



# The ClimateWise Principles Independent Review 2019

**Aligning for the future**

## ClimateWise

ClimateWise is a global network of 26 leading insurers, reinsurers, brokers and industry service providers sharing a commitment to reduce the impact of climate change on society and the insurance industry. ClimateWise is a voluntary initiative, driven directly by its members and facilitated by the University of Cambridge Institute for Sustainability Leadership (CISL), which brings business, government and academia together to identify solutions to critical sustainability challenges.

All ClimateWise members report annually against the ClimateWise Principles, which from 2019 have been aligned with the Taskforce on Climate-related Financial Disclosures (TCFD) Recommendations.

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The University of Cambridge Institute for Sustainability Leadership (CISL) is a globally influential Institute developing leadership and solutions for a sustainable economy. We believe the economy can be 'rewired', through focused collaboration between business, government and finance institutions, to deliver positive outcomes for people and environment. For over three decades we have built the leadership capacity and capabilities of individuals and organisations, and created industry-leading collaborations, to catalyse change and accelerate the path to a sustainable economy. Our practitioner-orientated research builds the evidence base for action.

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*Rewiring the Economy* is our ten-year plan to lay the foundations for a sustainable economy. The plan is built on ten interdependent tasks, delivered by business, government, and finance leaders co-operatively over the next decade to create an economy that encourages sustainable business practices and delivers positive outcomes for people and societies.

## Publication details

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### Reference

Please refer to this report as ClimateWise Principles Independent Review 2019, University of Cambridge Institute for Sustainability Leadership and PwC, 2019.

### Copies

This full document can be downloaded from ClimateWise's website: [www.cisl.cam.ac.uk/climatewise](http://www.cisl.cam.ac.uk/climatewise)

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# Executive summary

**In a year that witnessed six countries declare a climate emergency<sup>1</sup>, a groundswell of climate activism, reports of record levels of greenhouse gas emissions<sup>2</sup> and further devastating climate-related events, the importance of climate action has never been higher.**

The relevance of this for the insurance industry is clear. In 2019 the Bank of England's Prudential Regulatory Authority (PRA) has set out its expectations for how firms should identify and address climate risks<sup>3</sup> and, in Brussels, the European Commission is looking to incorporate sustainability questions into its Solvency II Directive due in 2021<sup>4</sup>. In the USA, the National Association of Insurance Commissioners' Climate Risk Disclosure Survey requires all insurers with direct written premiums over US\$100m to submit responses to its questionnaire on addressing climate change<sup>5</sup>. Regulators across the globe in tandem with civil society, customers and investors are increasingly demanding accurate, decision-useful climate-related disclosures.

ClimateWise members have been publicly disclosing their approaches to managing climate-risk under the structure of the ClimateWise Principles report for well over a decade. Following the release of the Task Force on Climate-related Financial Disclosures (TCFD) recommendations in 2017, members committed to updating the ClimateWise Principles to ensure all elements of the recommendations were incorporated. The updated Principles form an industry-standard disclosure framework ensuring TCFD alignment whilst retaining the ambition of informing public policy and raising customer awareness of climate change. This year is the first year that members have reported against the updated ClimateWise Principles.

ClimateWise membership comprises a range of industry organisations from (re)insurers and brokers to membership bodies and associations. Each with their own starting point, all

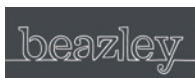
ClimateWise members recognise the importance of climate-related disclosure and support each other on their disclosure journeys. Through their adoption of the new ClimateWise Principles, members are demonstrating both their ambition for and leadership of the sector, taking important steps to integrate climate change challenges across all aspects of the business.

The scores from the 2019 report, which as anticipated have decreased in line with increased ambition, will form a critical baseline for ClimateWise members to consider, measure and build on in the coming years.

This report provides useful reflections on the challenges and opportunities for the industry in implementing the TCFD recommendations such as the need for wider adoption of scenario analysis to assess financial and strategic resilience to climate-related risks and the need to incorporate financially oriented metrics and targets. ClimateWise members will work together in the year ahead to provide peer guidance and support to address these issues through designated task groups.

**The ClimateWise Principles provide an industry-standard framework for TCFD disclosure and the membership provides the peer to peer and mentoring support necessary to maximise learning, enhance best practice and lead the industry forward as it seeks to meaningfully address the challenges and opportunities presented by global climate change.**

## ClimateWise members 2019



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# Forewords



The human tragedy of a more volatile climate is as present as ever. From fires in California and Australia, to typhoons in Japan and flooding in the UK, a new normal is a threat to us all in a society built around a stable climate system. News stories from industry trades and the business press increasingly highlight climate change as a material financial risk to society. At Aon we have seen a step change in the way clients are discussing climate change this year.

ClimateWise members are leaders in climate-related disclosures having been reporting, independently benchmarking and sharing learnings from the industry for over ten years. In 2018 the growing support for the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) provided an opportunity to refresh the ambition of the ClimateWise membership. As an industry we decided to align the Principles with the TCFD recommendations. Companies from across the insurance sector have a specific, relevant set of questions to benchmark themselves with peers, while at the same time fully conforming to the disclosure recommendations of the TCFD.

The fantastic range of disclosures, at various stages of maturity, reflects the ClimateWise member commitment to learning and sharing their knowledge to enable full disclosure by the industry. Member strengths in identification and disclosure of risks and environmental impact highlight the insurance industry's role as society's risk managers. The ClimateWise Principles continue their emphasis on leadership qualities, and focus on risks and opportunities in order to improve the insurance sector's ability to increase the resilience of society to climate change.

The next year will be a pivotal one for climate negotiations. The insurance industry is ready to play its part.

A handwritten signature in black ink, appearing to read 'Dominic Christian', with a stylized, flowing script.

**Dominic Christian**  
Chair, ClimateWise  
Global Chairman Reinsurance Solutions at Aon



## Climate change – and society’s responses to it – are now widely recognised as foundational drivers of risk and opportunity within the global economy.

The ClimateWise Principles have been shaping a path towards a more sustainable insurance industry for over a decade now and I am delighted to see, in this year’s report, that its members have enhanced their commitment towards leading practice in portfolio assessment, scenario analysis and full disclosures.

As we witness the impact of a rapidly changing climate move from a scientific consensus to an increasingly observable reality, so too have we seen ever greater external and internal pressure to better align the financial markets with the needs of society and the planet. In the financial sector, the costs of greater physical risks are already being felt and are only set to increase as we continue to alter the climate at a rate 5,000 times faster than any natural warming episode in the planet’s history – the full ramifications of which will not be felt for another 50 years<sup>6</sup>. We have also already begun to see mounting liability and transitional risks for those behind the learning curve.

It is essential, therefore, that the finance industry continues to take green and sustainable finance out of the box of ‘environmental concerns’ and places it squarely onto the boardroom’s strategic agenda. This is challenging; there is no playbook, no historic precedent and no one has the monopoly of wisdom as to how we respond to a changing climate to

ensure our collective resilience. This is why at the Green Finance Institute we work with valued partners such as the University of Cambridge Institute for Sustainability Leadership to drive effective collaboration between financial market participants, policymakers, academics and civil society to seek solutions that mobilise capital towards a greener, more resilient economy and promote financial stability. The ClimateWise Principles similarly promote collaboration between the insurance industry, academic research and public bodies, and in so doing, not only highlight the efforts of insurance industry leaders but also provide a leading standard for the insurance industry on action and TCFD-aligned reporting.

A handwritten signature in dark ink, reading 'Rhian-Mari Thomas'.

**Rhian-Mari Thomas OBE**  
Chief Executive Officer  
at the UK Green Finance Institute



# Regulation and disclosure

**In 2019, the identification and management of climate-related risks in the insurance sector has started to evolve from recommendation to regulation. Insurers have been disclosing climate-related risks under voluntary frameworks, such as ClimateWise, CDP and the Task Force on Climate-related Financial Disclosures (TCFD). However, as global recognition of the severe implications of climate change increases, evidenced by six countries declaring a climate emergency in 2019<sup>1</sup>, we are seeing regulation beginning to come into force that will mandate climate risk disclosures. While this is unlikely to provoke drastic changes for businesses already taking a lead in this area, companies lagging behind will be forced to accelerate their climate risk capabilities to avoid potential financial, reputational and legal consequences.**

## **There is global movement on increasing climate-related regulation**

The most comprehensive examples of evolving climate risk regulation specific to the insurance industry come from Europe. One of the earliest examples comes from France, where Article 173 of the Energy Transition Law came into force in 2015, mandating disclosure of climate risks for listed companies<sup>2</sup>. In the UK, the Bank of England's Prudential Regulation Authority (PRA: the prudential regulator for the insurance and banking industry) published Supervisory Statement 3/19 in April 2019 setting out its expectations for how firms should identify, monitor and manage climate-related risks<sup>3</sup>. The PRA supervisory statement is strongly aligned with the four key recommendations of the TCFD guidelines, and explicitly states that it expects firms to consider engaging with the TCFD framework (with which the ClimateWise Principles are aligned). Firms were required to have initial plans in place in response to the PRA's supervisory expectations and assigned individual responsibility to a senior management function, by 15 October 2019. The PRA has said it is likely to develop more granular requirements and may intensify its supervision of firms' management of climate-related risks over time.

We are also beginning to see increased domestic collaboration between financial regulators in the UK. In 2019 the PRA founded the Climate Financial Risk Forum (CFRF) with the Financial Conduct Authority (FCA). This forum aims to advance financial sector

responses to the financial risks of climate change<sup>8</sup>. The PRA and FCA also released a joint statement with the Financial Reporting Council (FRC) and the Pensions Regulator to welcome the UK's Green Finance Strategy<sup>9</sup>. At the European level, there are signs that the European Insurance and Occupational Pensions Authority (EIOPA) is beginning to take a leadership role on climate risk in the insurance sector. In September 2019 EIOPA released an Opinion on Sustainability within Solvency II, which suggested that insurers should assess their exposure to sustainability risk and stressed the importance of scenario analysis in risk management<sup>4</sup>. The European Commission will take this Opinion into account while preparing a report on the Solvency II Directive which is due by 2021, which could result in a tightening of regulation of how insurers approach and disclose sustainability risk.

In addition to this, there is increasing evidence of a global shift towards a tighter regulatory environment for climate risk disclosures in the insurance sector. At the global level, the 213 regulator members of the International Association of Insurance Supervisors (IAIS) identified sustainability and climate change as a key focus of the organisation's new five-year strategic plan<sup>10</sup>. The UN Sustainable Insurance Forum (UN SIF), a network of 26 leading insurance supervisors and regulators, has worked to develop and share best knowledge on climate change risk identification and management in the insurance sector<sup>11</sup>. On a state level, the California Department of Insurance's Climate Risk Carbon Initiative has resulted in hundreds of





insurance companies disclosing their fossil fuel-related investments, which are posted on the Department of Insurance website<sup>12</sup>. More broadly in the USA, regulators from six states run the National Association of Insurance Commissioners' (NAIC) Climate Risk Disclosure Survey<sup>6</sup>. Insurers are asked how they are addressing climate change in their business operations, underwriting and reserving, and insurance companies with direct written premiums greater than USD100 million are required to submit responses. In Australia, the regulator APRA flagged its intention in March 2019 to increase its scrutiny of how insurers are managing the physical and transition risks of climate change to their businesses<sup>13</sup>. The Australian Council of Financial Regulators has established a working group on the financial implications of climate change to co-ordinate the actions of APRA, the Reserve Bank of Australia (RBA) and the corporate watchdog ASIC<sup>14</sup>. Clearly there have been multiple regulatory responses already across the globe and we do not expect this pace of regulatory change to slow down.

### **The pace of insurance companies' disclosures needs to match the wave of regulation**

Current disclosure practice within the insurance industry is not keeping pace with the rapid move towards regulation as the global norm. As of November 2019, 45 insurance companies, including 13 ClimateWise members, have stated support of the TCFD recommendations<sup>15</sup>. However, the quality of climate-related

disclosures for the insurance sector is below the average of all reports. The 2019 TCFD status report shows the rate of improvement for the insurance sector across the four TCFD categories has been under half that of all companies reporting to the TCFD over the last three years<sup>16</sup>. The insurance sector has been notably slower in progress on two specific TCFD recommendations: Strategy, and Metrics and Targets. The percentage of insurance companies meeting the Strategy recommendation is 8 percentage points below the average across all industries, while for the Metrics and Targets recommendation it is 15 percentage points below the average. This global picture is reflected in the 2019 review of member disclosures against the ClimateWise Principles, where Principles 2 and 4 (aligned with TCFD Strategy and Metrics and Targets recommendations) show the weakest performance.

ClimateWise looks for members to improve year-on-year their identification and management of climate-related risks. Some members are already towards the front of the industry curve, as shown by four ClimateWise members ranking in the top 10 of the Asset Owners Disclosure Project (AODP) Insurance Global Climate Index in 2018<sup>17</sup>. The hardening worldwide regulatory landscape and shifting industry norms will provide a stronger incentive for ClimateWise members to accelerate the inclusion of climate-related risks in their processes and reporting. One of the next steps for insurance companies would be to evaluate their strategic resilience to climate-related risks and opportunities through scenario analysis.



# Climate scenarios and strategic implications

## Climate change is increasingly recognised as a risk for the insurance industry

There is scientific consensus that a changing climate will influence the frequency and intensity of extreme weather events, and the insurance industry is already feeling the effects<sup>18</sup>. The number of natural disasters over the last decade is 400 per cent higher than the number of natural disasters in the 1970s, and there is academic consensus that climate change is making extreme weather events more likely and more intense<sup>19 20</sup>. This is demonstrated by 2017–18 becoming the most expensive two-year period on record for the global re/insurance industry, which paid out USD219 billion in claims from weather-related events<sup>21</sup>. In 2019, the Insurance Banana Skins survey of risks facing the insurance sector across the globe over the next two to three years recorded climate change as a big riser, ranking it as the 6th most prominent risk facing the global insurance industry. Climate change has not featured near the top of this list since 2007. Commentary from c.900 global insurance professionals established a strong expectation for climate change and sustainable development to continue to impact the insurance industry, businesses and country agendas across the world<sup>22</sup>. In addition, environmental risks have dominated the World Economic Forum's Global Risk Perception Survey for the past three years<sup>23</sup>.

### Scenario analysis is the first step on the journey

Despite climate-related risks and opportunities becoming an increasingly important issue for insurers, evaluating the impacts is proving challenging. The timing and magnitude of climate change financial impacts are uncertain and subject to numerous factors ranging from policy decisions to the physics of the Earth's climate system. To consolidate this information into a format that aids decision-making, climate scenarios have been defined by intergovernmental organisations such as the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA). Climate scenarios are not forecasts of the future, rather, they demonstrate the interactions between elements of the economic and climate system as particular variables change. The scenarios describe a variety of possible outcomes over the short, medium and long term in the context of environmental, economic and socioeconomic factors.

