers in areas more exposed to natural perils. Our role as a global insurance company is to provide our customers insurance coverage and to help them recover from damages quickly. This is why QBE engages with external stakeholders, including national and local governments, to encourage adaptation and resilience measures against natural perils. During 2018, we worked with the Australian Government's National Resilience Taskforce to develop a framework for adaptation finance and investment in resilience.

Transition risks and opportunities

As signalled by the commitment of countries to the Paris Agreement, a transition to a low-carbon economy has begun. Growth in the development and deployment of new sustainable technologies will be necessary to achieve the Paris Agreement targets, along with reductions in greenhouse gas emissions. This global challenge requires concerted action led by governments and supported by industry to minimise economic disruption and deliver an orderly transition.

Transition risks affect our operations and clients. We monitor and engage with regulators to understand the potential impact of current and future climate change and energy policies. As set out in our climate change action plan, we are performing more detailed analysis of our insurance exposure to transition risk and will report on this in our 2019 Annual Report.

The pressure to transition is felt by many of our energy clients and will intensify in the medium to long-term. These clients are already undergoing rapid transition, driven by changes in policy, technology and markets. As a result, their insurance needs are changing, and we are seeking to increase our range of products to support them in their efforts.

An analysis of our investment portfolio has shown that we have minimal exposure to transition risk, as discussed on page 40. We believe that the transition to a low-carbon economy will lead to new investment opportunities and we actively look to invest in renewable energy and other opportunities consistent with a low-carbon economy, such as through QBE's Premiums4Good initiative.

Risk management and strategy

Our ESG Risk team

Following the high-level impact assessment undertaken in the first half of 2018, QBE created a new ESG Risk team with responsibility for coordinating the ongoing integration of climate-related risks and opportunities within the business. In collaboration with the business, the ESG Risk team is responsible for the day-to-day management of climate-related risks and opportunities and acts as an expert team for the Group and divisions. The team collaborates with subject matter experts and monitors market, technology, policy and regulatory changes.

Risk management framework

QBE considers climate-related risks and opportunities throughout our business, supported by our Enterprise Risk Management (ERM) framework. QBE's ERM framework is described in the CRO report section on page 42.

Climate-related risk is part of the overall ERM framework. It is explicitly included within the strategic risk class and implicitly considered within the insurance, credit, market, liquidity and operational risk classes. This strategic risk policy is being updated and incorporates key risk management activities for climate-related risks, such as risk and control self-assessment, incident and issue management process, emerging risk forums, stress testing and scenario analysis, cell reviews, performance monitoring and targeted risk reviews.

Investment strategy and risk management

QBE's investment philosophy is to strike an appropriate balance between the return objectives of the organisation and our appetite for risk, earnings volatility and capital consumption, while managing climate-related and other non-traditional financial risks. The investment strategy is revisited annually as part of the business planning process and incorporates our expectations regarding economic and market performance for the year ahead, as well as the valuation of, and likely correlations between, the asset classes. In constructing targets and benchmarks against which to manage our portfolios, we consider the currency and liability profiles of the relevant entities, local risk appetites, regulatory constraints, local market conditions and asset opportunities.

In line with our investment strategy, QBE seeks to minimise transition risk within the investment portfolio. In particular, we seek to avoid exposure to stranded assets as we consider them a high risk for our long-term investment strategy.

Q&A

What is the Paris Agreement?

195 countries have signed the 2015 Paris Agreement, committing to restrict temperature rises to well below 2˚C in order to mitigate climate-related physical impacts. The policy, legal, technology and market changes associated with a rapid transition towards a low-carbon economy present significant economic challenges and opportunities.

Integration of climate change factors into investments

QBE's fixed income portfolio represents approximately 85%-90% of our overall investment assets, and ESG factors, including climate-related factors that support our alignment with the Paris Agreement, are embedded in our investment decision making process.

We utilise relevant climate data and research from external providers to ensure that all securities being considered for inclusion in the portfolio, and the overall portfolio itself, meet our criteria for managing climate-related risks. These criteria are evolving to include both minimum standards as well as an ambition to manage the overall portfolio carbon metrics to an environmentally responsible level over time. During 2018 we initiated dialogue with the largest greenhouse gas emitters in our credit portfolio in relation to their commitment to implementing the TCFD recommendations.

QBE's growth asset portfolio represents approximately 10%–15% of our overall investment assets, with external managers and passive index vehicles used to access various asset classes. Our selection process includes engagement to ensure alignment where practical to our direct investment philosophy, and to advocate for change where opportunities exist for more responsible climate risk management. Our investment guidelines require a minimum of 75% of our external managers to be PRI signatories, and currently 85% are signatories.

To understand the ESG and sustainability performance of the real estate fund managers, QBE joined Global Real Estate Sustainability Benchmark (GRESB) as an investor member in 2018 and reviewed the ESG and sustainability performance of the real estate portfolio managers. Based on the GRESB real estate sustainability benchmarks, the weighted average for the property portfolio is GRESB 4 Star and is in the top quartile GRESB. We continue to integrate ESG in our reviews with managers.