Climate scenario analysis allows an organisation to consider how it might perform under different climate scenarios, and how resilient their strategy is to future states of the world<sup>24</sup>. The TCFD defines scenario analysis as a tool that "evaluates a range of hypothetical outcomes by considering a variety of alternative plausible future states (scenarios) under a given set of assumptions and

constraints"<sup>24</sup>. For the insurance industry as a whole, the uptake of scenario analysis to better understand the implications of transition risks and physical risks has been slow. Transition risks are risks which arise from efforts to address environmental change, including but not limited to abrupt or disorderly introduction of public policies, technological changes, shifts in investor sentiment and disruptive business model innovation. Physical risks are risks which arise from the impact of climatic (ie extremes of weather) or geologic (ie seismic) events or widespread changes in ecosystem equilibria, such as soil quality or marine ecology<sup>25</sup>. However, progress is evident amongst the ClimateWise membership, with half of ClimateWise members undertaking scenario analysis in the 2019 reporting cycle to assess their climate-related physical and transition risks. Some members are also working towards using scenario analysis to assess the resilience of their business strategies in future states of the world, but for most members this is in the early stages.

### Responding to climate change through integration of scenario analysis results in decision-making and strategy

Despite some insurance companies using scenario analysis to look at the implications of climate-related risks and opportunities on their business, it is rarely being used to its full potential. A PRA review of the insurance industry in 2015 found that whilst liability management was adequate, climate risk management on the asset side of the balance sheet was low<sup>26</sup>. Mark Carney (Governor of the Bank of England) spoke of this "cognitive dissonance" which is still common within the industry at the European Commission Conference in March 2019<sup>27</sup>. Insurers need to disclose more information on how the outcomes of scenario analysis have influenced their insurance and investment strategies, and thus promoted the firms' resilience to climate change. The 2019 TCFD status report reviewed 147 insurers and found that only 12 per cent were using scenario analysis to consider the resilience of the organisations' strategies in different climate-related scenarios<sup>16</sup>. This is also apparent in the ClimateWise membership; very few members describe how scenario analysis is used to promote the resilience of their business strategy in light of the climate change risks they have identified as material. The disconnect between scenario analysis and strategic response can also be observed at the macro level: the insurance industry is responsible for over USD30 trillion of global assets under management, but less than 0.5 per cent of assets invested by the world's 80 largest insurers are in low carbon investments that provide solutions to climate change<sup>28</sup>. Clearly, there is still a way to go in ensuring strategies are robust enough to deal with the increasingly material issue of climate change.

Practically, insurers can improve the effectiveness of scenario analysis for strategic decision making by considering how they design their scenarios and communicate the results. In the initial stages insurers should set clear objectives and define the scope of the exercise, to ensure the outputs are relevant to a business imperative. Often scenarios have been designed for policymakers rather than financial institutions<sup>29</sup>. Therefore, insurers are encouraged to tailor scenarios to their own needs, enabling them to explore the impacts of climate change on indicators that are directly relevant to their business models. Insurers should consider extracting data that can be easily integrated into existing risk management and decision-making processes. For example, reporting on risk levels in terms of financial impact on the insurer can increase relevance to decision makers. In addition, as scenario analysis is a modelling methodology used to

predict an uncertain future, it often relies on implicit assumptions. The assumptions and uncertainties of this technique need to be clearly communicated to decision-makers to ensure this is built into strategic decision making<sup>30</sup>. Scenario analysis typically works best as a cross-functional undertaking involving internal stakeholders from across the business, including but not limited to the risk management, investment and sustainability functions<sup>29</sup>. This enhances the value of outputs for making specific strategic decisions across both the investment and insurance functions. ClimateWise have also developed the Physical risk framework<sup>31</sup> and Transition risk framework<sup>32</sup>, which contain methodology to guide insurers on how insurance models, tools and metrics can be used to improve management of physical and transition risks of climate change.' after 'material issue of climate change'.

### In the UK, the Prudential Regulation Authority (PRA) included climate scenarios in its market-wide insurance stress tests for the first time in 2019.

Both life insurers and general insurers were required to consider the impact of three scenarios:

- a sudden transition with temperatures being kept below 2°C relative to pre-industrial levels, with shock parameters illustrative of potential impact in 2022
- an orderly transition with temperatures being kept below 2°C, with shock parameters illustrative of potential impact in 2050
- a scenario with failed future improvements in climate policy, resulting in a temperature increase in excess of 4°C, with shock parameters illustrative of potential impact in 2100.

General insurers were required to consider the impacts of both sides of their balance sheet for physical risk, and to evaluate their investment portfolios for transition risk. Life insurers were required to consider their investments for physical and transition risks, but were not required to consider their liabilities. The PRA acknowledged that this exercise was exploratory and that its scope was limited. As well as requesting quantitative data on the impact of these stresses, the regulator also asked insurers to provide it with information on how they are approaching scenario analysis, including the types of assumptions made<sup>3</sup>. It is likely that the PRA will build on this exercise to conduct more wide-ranging stress tests in future; it is also likely that other regulators will follow the UK's example and conduct similar exercises.

### Introducing innovative climate-related strategic solutions

Undertaking scenario analysis can have a profound effect on an insurance company's strategy. In response, insurers are beginning to demonstrate a range of innovative strategic solutions to mitigate climate change risks and capitalise on opportunities. A key influence on investment decisions has been the identification of asset classes which are more vulnerable to climate change. A combination of scenario analysis and external pressure has caused many insurers to reconsider their involvement with high carbon assets. The 2018 Unfriend Coal report revealed that Europe's four biggest primary insurers (three of which are ClimateWise members **AXA**, **Zurich** and **Allianz**) have restricted insurance for coal, and 19 major insurers have divested from coal<sup>33</sup>. Insurers are also starting to identify how specific investment decisions can work to reduce climate change risk in their insurance business. A **Lloyd's** study led by the University of California, Santa Cruz, found that globally, coastal flood damage has cost insurers over USD200 billion over the past decade.<sup>34</sup> In response, Lloyd's is funding a research project to understand how the insurance industry can help reduce damage from coastal flooding by supporting coastal and marine habitats<sup>35</sup>. In a similar

effort, **Swiss Re** has collaborated with The Nature Conservancy to insure a coral reef off Cancun in Mexico<sup>36</sup>. By funding or insuring nature-based solutions, the insurance sector can buffer the uncertain risks of climate change, with benefits for its own profit margins and wider society. In addition, tools such as ENCORE (Exploring Natural Capital Opportunities, Risks and Exposures), which was launched by the Natural Capital Finance Alliance, have been developed to help financial institutions screen their portfolios for natural capital risk and integrate the insights into their existing risk management processes<sup>37</sup>.

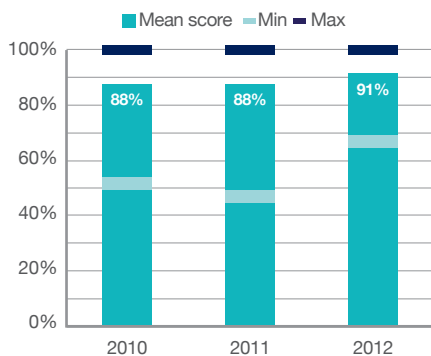
To conclude, the insurance industry is increasingly seeing climate change as a key risk. Although insurance companies are making progress in responding to climate change, there is still work to be done on incorporating and embedding the implications from the scenario analysis into their business strategy and decision-making processes in order to become more resilient to climate risk. Undertaking scenario analysis is not the final step of the process for incorporating climate risk into investment and insurance decisions – for example, the understanding of physical risk implications of climate change can be deepened by combining scenario analysis with a natural capital perspective; and tools, such as ENCORE outlined above, to help organisations do this are increasingly available.



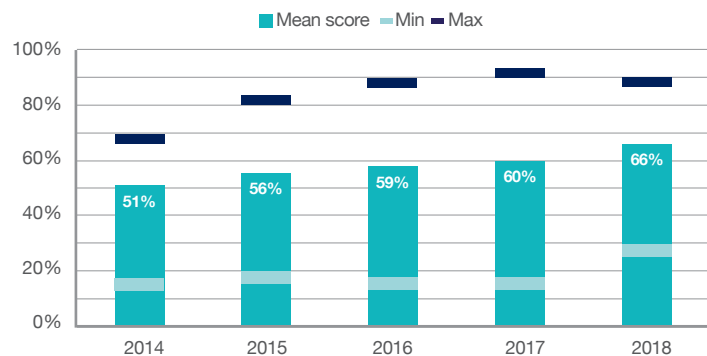
# The ClimateWise Principles member progress

**“The demand for TCFD disclosure is now enormous. Current supporters control balance sheets totalling USD120 trillion and include the world’s top banks, asset managers, pension funds, insurers, credit rating agencies, accounting firms and shareholder advisory services... The next step is to make these disclosures mandatory.”<sup>38</sup> Mark Carney’s (Governor of the Bank of England) message during the UN Secretary General’s 2019 Climate Action Summit in New York was clear about the direction of climate-related regulation and disclosure. The new ClimateWise Principles reflect this sentiment; they are now aligned to the recommendations of the TCFD and address the heightened expectations from users of climate-related disclosures.**

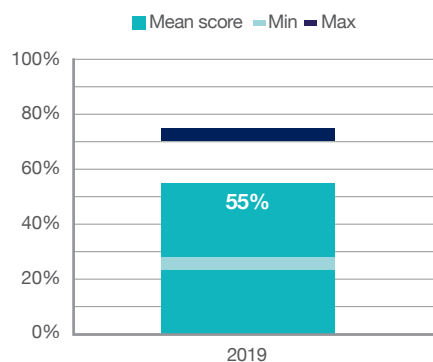
Member score over time (2010-2012)



Member score over time (2014-2018)



Member scores over time (2019)



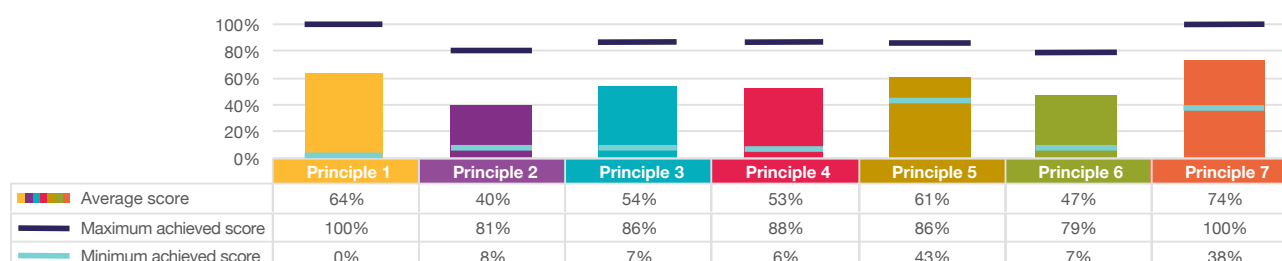
When a revised approach to the ClimateWise Principles was introduced between 2012 and 2014, a significant decrease in mean score was observed, with average members dropping from 91 per cent to 51 per cent. The new approach introduced in 2019 has had a similar result, with a decrease in mean score from 66 per cent to 55 per cent from 2018 to 2019. Many of the ClimateWise members have started their journey towards full TCFD disclosures in 2019, and have used the ClimateWise review process as an opportunity to reflect on their current disclosure practices and recalibrate their approach both publicly and internally.

The independent review process identified areas where disclosures are already of a high quality, as well as areas for improvement within the ClimateWise membership. Members demonstrated strong corporate accountability on climate issues, with engagement at board and management level, and the clear incorporation of climate change issues into internal

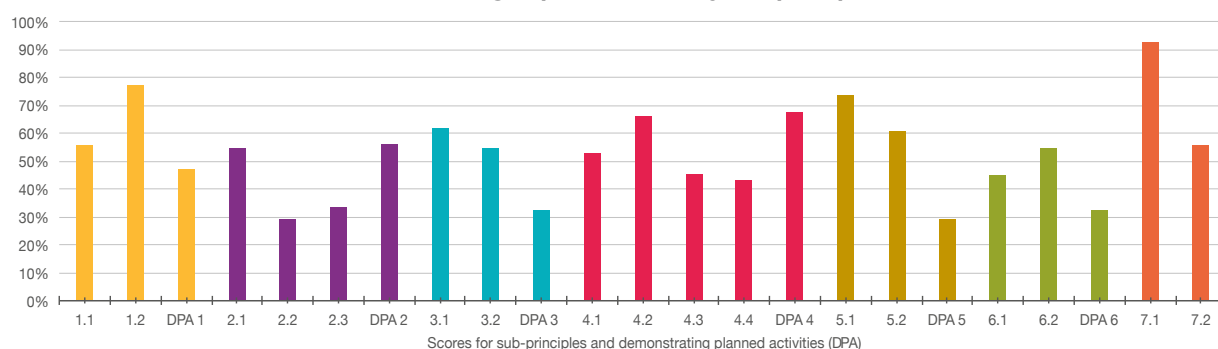
risk management procedures. ClimateWise members continue to demonstrate leadership within the insurance sector in climate-related engagement activities, and are actively involved in initiatives to influence climate mitigation and adaptation policy. Many members also participate in research into the implications of climate change on customers and the insurance industry more broadly.

In line with the findings of the TCFD 2019 status report<sup>16</sup>, ClimateWise members should look to enhance their disclosures by demonstrating their strategic response to climate change issues. Future disclosures should highlight members' financial and strategic resilience to climate-related risks through the use of scenario analysis, and the incorporation of financially orientated metrics and targets. Progress in these areas will prepare ClimateWise members for the increasing scrutiny around climate-related regulation and disclosure standards.

Normalised average absolute score by Principle



Normalised group mean score by sub-principle



# ClimateWise Principles —

## 2019 Annual Review

The annual assessment of the integration of the ClimateWise Principles across members' business activities is based on members' reporting progress, independently reviewed by PwC. It highlights the overall progress being made by the ClimateWise community, while giving members individual rankings that allow them to benchmark progress against their peers. This year is the first year of the new ClimateWise Principles, which have been updated and aligned with the TCFD recommendations. The new ClimateWise Principles have retained their emphasis on leadership qualities, risks and opportunities, in order to improve the insurance sector's ability to increase the resilience of society to climate change.

### Principle 1 Be accountable

See page 17

### Principle 5 Inform public policymaking

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### Principle 2 Incorporate climate-related issues into our strategies and investments

See page 21

### Principle 6 Support climate awareness amongst our customers/clients

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### Principle 3 Lead in the identification, understanding and management of climate risk

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### Principle 7 Enhance reporting

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### Principle 4 Reduce the environmental impact of our business

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## Summary

### Principle 1: Be accountable

The majority of members have demonstrated that they have good governance structures in place to address and incorporate climate change issues into decision-making at the board and management level. At board level, a quarter of members are seen to have sustainability, climate change or ESG board committees that oversee climate-related risks and opportunities, and for most members this accountability lies with the group board. At management level, members disclose climate-related responsibilities being assigned to specific positions or committees, such as the sustainability committee, risk committee or sustainability manager.

To enhance disclosures further, members should demonstrate how the board monitors and oversees progress against goals and targets for addressing climate-related issues.