Q&A

What are stranded assets?

Assets that are unable to recover their investment cost as intended, with a loss of value for investors.

$364M

invested in green finance

Analysis of transition risk in the investment portfolio

Transition risk may arise in our investments where companies within our portfolio are not aligned to the Paris Agreement targets, and so expose QBE to sudden drops in asset values or increased credit risk. Predominantly, transition risk is associated with carbon intensive industries.

We assessed our credit portfolio by applying the 2 Degrees Investing Initiative (2Di) Paris Agreement Capital Transition Assessment Tool (PACTA) to confirm that our credit portfolio is **aligned to the Paris Agreement, both now and in five years' time**.

We performed an internal analysis to assess coal-specific transition risks in the total investment portfolio. We identified investments in companies fitting one or more of the following criteria as coal-related assets:

- companies that have expansion plans for coal;
- companies that have 30% or more revenue from coal or coal share of power generation;
- companies whose annual coal production equals 20 million tons or more; and
- companies whose installed coal-fired capacity equals 10,000 MW or more.

The analysis confirmed that we have **less than 1% of our investment portfolio in coal-related assets**. The analysis affirms our investment philosophy and our focus on contributing to a low-carbon economy.

Climate-related opportunities

QBE contributes to a low-carbon economy by financing renewable energy infrastructure and investing in green finance in both our wider portfolio and through our impact investment program, Premiums4Good. In 2018, QBE won Impact Asset Owner of the Year at the Australian Impact Investment Award for the innovative way the product mobilises capital for impact. Our Premiums4Good program has 32 investments ($440 million) of which 11 (with a value of $160 million) are related to sustainable energy and investments related to resource efficiency, recycling, reuse and conservation. We also hold $204 million in green bonds.

Industry collaborations

QBE collaborates with industry partners and associations to develop innovative solutions to the challenges posed by climate change.

In 2018, we partnered with Jupiter, an emerging leader in providing data analytics to better predict climate risks. Through this partnership we are developing innovative ways to leverage Jupiter's capabilities across our business.

QBE is also a member of the United Nations Environment Programme Finance Initiative (UNEP FI) and is a signatory to both the Principles for Sustainable Insurance (PSI) and the Principles for Responsible Investment (PRI).

QBE actively participates in the following initiatives:

- The UNEP FI PSI TCFD pilot group comprising of 18 leading global insurers and reinsurers that aims to develop tools and standards for scenario analysis in line with the TCFD.
- The UNEP FI PSI working group on ESG in Underwriting Standards that is developing a framework for the integration of ESG factors, including climate change, in underwriting decisions.
- The PRI 2˚C Scenario Analysis Pilot that begins in 2019.

QBE is also a member of the following organisations, with which we actively work on climate-related issues and policies:

- The Insurance Council of Australia;
- Carbon Disclosure Project;
- ClimateWise;
- Investor Group on Climate Change;
- Responsible Investment Association Australasia; and
- The Actuaries Institute's Climate Change Working Group.

Details of our broader industry collaboration on sustainability are included in our 2018 Sustainability Report.

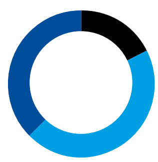
"Climate change poses significant risks to the world and presents a host of challenges and opportunities for the insurance industry. At QBE, we're taking practical action to manage for the future whilst supporting our customers."

W. Marty Becker
Chairman

Metrics and targets

Operational greenhouse gas emissions

SCOPE		GHG EMISSIONS
Scope 1	Direct emissions i.e. related to company car fuel consumption and natural gas heating.	8,250 tCO_2-e
Scope 2	Indirect emissions i.e. related to electricity consumption.	21,382 tCO_2-e
Scope 3	Other indirect emissions i.e. related to business travel by air, rail and land; waste disposal, including recycling; and water consumption.	17,641 tCO_2-e



In 2018, we achieved carbon neutrality, offsetting

47,273
tCO_2-e

through the Qantas Future Planet program

We measure and manage the environmental impact of our operations. Achieving the Paris Agreement goal of limiting temperature rise to well below 2˚C will require organisations around the world to reduce greenhouse gas emissions. In 2018, we achieved carbon neutrality for our business operations through reducing our air travel, and purchasing offsets in relation to our residual emissions through the Qantas Future Planet Program. We have also committed to reduce our air travel by 20% by 2021 (from a 2017 baseline). A more detailed overview of QBE's operational environmental metrics can be found in the 2018 Sustainability Report.

Underwriting & investment exposures

In line with our climate change action plan, we will complete our analyses of priority underwriting portfolios in 2019. In 2020, we will use this analysis to develop metrics for assessing our exposure to climate-related risks within our underwriting and investment portfolios and set targets for these metrics in the short, medium and long-term, in line with our strategy and the Paris Agreement targets. These metrics and targets will be published in our 2020 Annual Report and we will report our progress against them annually.