### Principle 2: Incorporate climate-related issues into our strategies and investments

Members have disclosed their priority climate-related risks and demonstrated how these risks impact their business, strategy and financial planning. Examples of recurring risks disclosed by members are physical risks such as more frequent and extreme weather events, which can lead to weather-related losses, or transition risks, including market and consumer choice changes, impacting the type of products offered by members.

This principle has the most scope for improvement in disclosures. To improve, members should disclose priority climate-related opportunities, not only risks, and demonstrate how they are measuring both these climate risks and opportunities through metrics and targets. Members should also demonstrate a leadership position for encouraging better climate disclosure and further research. Additionally, members should demonstrate how they are undertaking scenario analysis and the implications of the analysis for their business, such as enabling them to understand the resilience of their strategy or the impact on business decisions.

### Principle 3: Lead in the identification, understanding and management of climate risk

Members have scored well in describing how processes for identifying, assessing and managing climate-related risks are integrated throughout their organisations. In underwriting, members disclose the use of tools to monitor physical risks and the function of management networks to facilitate discussions and decision-making. On the investment side, members have looked into the carbon intensity of their investment portfolios, considering the implications of physical and transition risks. Members actively undertake research and develop insurance products to support climate adaptation and mitigation initiatives. This includes insurance and risk financing solutions for clean technologies and renewable energy for commercial and domestic clients.

To improve, members could provide more detail on how the potential size and significance of climate-related risks is assessed, giving an indication of the relative significance of climate-related risks to other business risks. Additionally, members could explain the relationship between risk analysis processes on the investment side and underwriting side of the business, describing if possible where they overlap and inform each other. Members describe a wide variety of research undertaken and new insurance products developed to mitigate climate-related risks, but need to provide more evidence of how this impacts their business practices.

### Principle 4: Reduce the environmental impact of our business

ClimateWise members have continued to disclose Scope 1, 2 and 3 emissions data and other environmental KPIs, and demonstrate progress against emissions reduction targets. Members are also working to improve the environmental sustainability of their operations through implementing sustainable procurement policies, and in some cases engaging with their supply chains to actively reduce environmental impacts.

Members can continue to improve by setting reduction targets for other operational environmental indicators, such as water and waste. In addition, members should demonstrate how their employee engagement initiatives on climate form part of an overarching engagement plan that helps reduce their organisations' environmental impacts.

### Principle 5: Inform public policymaking

Members have demonstrated engagement with multiple organisations and industry bodies across a range of issues, and increasingly do so according to the areas most relevant to them. Several members are involved in initiatives to improve policies on physical risk mitigation, such as flood resilience or water conservation projects, and some have participated in government conferences on natural catastrophes and climate-related risks. Many members have demonstrated a leadership position in the engagement of others on matters relating to climate change, by setting up and chairing forums on climate risks, or organising seminars on natural catastrophes, enabling members to work with a range of stakeholders and actively contribute to the public debate on climate change. Members are also shown to support climate-related research over the year, and demonstrate how this is used to inform their business strategies, which is often achieved by improving natural catastrophe models or enabling better solutions for clients.

To progress further, members should seek to demonstrate clearly how their engagement activities link to key issues, and how research undertaken or supported on climate change addresses key risks faced by the business.



### **Principle 6: Support climate awareness amongst our customers/clients**

Members have demonstrated active engagement with their customers/clients to communicate their organisation's beliefs and strategy on climate change. Many members produce climate-related publications and newsletters which form the basis of discussion with clients/customers about climate issues. Some members have organised awareness-raising campaigns, workshops and networks to help customers/clients develop strategies to identify, assess and manage climate risks and opportunities. Members have helped clients address their specific climate-related risks and opportunities, providing support and tools in areas including meteorological forecasts for farmers, personalised typhoon preparation advice and the implications of different climate scenarios.

To progress further, members should explain how their engagement activities with customers/clients form part of an overarching engagement plan to promote climate awareness. Members should also provide evidence of the effectiveness of their engagement activities in promoting climate awareness and enabling customers/clients to assess their own levels of climate risk.

### **Principle 7: Enhance reporting**

Some members have enhanced their reporting on climate-related issues through incorporating elements of their ClimateWise report into their annual filings. This includes forming part of their TCFD response by providing details of how climate-related risks and opportunities are governed; incorporated into strategy and risk management processes; and monitored and addressed or reduced through metrics and targets.

Members should continue to develop their public reporting on climate risks and opportunities and are also encouraged to publish their ClimateWise report publicly.

# Appendix 1

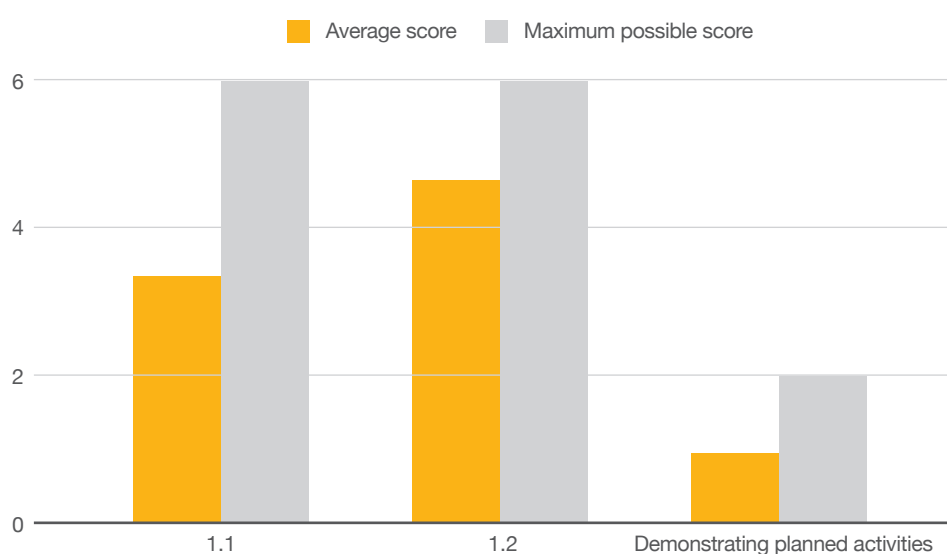
## Member evidence against the ClimateWise Principles

# Principle 1: Be accountable

## The sub-principles

- 1.1 Ensure that the organisation's board is working to incorporate the Principles into business strategy and has oversight of climate risks and opportunities.**
- 1.2 Describe management's (below board-level responsibility) role in assessing and managing climate-related issues.**

Principle 1: Group mean absolute score by sub-principle



Note: The 'Maximum' bar in the chart (left) reflects the total marks available under each sub-principle and each level of each sub-principle is scored out of two points.

'Absolute' refers to the number of points scored, and does not take into account the weighting of the Principles by insurer type.

**Principle 1 is one of the strongest scoring amongst all seven ClimateWise Principles. Board-level oversight formed part of Principle 6 of last year's ClimateWise Principles, where it was demonstrated across members that board-level engagement with climate issues had increased between 2017 and 2018. New to this year's principles, however, is the disclosure of management-level oversight of climate-related issues.**

In sub-principle 1.1, the majority of members described oversight of climate-related issues at the board level through discussion of such issues at regular committee meetings, and the processes and frequency through which the board or board committees are informed, with just less than half of members scoring full marks. Disclosures on how the board monitors and oversees progress against climate-related goals and targets were not as high scoring, with most members scoring no or only partial marks. Most members disclosed information on incorporation of climate change into business strategy and planning at a board level, with half scoring maximum points.

In sub-principle 1.2, nearly all members assigned climate-related responsibilities to management-level positions or committees, including a description of the associated organisational structure and detail on how management reports to the board/board committees, with over two-thirds of members scoring full marks. Just over half of all members scored full marks in their disclosure on the processes by which management is informed about climate-related issues. Almost all members scored full marks for their disclosures of how management monitors climate-related issues.

Just over half of the members provided evidence of demonstrating planned activities (DPA) to address the gaps in their disclosures on governance. However, most received only partial marks due to a lack of detail on specific timelines for the plans. Under one-third of members received no marks as they did not disclose any information on planned activities.

## Key strengths

The TCFD governance recommendations directly relate to ClimateWise's Principle 1 of 'Be accountable', and it is clear through members' disclosures on Principle 1 that the governance recommendations in particular have resonated with insurance members. Board-level oversight of climate change has been clearly defined by the majority of the members, where governance structures are in place to address and incorporate climate-related issues into top-level decision-making. For example, at **Sanlam**, all business units and subsidiaries are required to include environmental, social and governance (ESG) issues in the board agendas such that climate-related issues are scheduled as agenda items at all board meetings. **Chubb's** Nominating and Governance Committee has responsibility at the board level for reviewing ESG issues, including climate change. The **RSA** Group Board has responsibility for oversight of climate-related issues and considers climate change as it does other risks with significant implications for the business. RSA's Chief Risk Officer has responsibility for climate-related issues and updates the Group Board on activities and progress against targets on a biannual basis.

Members are also starting to demonstrate the incorporation of climate change into business strategy at a board level, rather than it being sidelined as a separate issue. At **Swiss Re**, there are three Board of Directors committees tasked with overseeing the implementation of Swiss Re's climate change strategy. For example, the Chairman's and Governance

Committee has the overall task of monitoring the Group's strategic priorities on enabling sustainability progress, including initiatives and actions specifically addressing climate change.

For sub-principle 1.2, an ongoing part of the Principles and the highest scoring sub-principle, members are providing strong evidence of management-level oversight of climate-related issues. Members do particularly well in describing the climate-related responsibilities assigned to management-level positions or committees and outlining the specific climate-related issues overseen and monitored by them. For example, **Aviva's** Group Chief Operations and IT Officer is responsible for overseeing the management and reduction of Aviva's operational carbon emissions, and each of the Market CEOs is responsible for overseeing the management of climate-related impacts for their businesses. The 'Greater Good' steering group is **Ecclesiastical's** management-level Corporate Responsibility advisory group which includes the Group CEO and EdenTree investment management representation, and is responsible for the management of specific issues including its response to climate change. A Research and Development team was created at **ArgoGlobal** in order to invest dedicated resources into capturing current risk from natural hazards. **Prudential's** ESG ExCo oversees the development and implementation of the Group's processes, to assess the climate-related risks and opportunities facing the business and the identification and delivery of activities to support implementation, with a view to enhancing its climate-related financial risk management practices.

Some members also disclose well on the processes by which management is informed about climate-related issues.

**QBE's** management is informed about climate-related issues through a number of processes which are integrated into QBE's business strategy, and which guides decision-making. This includes their Group Environmental Policy, which sets out QBE's commitment to minimising impact on the environment (including climate-related impact). **Zurich's** Sustainability Leadership Council is informed of climate-related issues by Zurich's Sustainability Taskforce, Regional Sustainability Acceleration Boards and business units. **Aon's** Resilience and Sustainability team regularly provides advice to global leadership teams on the topic of climate change, while ensuring that leaders of the business units are aware of the development of Aon's climate change working groups. The head of **Santam's** Group Strategy Unit reports to the CEO, and progress regarding all priority ESG issues is regularly reported to, and reviewed by, the CEO, including climate-related issues.

## Recommended areas for development

Members score well in demonstrating accountability and governance of climate-related issues at both board and management level. However, very few members disclose how the board monitors and oversees progress against goals and targets for addressing climate-related issues, and further marks can be gained if this is disclosed. Members should continue to demonstrate how climate-related issues are overseen by the board. However, there is also scope for members to enhance disclosures by revealing further details of this level of oversight. This includes more granularity on the processes and frequency by which the board is informed of climate-related issues. Many members also do not reveal planned activities to be conducted on improving the governance of climate-related issues, and when they do, they are often unable to score full marks due to a lack of specific dates and timelines for the implementation of the activities.

## Case Study: Allianz's governance of climate-related issues

For Allianz, countering climate change and limiting global warming is a crucial priority and strong corporate governance is pivotal to their sustainability approach. The Group ESG Board is the highest governing body for climate change overseeing the Group Climate Change Strategy, ESG issues and environmental management.

### Membership of the ESG Board

This consists of three members of the Allianz SE Board of Management:

**Dr Günther Thallinger**, Member of the Board of Management since 1 January 2017 with responsibility for Investment Management.

**Jacqueline Hunt**, Member of the Board of Management since July 2016, responsible for Asset Management and US Life Insurance since 1 January 2018, with responsibility for the Finance, Controlling and Risk Management functions.

**Dr Christof Mascher**, member of the Board of Management, Operations, Allianz Services, is invited as standing guest for all topics related to sustainability in Operations.

Key Allianz Group functions are represented on the ESG Board:

- Head of Corporate Responsibility
- Group Communications and Corporate Responsibility
- Group Risk
- Group Compliance
- Allianz Investment Management SE
- Allianz Global Corporate and Specialty SE.

The ESG Board meets quarterly and informs the Board of Management on relevant topics and activities at least twice a year. It also reviews and recommends policy proposals for consideration by the Board and/or relevant Board committees on any climate or ESG-related risks or opportunities.

*continued*

## Case Study: Allianz's governance of climate-related issues

### Key functions of the ESG Board include:

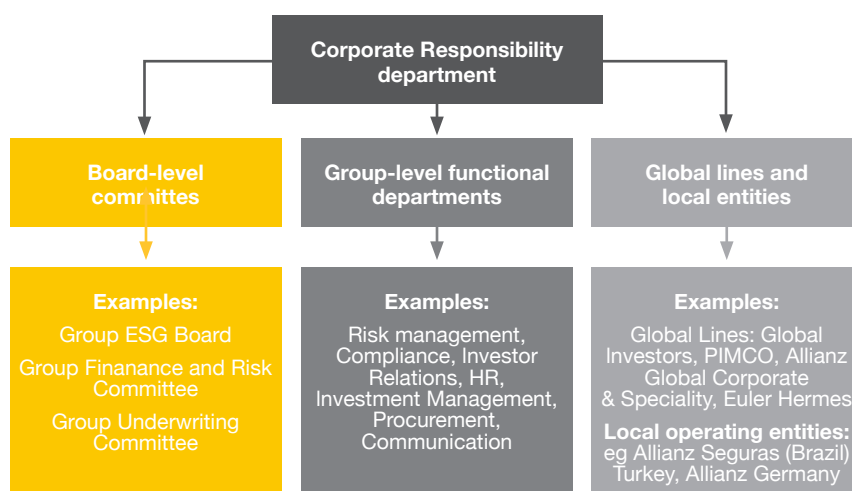
- strategically defining and continuously developing ESG ambition for the Allianz Group
- guiding the Group ESG approach and approving a yearly ESG work-plan
- defining and prioritising ESG topics for the Group – regularly informing the Allianz SE Board of Management on ESG topics and activities
- positioning the Group towards critical ESG topics (in collaboration with relevant functions within Group Communications and Corporate Responsibility) (eg climate change)
- reviewing and recommending ESG-related policy proposals for consideration by the Board of Management and/or relevant Board committees (eg divestment on fossil fuels)
- engaging on ESG topics with relevant stakeholders, eg peers and business partners, NGOs (eg coal)
- oversight of Allianz's decarbonisation approach (eg Science Based Targets initiative (SBTI) progress, global procurement on major expenditures such as renewable energy, etc).

In addition to the Group ESG Board, several committees with Board member leadership play an important role in their decision-making processes:

- **Group Finance and Risk Committee:** oversees risk management and monitoring, including sustainability risk. The Committee is the escalation point for ESG-related topics, based on analysis and deliberations within the Group ESG Board.
- **Group Underwriting Committee:** monitors the underwriting business and its risk management, as well as developing new underwriting policies and strategy.
- **The Head of Group Communications and Corporate Responsibility** reports directly to the CEO of Allianz SE. This ensures a close alignment with the CEO's agenda.
- **Allianz Climate Solutions** – Allianz's centre of excellence for climate change, with a focus on renewable energy, and responsible for the implementation of the Allianz Climate Change Strategy – sits with Allianz Re alongside the Group Environment Office.

There are a range of committees at global level which have responsibility for climate-related issues.

### CR Governance Structure



# Principle 2:

## Incorporate climate-related issues into our strategies and investments

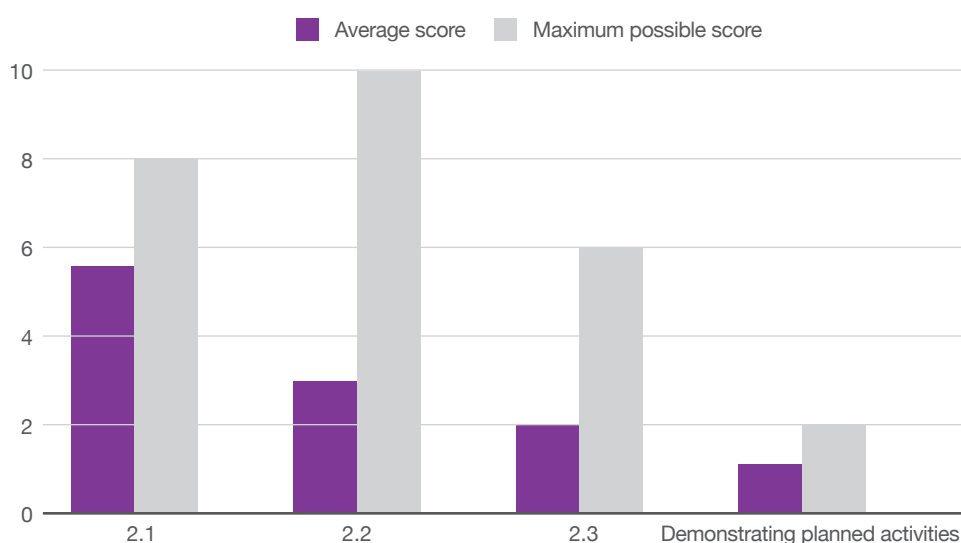
### The sub-principles

**2.1 Evaluate the implications of climate change for business performance (including investments) and key stakeholders.**

**2.2 Measure and disclose the implications of climate-related issues for business performance (including investments) and key stakeholders.**

**2.3 Incorporate the material outcomes of climate risk scenarios into business (and investment) decision-making.**

Principle 2: Group mean absolute score by sub-principle



Note: The 'Maximum' bar in the chart (left) reflects the total marks available under each sub-principle and each level of each sub-principle is scored out of two points.

'Absolute' refers to the number of points scored, and does not take into account the weighting of the Principles by insurer type.

**The incorporation of climate-related issues into insurance companies' strategies and investments is important in ensuring the businesses are resilient to the risks that arise from climate change. However, Principle 2, as a whole, is the weakest scoring principle for ClimateWise members.**

In sub-principle 2.1, around two-thirds of members described their priority climate-related risks and opportunities, and the impact of these risks and opportunities on their business, strategy and financial planning. More disclosure is required on how members are developing a business strategy on the implications of climate-related issues. Though over half of the members disclosed a leadership position for encouraging better climate disclosure and further research, only four members scored full marks.

Sub-principle 2.2 is the lowest scoring under Principle 2. Over half of the members disclosed key metrics used to manage climate-related risks and opportunities. However, there was a lack of disclosure on providing historical data and a narrative relating to performance over the past year for the metrics. Fewer members set targets to manage climate-related risks and opportunities, with only one member scoring maximum points. Some members described the methodologies used to calculate the measures and targets, whilst only a few provided information on how climate-related metrics are incorporated into remuneration policies.

In sub-principle 2.3 two-thirds of members scored partial or full marks for describing their process for undertaking scenario analysis, taking into consideration different climate-related scenarios, including physical and transition risk scenarios. However, members fell short when explaining how scenario analysis is used to understand the resilience of their business strategy, and how the results from the analysis have impacted on key decisions.

Disclosures on the future were stronger however, with two-thirds of members scoring well in demonstrating planned activities and disclosing activities to address all of their gaps. Examples of planned activities included developing client solutions with a stronger climate focus and plans for scenario analysis to be used in developing forward-looking criteria for investment decisions.

## Key strengths

Businesses should prepare for the implications of transitioning to a low carbon economy and the physical consequences of a warming planet. In order to prioritise actions, it is important that companies understand the magnitude of risks from climate change. It is therefore pleasing to see that members do well in disclosing their priority climate-related risks (and sometimes opportunities) over specific time horizons, and it is clear that they understand the impact of these risks and opportunities on their business, strategy and financial planning. This is reflected in sub-principle 2.1 scoring, which is the best of all sub-principles under Principle 2.

For example, **Aviva** recognises that the increased severity and frequency of weather-related losses have the potential to negatively impact on its profitability. As such, in order to improve resilience to such catastrophic scenarios, large catastrophic losses are now explicitly considered in Aviva's economic capital modelling. **Prudential** discloses how the potential shift in consumer demand towards more sustainable products and services presents an opportunity for it to develop sustainability and wider ESG products. Consequently, Prudential launched two new retail funds in 2018 – the M&G Positive Impact Fund and the M&G Sustainable Multi Asset Fund. **Hiscox** allocates capital depending on the lines of business it wants to write, and the risks and opportunities

associated with it, and this fluctuates according to a number of factors, including the impact of climate change. This means that the impact of climate change on the company's financial planning may be the reallocation of capital towards certain lines of business and away from others, depending on its climate risk exposure and appetite. **Beazley** acknowledges that over time climate-related risks could become more significant for its insurers. In order to manage climate-related risks identified by Beazley, such as catastrophe risk, it utilises commercial catastrophe models to facilitate the estimation of aggregate exposures based on its underwriting portfolio, and these models are updated to reflect new or secondary perils which may be related to climate change.

Some members also describe how they are developing a business strategy based on the implications of climate-related risks they have identified as priority. Natural catastrophes are identified as a key risk by **Swiss Re** to its Property and Casualty businesses. In view of the high potential relevance of this climate-related risk and climate change in general, Swiss Re, as a whole, has addressed climate change with a strategy combining four pillars. These four pillars are: 1) advancing its knowledge of climate change risks and quantifying and integrating them into its risk management and underwriting frameworks; 2) developing projects and services to mitigate



this risk; 3) raising awareness about climate-related risks through dialogue with clients; 4) tackling its own carbon footprint. **Santam** Group is currently undergoing a strategy review process called Future Fit 2025, and this review process ensures that it is responding to strategic issues and significant drivers of change, which include climate change and related risks. **Tokio Marine & Nichido Fire (TMNF)** has specified that climate change and natural disasters are priority CSR issues and has been making various efforts as part of its climate-related strategies. These include: engaging in industry-academia collaborative research on climate change and weather disaster risk, developing and providing disaster risk-related products and services, raising environmental and disaster prevention awareness, reducing the environmental footprint in business activities and achieving carbon neutral status.

In general members did not score highly on sub-principle 2.2. However, to measure the impact of physical risks, **RSA** discloses climate-related financial metrics such as weather-related losses for 2016, 2017 and 2018. It explains that the increase from 2016 to 2018 was a result of 2018 being a year with some major external underwriting challenges for the insurance industry, as natural catastrophes and other weather-related losses were higher than the long-term averages. **RSA** also provides metrics for its carbon emissions on investments and written premiums for renewable energy for 2018. In line with TCFD guidelines, **Swiss Re** discloses its weighted average carbon intensity to measure the carbon footprint of its investment portfolio. **Aviva** is the only member to set targets that measure climate-related risks and opportunities, with an investment target set in 2015 of £500 million annually for the next five years in lower carbon infrastructure. **Sanlam** Group discloses how climate-related metrics are embedded into remuneration policies by describing the monetary incentives provided for the management of climate-related issues. The achievement of emissions, greenhouse gas, energy, water, waste and paper reduction targets positively impacts bonuses or discretionary pay of the CEO, facilities manager and environment/sustainability manager.

Sub-principle 2.3 is the weakest scoring sub-principle under Principle 2, reflecting the need for further progression and disclosure relating to scenario analysis and the strategic implications of this. Some members are starting to comprehensively disclose their processes for undertaking scenario analysis, showing consideration of different climate-related scenarios, including physical and transition risk scenarios. However, only a handful of members have gone a step further to use scenario analysis to understand the resilience of their business strategy. For example, **Zurich** analysed physical and transition risks for selected parts of its investment portfolio. While Zurich is exposed to both near-term transition and long-term physical risk, its analysis suggests that very significant impairments would be required for the Zurich portfolio to be materially impacted, and the Group does not consider such impairments currently likely. Exposure is also expected to be further mitigated with ongoing implementation of Zurich's responsible investment and climate change investment strategies. **Argo Group** has identified 'stranded assets' as a potential significant risk factor for its investment portfolio. Utilising the **Lloyd's** report entitled Stranded Assets: the transition to a low carbon economy - Overview for the insurance industry,

**Argo Group** has maintained stress test scenarios that consider the potential impact of high carbon assets within its portfolio and on its capital adequacy. **AXA XL** discloses analysis based on the "warming potential" methodology, by which it finds that its "portfolio cost of climate" translates into a 0.2 per cent reduction in AXA's investment value. Across members, there is currently limited disclosure on how the results from scenario analysis have impacted key decisions. **Allianz** demonstrate this, however, by disclosing the Representative Concentration Pathway (RCP) scenarios used to inform its scenario analysis approach, and by analysing the potential impacts of the scenarios on the valuation of the constituents of its investment portfolio. The results of this analysis show that full 2°C alignment for the portfolio in scope is not yet achieved. Hence, Allianz France plans to make use of these results as an input for a range of actions such as targeting company engagements, the setting of portfolio decarbonisation targets, stock selection, or asset allocation decisions like sectoral tilting or divestment. This highlights the importance of continuing improvement on portfolio resilience to the risks arising from different climate change scenarios.

## Recommended areas for development

Though most members are identifying key climate-related risks and developing the risks to show how they specifically impact parts of the business, very few are disclosing their approach to climate opportunities. In line with TCFD recommendations on strategy, members should identify the physical and transition risks and opportunities presented by climate change, to inform the development of long-term strategies to guide their investment approach. Members could enhance their scores by demonstrating a leadership position for encouraging better climate disclosure and further research.

Members are also encouraged to provide metrics to measure the priority physical and transition risks identified in sub-principle 2.1 and provide historical data for these metrics to show performance trends over time. In order to manage these risks and opportunities and highlight progression, members should disclose their targets set, and the performance against these targets. While some members are leading the way forward, most members do not yet embed these climate-related metrics into remuneration policies. Members are therefore encouraged to show how they link executive and employee pay to their response to climate change.

There is limited disclosure of members undertaking scenario analysis and what the implications of this analysis mean to the business. Members are currently taking a light-touch and qualitative approach to scenario analysis, for example through explaining climate scenarios, such as those by the IEA, in general terms or how the outcomes of different scenarios might impact the insurance industry as a whole, rather than conducting scenario analysis specifically on its business. Members should relate scenario analysis and the outcomes back to the company itself to understand the resilience of its strategy to climate change and the impact the results could have on business decisions.

## Case Study:

### Aviva's response to the impact of climate change focuses on the transition, physical and litigation risk factors and related opportunities.

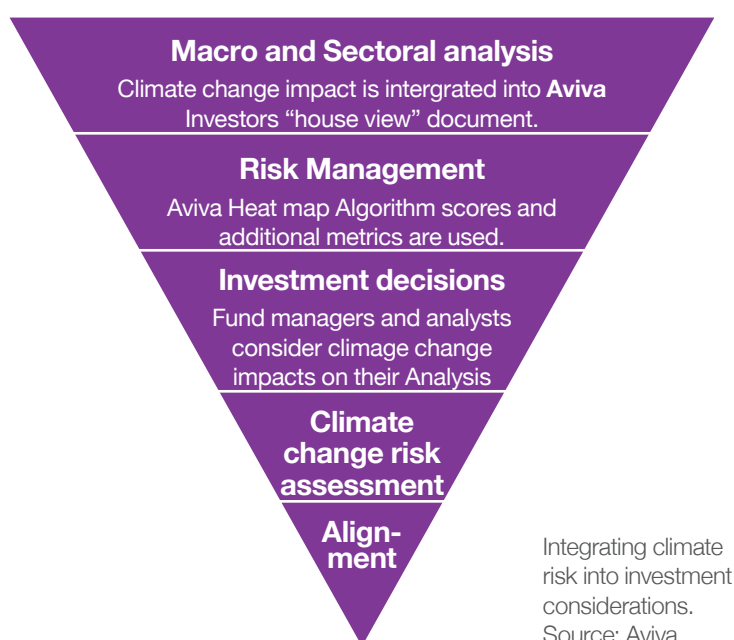
The materiality and horizons over which climate-related risks and opportunities impact Aviva's business depend on the specific insurance products, geographies and investments being considered. For example, the general insurance business considers risks in the underwriting and pricing processes and setting the reinsurance strategy based on a relatively short time horizon (one to three years). Aviva recognises that the increased severity and frequency of weather-related losses have the potential to negatively impact profitability. Consequently, large catastrophic losses are already explicitly considered in economic capital modelling to ensure resilience to such catastrophic scenarios.

In contrast, when developing their new product strategy and updating Aviva's overall business plan, the impact of these risks and opportunities needs to be considered over a medium time horizon (three to five years). With respect to life and pensions, in areas such as setting premium rates and reserves for annuities in payment as well as their investment strategy to back those liabilities, the impact of these risks and opportunities needs to be considered over a much longer time horizon (five years plus).

To consider the impact of these risks and opportunities over a range of different time horizons, Aviva developed an initial Climate Value-at-Risk (Climate VaR) measure in conjunction with the United Nations Environment Programme Finance Initiative (UNEP FI). This measure enables the potential business impacts of climate-related risks and opportunities to be assessed taking into consideration different scenarios and assumptions regarding policies, technologies, demand and various other macroeconomic factors as well as extreme weather. This measure looks at the evolution of climate-related risks and opportunities over the next 15 years but with the ability to consider shorter time periods (three to five years) where appropriate.

When integrating the management of climate-related risks and opportunities into their liquid asset portfolios, Aviva Investors considers several layers: macro and sectoral analysis; risk management; investment decisions; climate change risk assessment and alignment as set out below.

With regard to stock selection, Aviva challenges senior management of companies about the key risks, including climate change impacts where relevant, and increasingly is seeing companies' management proactively raising climate change in their discussions. Fund managers, risk managers and Aviva's chief investment officers have access to a growing suite of tools to assess climate change risk at a portfolio level. This includes MSCI's ESG ratings and carbon footprinting information, which is embedded in Aviva and Aviva Investors' risk systems, as well as analysis provided by Carbon Delta and Four Twenty Seven for Aviva France.



## Case Study:

### **EdenTree Investment Management, which forms part of Ecclesiastical Insurance Group, identifies both risks and opportunities arising from climate change on behalf of its clients.**

In a carbon-constrained world, businesses that are managing their impacts have a competitive advantage and are better insulated against increasing regulatory requirements. In addition, companies providing solutions to tackle climate change are expected to benefit from the transition.

EdenTree understands the companies they invest in will face a range of risks, including regulatory risk such as tighter emission legislation or carbon markets; reputational risks from the lack of action or poor environmental performance; physical risks affecting both their own operations and their supply chains as severe weather events are likely to be more frequent; and transition risks such as stranded assets and a switch in demand for more climate-friendly products. Climate change, however, also presents opportunities for investors: the investment universe contains companies that provide solutions to adapt and mitigate the effects of climate change; monitor the consequences of climate change; products that increase climate resilience; and solutions to tackle climate change such as renewable energy or energy efficiency.

Climate-related risks are assessed prior to investment and monitored within the portfolio. Climate change is also integrated into investment policies. The Group's ethical and responsible investment policy has mandated the integration of climate risks and opportunities into investment management. The policy requires specific engagement on climate change with investee companies and also describes its "carbon aware" approach. In addition, the policy states that "We exclude companies with a material exposure to oil sands and Arctic drilling ... [and] ... EdenTree will also seek opportunities to invest in areas that are leading the transition to a low carbon economy."

In the future, Ecclesiastical expects to continue conducting portfolio carbon footprints and further develop identification of climate risks and opportunities within its portfolio.

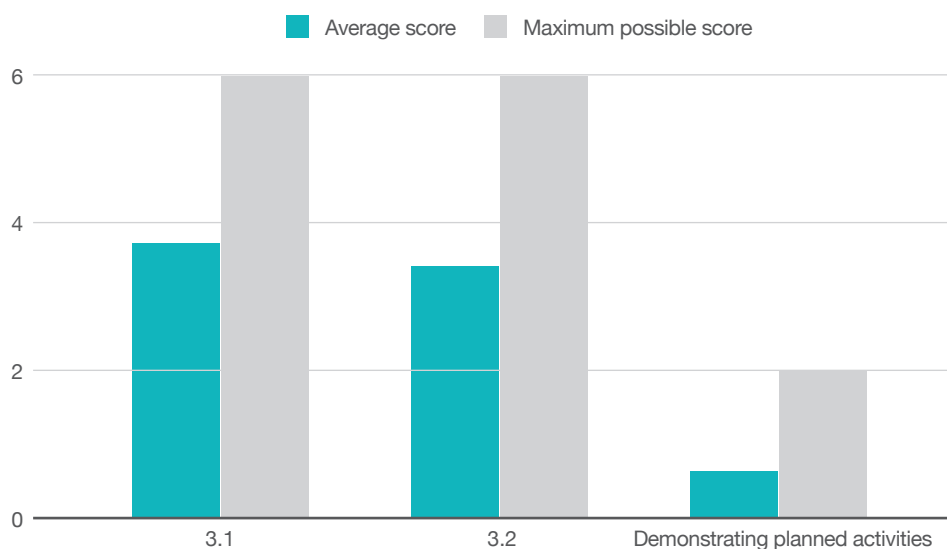
# Principle 3:

## Lead in the identification, understanding and management of climate risk

### The sub-principles

- 3.1 Ensure processes for identifying, assessing and managing climate-related risks and opportunities are integrated within the organisation (including investments).**
- 3.2 Support and undertake research and development to inform current business strategies (including investments) on adapting to and mitigating climate-related issues.**

Principle 3: Group mean absolute score by sub-principle



Note: The 'Maximum' bar in the chart (left) reflects the total marks available under each sub-principle and each level of each sub-principle is scored out of two points.

'Absolute' refers to the number of points scored, and does not take into account the weighting of the principles by insurer type.

### Identifying, understanding and managing risk is at the core of the insurance business, and ClimateWise members scored well on this principle.

In sub-principle 3.1, the majority of members described their current practice and processes for identifying and assessing climate-related risks, with half of the members scoring full marks. Just over half of the members scored partial marks and this was often because more detail was needed on how their organisation's risk management procedures incorporate climate risk, as well as on the actions taken to manage climate risks once identified.

In sub-principle 3.2, two-thirds of members scored well for describing their role in developing insurance products to support climate mitigation and adaptation activities. Just over half of the members scored full marks in describing their role in improving data quality to inform the research and analysis of climate-related issues. Members fell short when explaining how the development of these products impacts their business, with only two members receiving full marks.

Very few members provided evidence of planned activities to address the gaps in their disclosures, and nine members did not provide any evidence of planned activities. Members should focus on explaining how their risk management procedures may adapt to incorporate climate risk in the future. Additionally, members could show how the outcome of climate-related risk management procedures impacts the business both financially and strategically.

## Key strengths

Members have scored well in Principle 3, through providing detailed descriptions of the processes through which climate-related risks and opportunities are identified, assessed and managed within their organisations. This includes descriptions of the roles, committees, processes and tools used to assess climate-related risks and inform decision-making in both underwriting and investments. Members are also starting to highlight how these processes are integrated into existing risk management frameworks, and this is a particular area where further progression is still needed.

**Allianz** addresses climate-related risks as part of an overarching qualitative and quantitative risk-reporting and controlling framework. Climate-related risks are assessed and managed through the monitoring of early-warning indicators which are reported to senior management. Risk dashboards, risk capital allocation and limit consumption reports are used where climate aspects become significant. In addition, Allianz's Corporate Responsibility department works together with the Climate Contact Group on early identification and measurement of climate-related risks and opportunities arising from physical climate change and the low carbon transition.

**AXA XL**'s risk management committees serve as points of dialogue across the business, co-ordinating the identification and discussion of risk topics, creating risk aggregation methodologies, and developing specific risk appetites. This incorporates new exposures and changing weather patterns.

Sustainability and climate change are essential topics for **Swiss Re's** Asset Management. The company's Sustainability Risk Framework enables it to identify and address environmental and human rights concerns throughout its business, and these criteria are applied to its investments. In 2018–19 **RSA** began using ESG ratings data to better understand the ESG risk profile of its investment portfolio and has also conducted a carbon footprinting exercise. **Aviva** aims to reduce the carbon intensity of its investment portfolio through reducing exposure to the most carbon-intensive sectors. The company uses carbon footprinting and weighted average carbon intensity data (ts/USDm sales) to assess and manage the exposure of its assets to a potential increase in carbon prices.

A few members demonstrate the integration of climate risk management throughout their organisation by describing how climate is integrated into Enterprise Risk Management Frameworks (ERM). **RSA** classifies climate change as an emerging risk and has conducted research into the risks associated with "persistent or more extreme weather patterns" and "accelerating climate change", the insights of which have been used to inform RSA's management approach. The key climate-related risks identified are then managed along with other key risks within its ERM Framework. Climate-related risk management is also integrated into **TMNF** ERM. The company takes various factors into consideration when conducting risk

management, including results from research into the change in typhoon risk under future climate conditions, and the impact on insurance losses caused by a change in flood risk caused by increased rainfall.

The majority of ClimateWise members demonstrate an active role in developing insurance products to support innovation for climate mitigation and adaptation. In addition, several members describe activities undertaken to improve data quality issues to inform the research and analytics of climate-related issues.

**Argo Group** maintains a Clean Energy Risk Solutions (CERS) team dedicated to developing and distributing insurance and risk financing solutions related to clean technologies.

**Beazley** is working together with partners at Houston and Swansea universities, to understand the impact of climate on insurers and to promote a faster transition to lower carbon technologies. The work seeks to understand the hurdles that prevent prototype technology becoming industrialised. **MS Amlin** is undertaking a review of European windstorm risk, which includes an investigation into the potential impact of climate change on the frequency and/or severity of extreme wind events.

The **Association of British Insurers (ABI)**, a trade association, shares the outcomes of climate-related engagements through its network, alerting the broader industry to the development of climate initiatives. This includes contributing to the PRA's Physical Risk Framework, ClimateWise Transition Risk and Physical Risk Frameworks, and Flood Re's inland flood defence research. **Aviva** is developing a Climate Value-at-Risk (Climate VaR) measure in conjunction with the UNEP FI investor pilot project, working towards providing a holistic forward-looking view of climate-related risks and opportunities to its business. The **Allianz** Sustainable Solutions program promotes and monitors the development of products and services that create social value and have a positive environmental or climate-related impact. Examples of Sustainable Solutions include crop insurance, electric auto insurance, pollution liability, photovoltaic insurance and the green home energy-saving pack. The company's Sustainable Solutions products now number over 165 and generate €1.3 billion in revenue.

## Recommended areas for development

In general, members reported how climate-related physical and transition risks are identified and assessed. Over half of the members described how climate risk management procedures are integrated into the member's overall risk management procedures for both underwriting and investments. To improve Principle 3.1 scores, members should provide a greater level of detail on the actions they have taken to manage climate-related risk. For instance, updating risk modelling processes and feedback loops to reflect the changing climate perils, and reducing the carbon footprint of their investment portfolios. Details on the processes used to determine the potential size and significance of climate-related risks in relation to other risks would further improve practices. On the investment side, members could also improve marks by describing their engagement activities with investee companies. This could involve encouraging the identification and mitigation of climate-related risks within portfolios and improving disclosure practices.

ClimateWise members are active in capitalising on identified climate-related opportunities. For example, over two-thirds of members provided information on the innovative insurance products they have developed for climate mitigation and adaptation purposes. Looking forward, members could increase scores by explaining how the need for climate-related products and innovation is identified. There was limited reporting on members' roles in improving the quality of climate-related data to support research and development, and in particular there was a lack of evidence of how the development of new products to address climate change impacted their businesses. In future, members should describe how the development of new climate-related products impacts business in the short term, as well as the expected impact over longer time horizons. Members should also provide more detail on how research undertaken is shared throughout the business and ultimately influences strategic decision-making. In general, member responses for Principle 3.2 were focused on the underwriting side of the business. Members are encouraged to share examples of how research undertaken to improve the quality of climate data impacts the investment side of the business as well.



## Case Study: RSA's integration of climate change into risk management

RSA's Enterprise Risk Management approach ensures the right processes and procedures are in place to identify, understand and monitor the risks and opportunities associated with a changing climate. Climate risks are built into RSA's risk control environment and feature on the company's emerging risk profile.

RSA's Risk and Strategy teams regularly review the emerging risk landscape – analysing company-wide data, external research, exposure and trends to help senior leaders agree a management approach to climate-related risks. RSA is also an active participant in the CRO Forum's Emerging Risk Initiative (ERI) and as Chair, led the ERI's work on insurability and resilience in response to a changing climate.

### Applying climate trends to business decisions and risk management

Climate change will lead to more frequent weather extremes, which are potentially relevant to RSA's business decisions on issues such as risk pricing, managing exposures or designing its reinsurance strategy.

RSA has taken on the challenge to convert long-term weather trends into inputs that can be used to inform near-term management decisions. For example, by generating annualised trend rates for perils such as intense 24-hour downpours, from decades of weather station data.

As a result of its analysis, RSA has reviewed the weather assumptions included within its annual three-year planning process to validate whether the five-year historical analysis is adequate to reflect increases in the extreme weather associated with more persistent weather patterns. RSA's reinsurance treaties are used to ensure exposure to weather events remains within its risk appetite.

RSA's risk appetite statement and key risk indicators enable the Group to prioritise and monitor risks and opportunities within a clearly defined framework. The risk appetite statement is updated annually and reviewed quarterly by the Board Risk Committee, which has oversight of a range of emerging ESG risks.





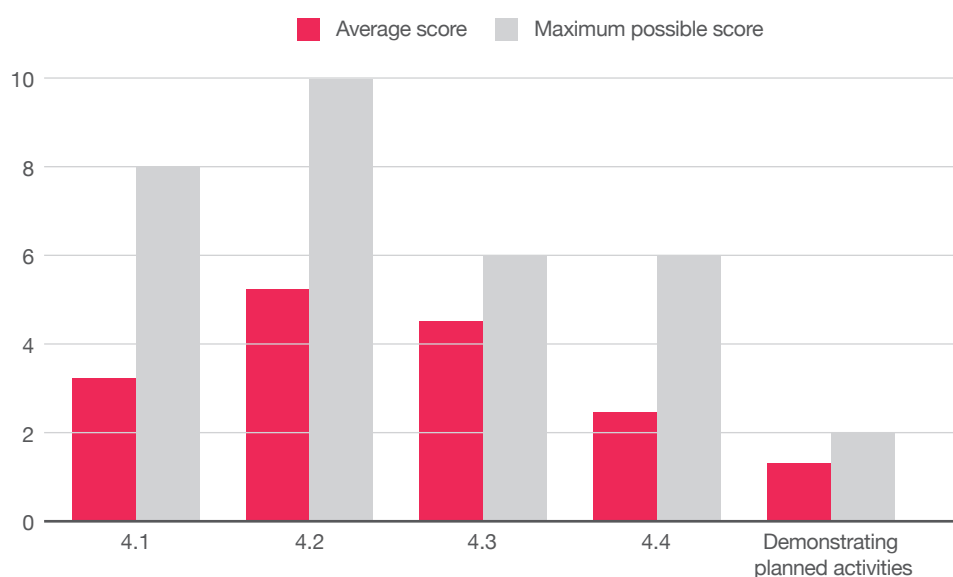
# Principle 4:

## Reduce the environmental impact of our business

### The sub-principles

- 4.1** Encourage our suppliers to improve the environmental sustainability of their products and services, and understand the implications these have on our business.
- 3.2** Disclose our Scope 1 and Scope 2 greenhouse gas emissions and Scope 3 greenhouse gas emissions and using a globally recognised standard.
- 3.2** Measure and seek to reduce the environmental impacts of the internal operations and physical assets under our control.
- 3.2** Engage our employees in our commitment to address climate change, helping them to play their role in meeting this commitment in the workplace and encouraging them to make climate-informed choices outside work.

Principle 4: Group mean absolute score by sub-principle



Note: The 'Maximum' bar in the chart (left) reflects the total marks available under each sub-principle and each level of each sub-principle is scored out of two points.

'Absolute' refers to the number of points scored, and does not take into account the weighting of the Principles by insurer type.

**ClimateWise members have demonstrated strong sustainability practices in their operations. Members are continuing to improve their environmental sustainability through working with their suppliers and implementing sustainable procurement policies. The majority of members provided full disclosure of Scope 1, 2 and 3 emissions using globally recognised standards, and half of the members scored full marks for disclosing progress against their emissions reductions targets.**

In sub-principle 4.3 over half of members disclosed key operational environmental indicators with a supporting performance narrative. However, very few members provided evidence of how the underlying data is measured and if there are any targets to reduce environmental impacts. Few members scored full marks for reduction targets relating to environmental indicators and only one member provided a methodology.

In sub-principle 4.4, just over half of the members scored full marks for engaging their employees in their commitment to address climate change. In contrast, very few members scored full marks for demonstrating how employee engagement activities align with the organisation's priority climate risks and contribute to reducing environmental impacts.

Members scored well in demonstrating planned activities, with half of the members scoring full marks through disclosing activities to address all of their gaps. Examples of planned activities included setting environmental reduction targets and implementing new environmental procurement policies with a stronger climate focus.

## Key strengths

The majority of ClimateWise members are working to improve the environmental sustainability of products they purchase through implementing environmental procurement policies and engaging with selected suppliers in their supply chain.

**Lloyd's** Sustainable Procurement Statement sets out its mission to deliver a sustainable approach to third-party sourcing. The organisation's suppliers must have a written environmental/sustainability policy and effective internal environmental management programmes. **Zurich** is focusing on minimising its environmental footprint through developing a sustainable sourcing framework, which will include global minimum sourcing standards and standardised third-party reporting. During 2018–19, **RSA** implemented a new supply chain monitoring tool in the UK that enables the company to measure supplier compliance and track performance. RSA also directly engages with key suppliers to better understand their approach to managing their environmental impact and identify opportunities for engagement. **AXA XL** works with its supply chain to actively reduce a supplier's environmental impacts and improve the sustainable nature of their services. All suppliers are required to fill out a self-appraisal questionnaire, which is then vetted to ensure the supplier meets AXA XL's standards.

Almost all ClimateWise members calculate their Scope 1, 2 and 3 greenhouse gas (GHG) emissions for sub-principle 4.2. Emissions disclosures are enhanced when members also include reduction targets, historical performance data and an accompanying narrative, along with a description of the calculation methodology used. **Ecclesiastical** calculates and discloses its Scope 1, 2 and 3 GHG emissions using the UK government GHG conversion factors for company

reporting, supported by the independent sustainability and carbon management consultancy Clearstream Solutions. For the first time in 2018, **Sanlam** disclosed Scope 1, 2 and 3 emissions on an absolute basis (tCO<sub>2</sub>e) per full-time employee (tCO<sub>2</sub>e/FTE) in line with the Greenhouse Gas Protocol and ISO 14064:2006, and categorises indirect emissions (Scope 3) by source. Sanlam also provides five years of historical data and narrative, explaining the trends across this period. **Hiscox's** global Scope 1, 2 and 3 CO<sub>2</sub> emissions are independently verified by Carbon Footprint Limited on an annual basis. Hiscox is on track to deliver its 20 per cent reduction by 2020 target for Scope 1 and 2 emissions (against a 2014 baseline) and intends on setting Science Based Targets from 2020 onwards. **Allianz** Group identified that its most material CO<sub>2</sub> emissions arise from energy consumption, business travel and paper use. As a result, the company committed to reduce CO<sub>2</sub> emissions per employee by 30 per cent by 2020, against a 2010 baseline. Allianz has so far achieved a 27 per cent reduction against this target.

Over two-thirds of ClimateWise members monitor (and seek to reduce) the environmental impact of the assets under their control. **Sanlam** discloses historical facility-level environmental performance data from 2014 to the present, covering electricity usage, municipal water usage, business travel, paper consumption and waste. This is accompanied by a narrative explaining trends and ongoing initiatives to reduce consumption. Sanlam has set 2020 targets for all facility-level environmental metrics against 2014 baseline levels and reports the progress to date against these targets. **QBE** Group monitors a number of environmental indicators around resource consumption (energy, water, office paper, business

travel etc), and uses this information to identify and manage climate-related risks and opportunities associated with its internal operations. QBE has also conducted a review of its energy portfolio and published the QBE Group Energy Policy. This Policy aims to provide shareholders, customers and the wider community with a clear explanation of QBE's approach to investing and underwriting energy projects, now and in the future. In 2018 **Prudential** signed up to RE100<sup>39</sup> with the aim to achieve 100 per cent renewable electricity by 2025 across its occupied estates. To date 30 per cent of Prudential's global electricity consumption is procured from 100 per cent certified renewable sources (solar photovoltaic (PV) and onshore wind).

Over half of ClimateWise members organise climate-related engagement activities for employees throughout the year. Employee participation is an important aspect of **Swiss Re's** climate strategy. During the 'onboarding process' all Swiss Re employees learn about the importance of climate change to Swiss Re and about initiatives such as "advancing sustainable energy solutions" are driving the company's business.

**Santam**, in partnership with **Sanlam**, created and circulated a carbon footprint survey to calculate the Group's carbon footprint and to encourage employees to consider commuting options to work that will reduce their carbon footprint. Santam hosted an Environmental, Social and Governance engagement workshop which catered for employees from different business units within the Group, as well as external stakeholders. The workshop included a presentation on climate change and its impact on short-term insurance. For further improvement, members should provide more evidence of how these activities align to members' material impacts, and the effectiveness of these activities in engaging employees across the business on climate-related issues.

## Recommended areas for development

Although members have disclosed engagement activities with suppliers to promote more sustainable behaviour, members should clearly state where this relates to the claims process and to procurement for general business operations. For example, by describing how the organisation is working with suppliers to review and improve the sustainability of the claims process specifically.

Most members disclose Scope 1, 2 and 3 emissions, which are the foundations for disclosure against this Principle. Members are starting to include a breakdown of their Scope 3 emissions by source, for instance emissions from business travel, employee commuting and the use of products sold. To improve on this, members should also calculate and disclose the Scope 3 emissions for their investments. To continue reducing their environmental impact, members should set reduction targets for emissions and operational waste against a baseline year, and report their performance annually. Members should also provide details of the methodologies used to calculate emissions data and develop operational environmental targets.

Members provide plenty of evidence of standalone climate-related employee engagement activities. However, disclosures do not explain how these activities align with the company's climate-related risks and opportunities. Members should show how these initiatives form part of a comprehensive engagement plan and provide evidence (quantitative where possible) of their effectiveness in reaching and educating employees across the business.



## Case Study:

### Swiss Re is reducing operational GHG emissions through employee engagement and carbon offsetting strategies

Climate change has been a strategic priority for Swiss Re for the last 30 years. Swiss Re's strategy to support the tackling of climate change rests on four pillars, one of which is a pledge to reduce its own CO<sub>2</sub> emissions. To this end, the company contributes through two key programmes: the Greenhouse Neutral Programme and the COyou2 Programme.

#### Greenhouse Neutral Programme

The Greenhouse Neutral Programme combines two commitments: firstly, to reduce CO<sub>2</sub> emissions per employee (full-time equivalent, FTE); secondly, to offset all remaining emissions by purchasing high-quality emission reduction credits, thus making the company fully greenhouse neutral. The Greenhouse Neutral Programme was originally launched in 2003, for a 10-year period. During that time, Swiss Re was able to gradually reduce its CO<sub>2</sub> emissions by 49 per cent per employee (FTE) and compensated the remaining emissions.

Goals of the Greenhouse Neutral Programme to 2020:

- Maintain the emissions reductions the company has achieved between 2003 and 2013 regarding power consumption, heating and business travel.
- Fully offset the remaining emissions.
- Continuously reduce energy intensity (power consumption and heating) by 2 per cent per year (kWh/FTE).
- Obtain 100 per cent of its power from renewable sources by 2020.

To fulfil its commitment, Swiss Re built several photovoltaic plants at its facilities, such as the 2.7 MWp solar field in Armonk, New York, and entered into virtual power purchase agreements in order to cover the remainder of its obligations in the Americas and Europe.

Since the launch of the Greenhouse Neutral Programme in 2003, Swiss Re has disclosed its CO<sub>2</sub> emissions, their principal sources and relative performance over time. The method used to calculate emissions is based on the guidelines of the Greenhouse Gas Protocol, the most widely used emissions accounting standard ([www.ghgprotocol.org](http://www.ghgprotocol.org)). Since 2003, Swiss Re's data has, on a yearly basis, been independently verified by PwC.

In the current cycle, the programme covers the following emission sources: heating (Scope 1), power consumption (Scope 2), as well as business travel, copy paper use, waste generation, water use, technical gases and employee commuting (Scope 3).

#### COyou2 Programme

Swiss Re's COyou2 Programme has run for 11 years and offers employees grants for carbon-friendly private investments. The programme offers subsidies for a range of investments through which employees can reduce their private carbon footprints, such as purchases of energy-saving appliances, energy-efficient windows and fuel-efficient cars. This project is among the key drivers that have facilitated the decrease of Swiss Re's emissions related to employee travel.

During the first 10 years of the COyou2 Programme (2007–17), 15,000 subsidies were granted with a total avoidance of 70,000 metric tonnes of CO<sub>2</sub> emissions. This amount is equivalent to an average passenger car driving over 265,000,000 kilometres, enough to circle the Earth 6,620 times. It is also equivalent to the carbon sequestration effect of growing 1,800,000 trees for 10 years.

In 2018, Swiss Re granted a total of 2,924 subsidies spread across three product categories: home appliances, home infrastructure and mobility. Over the past five years, electricity-powered mobility has become more prominent, with 811 subsidies provided for e-bikes, e-motorbikes, e-cars and plug-in hybrid electric cars.

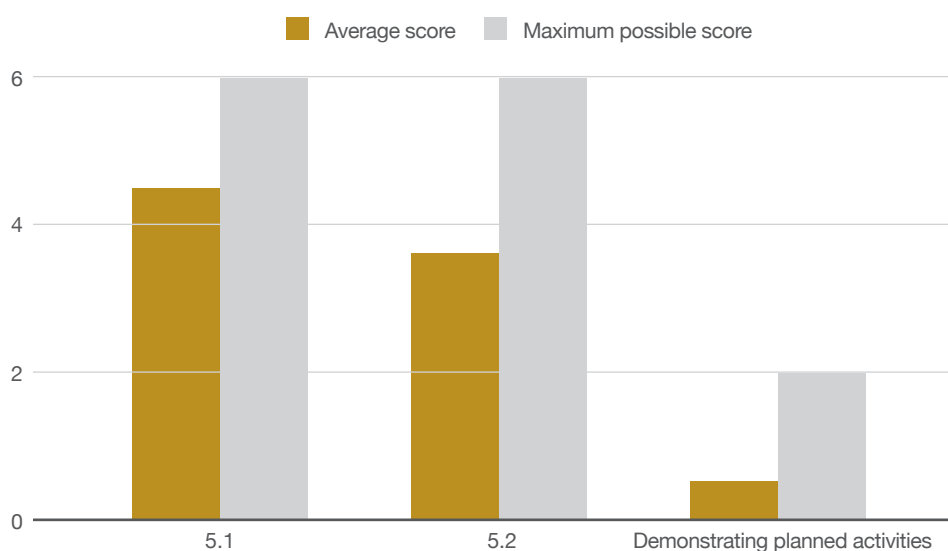
Amongst the larger Swiss Re locations, uptakes per employee were highest in Slovakia and India. The office in Slovakia has witnessed particularly strong growth in recent years, and many new employees there have made use of the opportunity to claim subsidies, eg for highly energy-efficient fridges and washing machines as well as bicycles for their daily commute to work.

# Principle 5: Inform public policymaking

## The sub-principles

- 5.1 Promote and actively engage in public debate on climate-related issues and the need for action. Work with policymakers locally, regionally, nationally and internationally to help them develop and maintain an economy that is resilient to climate risk.**
- 5.2 Support and undertake research on climate change to inform our business strategies and help to protect our customers' and other stakeholders' interests. Where appropriate, share this research with scientists, society, business, governments and NGOs in order to advance a common interest.**

Principle 5: Group mean absolute score by sub-principle



Note: The 'Maximum' bar in the chart (left) reflects the total marks available under each sub-principle and each level of each sub-principle is scored out of two points.

'Absolute' refers to the number of points scored, and does not take into account the weighting of the Principles by insurer type.



**In sub-principle 5.1, almost all members gained maximum points by disclosing engagement activities conducted throughout the year to influence policy on climate mitigation and adaptation. Nearly all members demonstrated a leadership position in the engagement of others on matters relating to climate change. However, there was a mixed range of disclosure on how engagement activities are prioritised to align to material issues.**

In sub-principle 5.2, all members described research supported or undertaken during the year, with over half of the members scoring full marks as a result of outlining the research outcomes and how the research has been used to inform business strategies. Nearly all members disclosed actions taken to proactively share the research and engage others in the topic of research, however less than half of these members achieved full marks.

Most members scored only partial or no marks and only three members scored full marks for their disclosure on how the research is aligned to more than one aspect of the business and to addressing the key risks facing the business.

Very few members demonstrated planned activities to address the gaps in their disclosures from Principle 5, and members should consider how their future climate-related engagement activities can work to address lower scoring levels.

## Key strengths

One of the responses by the UK's Committee on Climate Change<sup>40</sup> in building a zero carbon economy and driving action is through promoting public engagement on climate change – “climate conversations” – and engaging with different stakeholders. Similarly, the Principles for Responsible Investment (PRI)<sup>41</sup> highlights that, in the context of climate policy, investors, companies and governments need to work together on ambitious solutions to achieve the Paris Agreement, and emphasises that there are a number of ways in which companies can impact the outcome and pace of emerging efforts by governments to shape policy in response to climate change. It is therefore encouraging to see that most members demonstrate active engagement through a number of organisations and industry bodies that aim to promote business action and influence policy on climate mitigation and adaptation to create an economy that is resilient to climate risk. For example, **RSA** is engaging with the **ABI** on initiative Flood Re to improve flood resilience in the UK, and in Canada, RSA is partnering with WWF to support research on flood-resilient communities. **CII** publishes a variety of communications on climate change, including a podcast on climate change and legal liabilities, as well as lectures at the Insurance Institute of London on the litigation risks of climate change. The **ABI** has engaged, via Insurance Europe, with a number of aspects of the European Commission's Action Plan on Sustainable Finance. **MS Amlin** is a member of the Reinsurance Association of America, which actively advocates for reinsurance interests with state regulators and legislators, and plays a fundamental role in assisting individuals and businesses to manage risk and the potential adverse impacts of climate change. As disclosed by **Tokio Marine Kiln**, in July 2018, Tokio Marine Group participated in the 2018

Asian Ministerial Conference on Disaster Risk Reduction held in Mongolia, sponsored by the United Nations Office for Disaster Risk Reduction (UNDRR) and the government of Mongolia, where the Group presented its industry-academia collaboration initiatives and findings on the economic value of mangrove planting.

Some members have gone a step further and demonstrate how activities they engage in align with key issues faced by the country and the company in question. As South Africa is one of the 30 most water-stressed countries in the world, **Sanlam** prioritises engagement on water-related activities and has partnered with WWF-SA on various freshwater and marine projects aimed at conserving South Africa's water systems. The partnership also includes a focus on stimulating greater awareness of water issues in Sanlam's business practices, which has led to a deeper understanding of water risks to drive better insurance and investment practices. Many members have demonstrated a leadership position in the engagement of others on matters relating to climate change. This is depicted by **AXA**, which jointly presided over the global industry-led TCFD set up by the Financial Stability Board from 2015 to 2017 and AXA's Chairman who currently presides over the Insurance Development Forum. **RenaissanceRe** played a key leadership role in the creation of the Insurance Development Forum, whose main aim is to optimise and extend the use of insurance to build resilience in vulnerable areas in the light of increasing climate-related disasters. The Chief Risk Engineer of **Navigators** (now part of **The Hartford**) recently organised a seminar which aimed to draw awareness of natural hazards and climate change related events on the high hazards process industries.

Members are shown to support or undertake many pieces of climate-related research over the year, with some members doing particularly well at explicitly demonstrating how this research has been used to inform their business strategies. For example, **Hiscox** supports the publication of climate-related research via external collaborations. Over the last year, Hiscox has worked with a leading scientist in the USA on hurricane activity. This work has helped Hiscox to review its approach to specifying hurricane activity rates in its modelling, and to better understand the implications of new events. Swiss Re Institute, launched in 2017 by **Swiss Re**, conducts and publishes risk research to drive better decisions and innovation in the reinsurance industry. It curates risk and market data to enable solutions that create value for clients and to guide the Swiss Re Group's strategic direction. The Real Estate Climate Risk Report has been published by **Willis Towers Watson** with contributors from a range of proactive real estate organisations, and discusses how real estate can help the UK meet the targets enshrined in the Paris Agreement. **Zurich** developed an issue brief which considered the complexity in understanding the concept of resilience and proposed a framework to operationalise this for communities. This brief has been one of the foundations of Zurich's work to develop a measurement approach. Some members demonstrate proactive behaviour in sharing the research and engaging others in the topic of research on climate change. **TMNF**, for example, participates in events related to climate change in order to disseminate the outcomes and details of its natural disaster risk research and engages in multi-stakeholder dialogue to discuss how to promote disaster prevention.

## Recommended areas for development

Generally, members do very well at describing how they actively engage in public debate and with policymakers on climate-related issues, as well as how they support and undertake research on climate change to inform business strategies. To score full marks, members need to disclose more tangible evidence of how their engagement activities link to material issues. Members should also go one step further in their disclosures of research undertaken or supported on climate change by highlighting how the research addresses key risks facing the business (which are disclosed in Principle 2). This will show that members are not only taking action by responding strategically through adaptation of their strategy but are also addressing these risks through their engagement activities and research. Finally, although members generally demonstrate actions taken to proactively share their research, scores could be enhanced by showing how members engage others in the topic of research, such as key stakeholders or the public.

## Case Study: Sanlam's engagement with policymakers in South Africa

Sanlam has been engaging with climate-related policies, primarily through business associations, namely the National Business Initiative (NBI) and Business Unity South Africa, both of which have work-streams focused on the environment.

Climate change is one of Sanlam's key risks, therefore the company has assembled a multidisciplinary team to look at how it can ensure that, as far as practicable, climate risks that the business is exposed to are understood and mitigated. The team includes members from the Sustainability department, Risk Management and Finance, with representative members from all business units.

In the past year Sanlam has engaged with the Carbon Tax Act (enacted in May 2019) and the draft Climate Change Bill, and numerous norms and standards that the South African government has been keen to adopt. The interaction has been through workshops, which have led largely to an understanding of what the country's long-term carbon future will look like. There have also been discussions with the National Treasury on their expectations on the Financial Services sector.

Sanlam recognises that water scarcity is one of the greatest risks to the global economy. As one of the 30 most water-stressed countries in the world, this is particularly relevant in South Africa with the Western Cape. Without drastic measures to further drive down consumption, Cape Town is set to experience critical water shortages. This will have a devastating impact on business as both the Sanlam and Santam head offices are located in Cape Town. As such, Sanlam prioritises engagement on water-related activities. An example is Sanlam's ongoing engagement with WWF-South Africa, an NGO that the company has been partnering with since 2007. The focus on its partnership is fresh water stewardship, and over the years Sanlam has supported work that has brought understanding of how best to conserve this resource, particularly in the context of climate change.



# Principle 6:

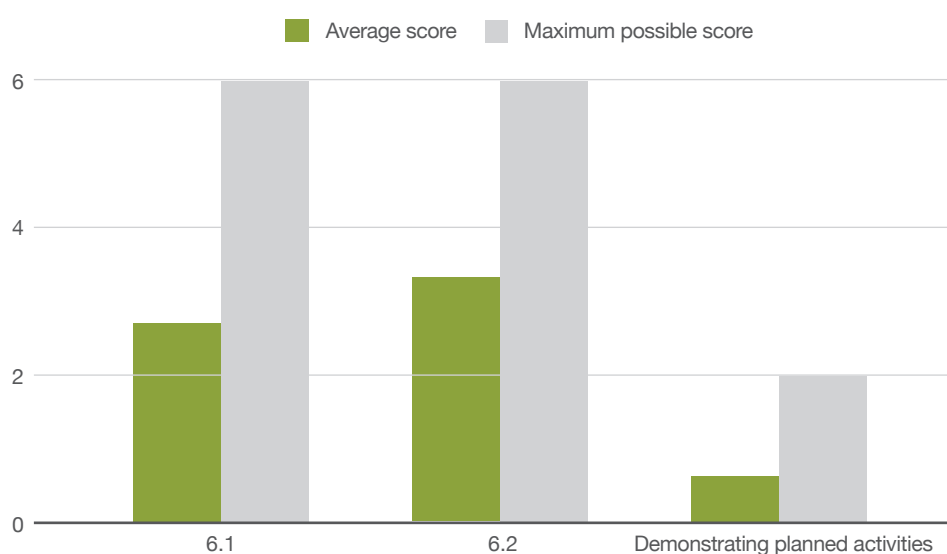
## Support climate awareness amongst our customers/clients

### The sub-principles

**6.1 Communicate our beliefs and strategy on climate-related issues to our customers/clients.**

**6.2 Inform our customers/clients of climate-related risk and provide support and tools so that they can assess their own levels of risk.**

Principle 6: Group mean absolute score by sub-principle



Note: The 'Maximum' bar in the chart (left) reflects the total marks available under each sub-principle and each level of each sub-principle is scored out of two points.

'Absolute' refers to the number of points scored, and does not take into account the weighting of the Principles by insurer type.

**In sub-principle 6.1 members demonstrated strong evidence of communicating their organisation's beliefs and strategy on climate-related issues with customers and clients. However, members did not gain full marks for the sub-principle as they are not explaining how these engagements form part of a robust and overarching engagement plan. For this sub-principle it is important for members to demonstrate that climate-related engagements are not siloed activities, but form part of a firm-wide strategic approach to addressing climate-related risks and opportunities.**

Members scored marginally better in sub-principle 6.2. Areas where members scored well include providing evidence of engagement with customers/clients to promote climate resilience, and describing the tools members have developed to enable clients to assess and manage their own climate risk exposures. Members did particularly poorly in identifying and disclosing areas of behavioural change needed to mitigate climate risks. Incentivising the right behavioural changes and providing risk mitigation incentives can promote the climate resilience of insurers and their customers/clients.

Very few members demonstrated planned activities to address the gaps in their disclosures for Principle 6, and members should consider how their future climate-related projects can work to sub-principles 6.1 and 6.2. For example, this could include developing robust customer engagement plans and identifying areas of behavioural change to promote climate resilience.



## Key strengths

The majority of ClimateWise members have demonstrated strong communication of their organisation's beliefs and strategy regarding climate issues with customers and clients. In Q3 2018 **Zurich** issued a whitepaper on Managing the Impacts of Climate Change: Risk Management Responses and engaged in a five-week global communication campaign targeting customers, distributors and key stakeholders. The campaign included awareness-raising through paid and non-paid media and dedicated workshops with customers worldwide with a deep focus on climate issues. "Raising awareness about climate change risks through dialogue with clients, employees and the public, and advocacy of a worldwide policy framework for climate change" is one of the four pillars of **Swiss Re's** climate change strategy. As such, Swiss Re regularly discusses climate change, climate-related risk and related solutions with regional, national and global clients. In 2018, **Aon** launched the network Aon Climate and Weather Risk Innovation (ACWRI), a group of experts within Aon who work with business development colleagues to help clients quantify climate risk and discuss strategies to reduce it. ACWRI has a key focus on using innovative actuarial approaches and financial innovations to smooth P&L volatility for investors in and developers of clean technology.

Members have demonstrated a variety of ways in which they support their customers and clients in assessing their exposure to climate-related risks. **Willis Towers Watson** has worked with clients to identify areas of behaviour change needed to mitigate climate risk and respond to the TCFD recommendations. The company has helped its clients answer questions such as "If the UK is two degrees hotter on average, what does that mean for summer temperatures and offices in London?" and "If sea levels rise by a metre, how high could a storm surge be on the south coast?" and develop a response. **Santam** provides crop insurance to farmers to help hedge against climate, environmental and other risks. To help farmers understand these risks, Santam's meteorologist forecasts the climate variability so as to identify extreme climate-related weather events that may impact crops. The meteorologist forecasts weather seasonally and provides training and advice to farmers on how to adapt their farming methods given the anticipated climate conditions. In 2018, the agricultural meteorologist wrote a number of articles,

giving farmers advice on the impact of climate change on agriculture, and was also quoted in several agricultural publications including Farmers Weekly, Landbouweekblad and KLK News. **TMNF** helps customers prepare for typhoons and torrential downpours by distributing 'personalised' videos which correspond to customers' varying situations. These videos can be viewed from computers and smart devices, and the company provides a service for customers to check information on disaster risks and details of coverage in an easy-to-understand manner.

## Recommended areas for development

Although the majority of members provided evidence of engaging with customers and clients on climate-related issues, in most cases these engagements did not form part of an overarching engagement plan. In future, members should provide evidence of how their climate-related communication efforts form part of a broader engagement plan, aimed at increasing client and/or customer knowledge and awareness of climate issues. Further marks can be gained through recording and monitoring the effectiveness of this plan by explaining the outcomes, feedback mechanisms, future activities and where possible, a quantitative disclosure of those engaged. For example, reference to the numerical results of engagements with customers and/or clients.

Members should provide more detailed evidence of engaging with customers and/or clients on building their climate resiliency, providing examples of engagements tailored to client and/or customer operating models and unique situations. In some cases, members also provide tools to customers and/or clients to enable them to assess their own levels of risk. Going forward, members should continue to disclose information about these engagement activities and supporting tools. Behavioural change is an underlying factor in promoting resilience to climate change, and few members disclosed how they have identified areas of behavioural change needed to mitigate climate risk. In future, members should support their engagement activities by identifying and incentivising the associated behavioural change that will promote the resiliency of the insurance industry to climate change.





## Case Study:

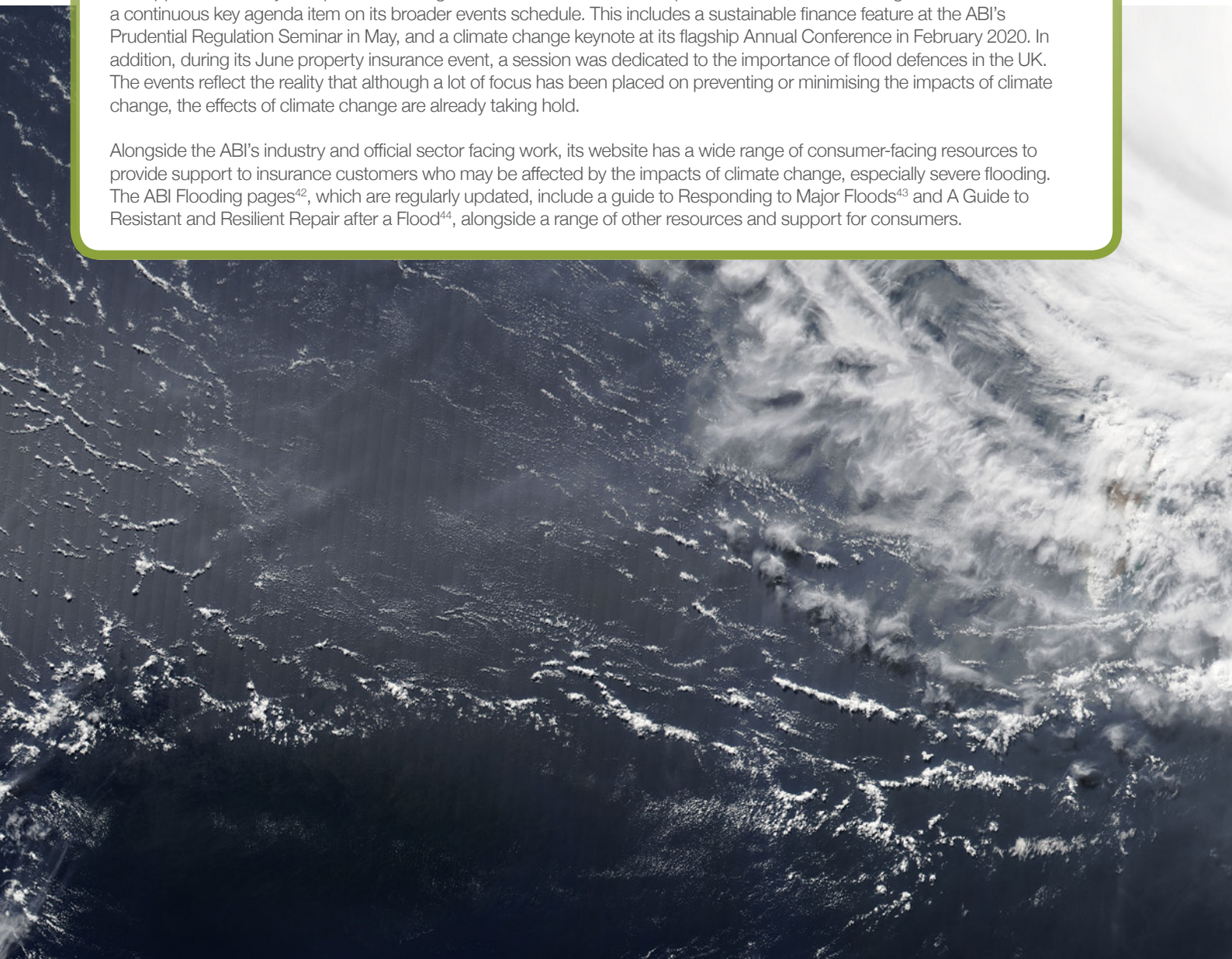
### ABI's knowledge-sharing activities on climate-related issues

The ABI leverages its position as an industry association to pool expertise on climate change issues, creating a platform to share this knowledge with its members, external stakeholders and the public.

The ABI considers the risks and opportunities climate change may pose to the insurance industry to be technically very challenging and relatively new phenomena. Developing forward-looking analysis to quantify risks outside of the usual business planning cycle, based on data that can be unreliable at best, would be enough to make even the most seasoned risk professionals scratch their heads. The ABI observed a concentrated pool of expertise within industry and sought to use its position as the industry's association to put on an event series – ABI Climate Change series: sharing best practice. The ABI has held events on the PRA's supervisory guidance, climate-related scenario analysis and ESG approaches for pension funds, and has dates in the diary for events looking at implementing the FSB Task Force on Climate-related Financial Disclosures framework and how insurers can invest in a changing climate.

The aim of the events has been to ensure representatives throughout industry have the tools to better identify the risks and opportunities they're exposed to. Alongside the ABI's dedicated best practice series, climate change features as a continuous key agenda item on its broader events schedule. This includes a sustainable finance feature at the ABI's Prudential Regulation Seminar in May, and a climate change keynote at its flagship Annual Conference in February 2020. In addition, during its June property insurance event, a session was dedicated to the importance of flood defences in the UK. The events reflect the reality that although a lot of focus has been placed on preventing or minimising the impacts of climate change, the effects of climate change are already taking hold.

Alongside the ABI's industry and official sector facing work, its website has a wide range of consumer-facing resources to provide support to insurance customers who may be affected by the impacts of climate change, especially severe flooding. The ABI Flooding pages<sup>42</sup>, which are regularly updated, include a guide to Responding to Major Floods<sup>43</sup> and A Guide to Resistant and Resilient Repair after a Flood<sup>44</sup>, alongside a range of other resources and support for consumers.



## Case Study: Lloyd's working with vulnerable countries to build climate resilience

Disaster Risk Facility at Lloyd's (DRF) is a group of seven Lloyd's syndicates that have committed capacity of USD445 million towards solutions that address natural catastrophe risks in emerging and developing economies.

The consortium provides access to the collective underwriting expertise of AXA XL, Beazley, Chaucer, Hiscox, MS Amlin, Nephila and RenaissanceRe to help developing economies build resilience to disaster, climate and weather risks. Key benefits of the facility, include:

- up to USD445 million of capacity on a per-risk, per-region basis
- ease of access to the pooled knowledge, expertise and resources of the consortium members
- local contacts through Lloyd's global platforms – this allows conversations to take place in local languages, using regional experts from each syndicate.

The Facility membership is open to the Lloyd's market, and aims to provide clients and intermediaries with access to the combined expertise and capacity of a range of Lloyd's managing agents who are committed to developing innovative solutions for populations which suffer some of the most serious losses, yet which currently have little or no access to insurance.

Lloyd's Corporation can and does support the market with such initiatives through raising awareness of what the market can offer with the organisations that are involved in this area. The Innovation team also acts as an initial point of contact for anyone who wants to find out more, and information is shared across the Lloyd's country network.

DRF members are also involved with running or contributing to several Insurance Development Forum working groups, which are working to pull together global stakeholders across the insurance industry, World Bank and United Nations to drive understanding. For example, the Risk Modelling Steering Group (RMSG) is co-chaired by Ian Branagan, Group Chief Risk Officer and Senior Vice President, RenaissanceRe Holdings Ltd.

# Principle 7:

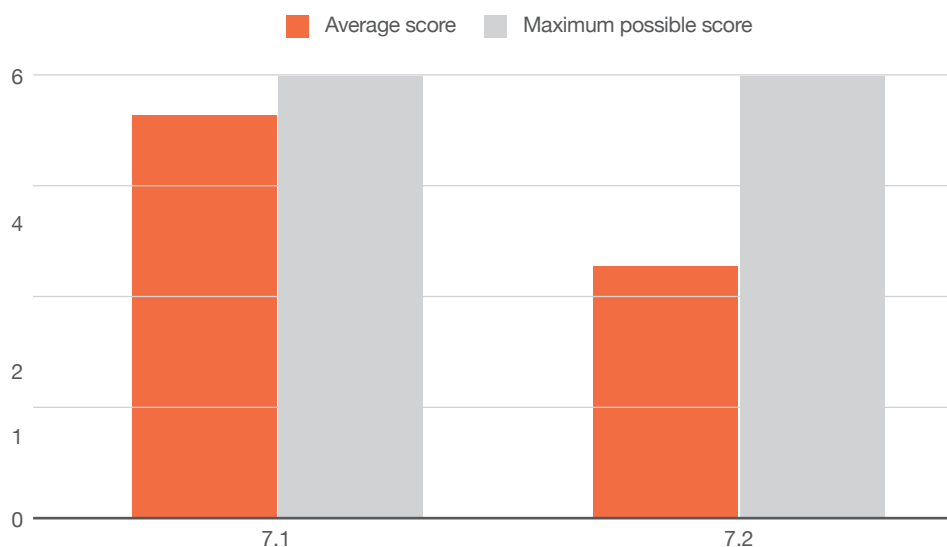
## Enhance reporting

### The sub-principles

**7.1 Submission against the ClimateWise Principles.**

**7.2 Public disclosure of the ClimateWise Principles as part of our annual reporting.**

Principle 7: Group mean absolute score by sub-principle



Note: The 'Maximum' bar in the chart (left) reflects the total marks available under each sub-principle and each level of each sub-principle is scored out of two points.

'Absolute' refers to the number of points scored, and does not take into account the weighting of the Principles by insurer type.



**Principle 7 highlights the importance of timely and complete ClimateWise disclosure. High scores in 7.1 demonstrate that despite the changes to the ClimateWise Principles, members are reporting against all of the ClimateWise sub-principles and submitting their report on time.**

For sub-principle 7.2, less than half of the members gain marks for publishing their ClimateWise report publicly, and going forward all members should aim for public disclosure of their ClimateWise report. Positively, just under two-thirds of members incorporate key elements of the ClimateWise Principles into their annual reports. As the TCFD recommendations encourage the disclosure of climate-related information in mainstream financial filings, ClimateWise members could improve disclosure scores by continuing to incorporate elements of their ClimateWise reports into their annual reporting, particularly around governance, strategy, risk management and metrics and targets. Common practices identified for annual report disclosure include: a TCFD-aligned index table, a short summary paragraph which then guides the reader to other relevant publications on climate; dedicating a chapter of the annual report to climate-related disclosures; or publishing a separate climate report which builds on the ClimateWise Principles and TCFD recommendations.

There are no marks for demonstrating planned activities in Principle 7. Scoring full marks for sub-principles 7.1 and 7.2 means that no further planned activities can be demonstrated.

## Key strengths

Members including **ABI, Aviva, CII, Hiscox, Santam, Swiss Re** and **Zurich** have encouraged the appropriate disclosure of climate-related activities by publicly disclosing their ClimateWise Principles report. More specifically, **TMNF** has included TCFD-related disclosures in their 2018 Sustainability Report and 2018 Integrated Annual Report. **Swiss Re** began to implement the recommendations of TCFD in 2016 and has significantly expanded them since. Their 2018 Consolidated Financial Report includes sections on climate governance, climate strategy, climate risk management, climate metrics and targets. **Hiscox** produces an annual public Climate Report, which is its primary vehicle for communicating information to all stakeholders about its view of climate risks and the actions the company is taking to tackle them. In 2018, **Aviva** produced a standalone Climate-Related Financial Disclosure report which was aligned to the TCFD principles and also included the results of financial analysis conducted by Aviva into the climate and carbon risk within their investment portfolios.

## Recommended areas for development

Members should aim to publish their ClimateWise report publicly each year. Where appropriate, members should continue to incorporate elements of the ClimateWise Principles in their annual reporting. Members should consider structuring their climate disclosures in line with the TCFD recommendations; in particular, focusing on the financial implications of climate change risks and opportunities to their business.



# Appendix 2

## Scoring methodology

### A scoring system is a helpful benchmark for members to encourage continuous improvement.

Evidence has been considered based on the quality and relevance of the activities conducted. As the ClimateWise Principles are weighted based on organisational category (Professional Bodies and Associations; Insurers; Brokers; Risk Modellers; Reinsurers), members that provided evidence in areas where more weight is assigned have achieved higher scores. Please note that with the approval of the Principles Advisory Group, the scoring process has been simplified this year. The scoring process is as follows:

Each level, and planned activity, receives a maximum of two points based on:

- 0 – No evidence provided
- 1 – Partial evidence
- 2 – Sufficient evidence

There is a varying number of levels for each sub-principle, up to a maximum of five.

The maximum score available for each sub-principle is dependent on the number of levels within that sub-principle. The number of levels under each sub-principle is not fixed. As such, some sub-principles contain more levels than others.

Scores are totalled at a Principle level and weighted accordingly based on organisational category to provide an overall percentage score.

Members should aim to provide evidence against all of the ClimateWise Principles, however, there is an option for members to self-exempt from sub-principles if required (see Optional Exemptions below). A weighted score by Principle is assigned to each specific category. Exemption to sub-principles 2.2 and 2.3 were provided to 2 members.

### The scoring process

#### 1. Detailed review of ClimateWise submissions

Members submitted their reports and supporting documents to CISL, which were in turn reviewed and scored by PwC analysts using the methodology described above.

#### 2. Distribution of initial feedback

An initial feedback template was shared with each member showing the initial score against each of the seven Principles and highlighting areas where further clarification could be provided.

#### 3. Discussion with members

Following the distribution of the initial feedback, all members were given the opportunity to participate in a call to discuss their initial score, provide clarifications and submit additional documentation relevant to the clarifications discussed.

#### 4. Reassessment of score

Some member scores were then amended as a result of the discussions and the review of additional relevant documentation.

#### 5. Distribution of final feedback and scores

A final feedback template was then shared with each member, including the breakdown of the final score, a high-level summary of key strengths and areas for development, and a summary of performance relative to other members.

The following organisations have been assessed as part of the Corporation of Lloyd's: QBE Insurance Group, Chubb, ArgoGlobal, MS Amlin, Tokio Marine Kiln, Beazley Group, Navigators Underwriting Agency (now part of The Hartford), RenaissanceRe Syndicate Management.

# Appendix 3

## Member ranking

Member	2019 score	2018 score	2019 rank	2018 rank
Member A	72%	65%	1st	10th
Member B	71%	89%	2nd	1st
Member C	67%	77%	Joint 3rd	Joint 5th
Member D	67%	–	Joint 3rd	–
Member E	62%	28%	Joint 5th	9th
Member F	62%	73%	Joint 5th	16th
Member G	60%	78%	Joint 7th	7th
Member H	60%	76%	Joint 7th	Joint 2nd
Member I	53%	49%	Joint 9th	Joint 5th
Member J	53%	77%	Joint 9th	14th
Member K	52%	57%	11th	13th
Member L	51%	78%	12th	Joint 2nd
Member M	50%	62%	13th	12th
Member N	46%	74%	14th	8th
Member O	41%	34%	15th	15th
Member P	38%	78%	16th	Joint 2nd
Member Q	26%	–	17th	–

# Appendix 4

## Score distribution

Principle	Sub-principle		Level	Score 0	Score 1	Score 2
1. Be accountable	1.1	Ensure that the organisation’s board is working to incorporate the Principles into business strategy and has oversight of climate risks and opportunities.	Level 1	2	6	9
			Level 2	8	6	3
			Level 3	4	6	7
	1.2	Describe management’s (below board-level responsibility) role in assessing and managing climate-related issues.	Level 1	1	4	12
			Level 2	4	4	9
			Level 3	1	3	13
	Demonstrating planned activities			6	6	5
2. Incorporate climate-related issues into our strategies and investments	2.1	Evaluate the implications of climate change for business performance (including investments) and key stakeholders.	Level 1	5	5	7
			Level 2	3	6	8
			Level 3	4	8	5
			Level 4	6	7	4
	2.2	Measure and disclose the implications of climate-related issues for business performance (including investments) and key stakeholders	Level 1	5	6	4
			Level 2	9	3	3
			Level 3	11	3	1
			Level 4	10	2	3
			Level 5	11	0	3
	2.3	Incorporate the material outcomes of climate risk scenarios into business (and investment) decision-making.	Level 1	4	6	5
			Level 2	7	6	2
			Level 3	12	2	1
		Demonstrating planned activities			4	6
2. Lead in the identification, understanding and management of climate risk	3.1	Ensure processes for identifying, assessing and managing climate-related risks and opportunities are integrated within the organisation (including investments).	Level 1	2	7	8
			Level 2	5	5	7
			Level 3	3	7	7
	3.2	Support and undertake research and development to inform current business strategies (including investments) on adapting to and mitigating climate-related issues.	Level 1	1	3	13
			Level 2	6	2	9
			Level 3	12	3	2
	Demonstrating planned activities			9	5	3

Principle	Sub-principle		Level	Score 0	Score 1	Score 2
4. Reduce the environmental impact of our business	4.1	Encourage our suppliers to improve the environmental sustainability of their products and services, and understand the implications these have on our business.	Level 1	2	6	9
			Level 2	8	6	3
			Level 3	4	6	7
	4.2	Disclose our Scope 1 and Scope 2 greenhouse gas emissions and Scope 3 GHGs using a globally recognised standard.	Level 1	1	4	12
			Level 2	4	4	9
			Level 3	1	3	13
	4.3	Measure and seek to reduce the environmental impacts of the internal operations and physical assets under our control.	Level 1	5	2	10
			Level 2	8	3	6
			Level 3	8	4	5
			Level 4	12	4	1
			Level 5	2	10	5
	Demonstrating planned activities			6	6	5
5. Inform public policymaking	5.1	Promote and actively engage in public debate on climate-related issues and the need for action. Work with policymakers locally, regionally, nationally and internationally to help them develop and maintain an economy that is resilient to climate risk.	Level 1	0	1	16
			Level 2	6	5	6
			Level 3	2	5	10
			Level 1	0	8	9
	5.2	Support and undertake research on climate change to inform our business strategies and help to protect our customers' and other stakeholders' interests. Where appropriate, share this research with scientists, society, business, governments and NGOs in order to advance a common interest.	Level 2	3	6	8
			Level 3	6	8	3
	Demonstrating planned activities			9	6	2
6. Support climate awareness amongst our customers/ clients	6.1	Communicate our beliefs and strategy on climate-related issues to our customers/clients.	Level 1	1	3	13
			Level 2	7	10	0
			Level 3	11	5	1
	3.2	Inform our customers/clients of climate-related risk and provide support and tools so that they can assess their own levels of risk.	Level 1	9	3	5
			Level 2	0	8	9
			Level 3	6	5	6
	Demonstrating planned activities				10	3
7. Enhance reporting	Submission against the ClimateWise Principles.		Level 1	0	2	15
			Level 2	1	1	15
	Public disclosure of the ClimateWise Principles as part of our annual reporting.		Level 1	7	3	7
			Level 2	3	7	7

### **Important message to readers who are not addressees of our engagement letter with the Cambridge Institute for Sustainability Leadership**

In reading this report, any person who is not an original addressee of this report must accept and agree to the following terms:

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## About the University of Cambridge Institute for Sustainability Leadership

The University of Cambridge Institute for Sustainability Leadership (CISL) brings together business, government and academia to find solutions to critical sustainability challenges.

Capitalising on the world-class, multidisciplinary strengths of the University of Cambridge, we deepen leaders' insight and understanding through our executive programmes; build deep, strategic engagement with leadership companies; and create opportunities for collaborative enquiry and action through our leadership groups.

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