

Gearing up for regulation

The ClimateWise Principles
Independent Review 2018

ClimateWise

Established in 2007, ClimateWise is a growing global network of 27 leading insurers, reinsurers, brokers and industry service providers which share 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.

Members are asked to submit a report annually which summarises their actions taken against the Principles across their business activities. These reports are subject to an independent review to assess the extent to which members have integrated the Principles.

The ClimateWise Principles include leading on climate risk analysis and climate-resilient investment, raising customers' climate awareness, and reducing the member's own carbon footprint.

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Rewiring the Economy

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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Author and acknowledgements

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Reference

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Copies

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

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Executive summary

We are seeing a groundswell of action and support for a tangible response to climate change by the financial sector.

Over the past year since the Financial Stability Board (FSB)'s Task Force on Climate-related Financial Disclosures (TCFD) published its recommendations, financial and non-financial companies alike have been developing and planning the disclosure of forward-looking, scenario-based analyses of their exposure to both transition and physical risks from climate change.

Insurance, banking and investment regulators are also considering the expectations of business response and disclosure; reports released by the International Association of Insurance Supervisors (IAIS), together with the Sustainable Insurance Forum (SIF), as well as by the Bank of England and Dutch Central Bank are highlighting the increasing expectation of a strategic and pragmatic response to climate change by businesses.

The 2018 status report of the TCFD and the Bank of England's report indicate that while progress has been made with disclosures, companies still have a long way to go to meet the TCFD recommendations and take a strategic long-term approach to climate change.

ClimateWise has for the past decade been leading climate disclosure for the insurance industry, supporting members to lead the response to the risks and opportunities associated with the climate risk protection gap. ClimateWise and ClimateWise members are taking important steps to advance a systemic response to climate change across the financial sector. This year the ClimateWise Principles have been reviewed and updated to ensure alignment with the TCFD recommendations. From 2019, the new ClimateWise Principles will provide a specific and relevant framework to: demonstrate climate leadership, benchmark members against peer performance, track progress year on year and fully conform with the disclosure recommendations of the TCFD. Reporting against the ClimateWise Principles demonstrates not only a commitment to disclose against the TCFD recommendations but also to go above and beyond the standards required.

In 2018, the annual member reporting against the ClimateWise Principles has seen an increase in mean score from 2017, which highlights the overall progress being made by the ClimateWise community. ClimateWise members have provided good examples of impact reduction activities, including estimates of emissions avoided. Members have also provided excellent disclosure of greenhouse gas emissions, including targets and performance trends.

ClimateWise members are supporting and undertaking research, and actively sharing this knowledge to spread awareness among stakeholders and customers of how they can best respond to climate change risks. It is typical for members to host international conferences, enabling them to work with a range of stakeholders, including policymakers. Members are encouraging sustainability initiatives beyond their own companies, taking a leadership position by advocating the use of metrics and supporting research to evaluate the implications of climate change for investment performance and shareholder value. Board-level engagement with climate issues has increased. As a result, members are progressively being recognised as leaders in encouraging action on climate change.

The focus for improvements in the coming year is to: look beyond the known risks and opportunities of climate change, deepen analysis of financial impacts and improve clarity of engagement with policy. The industry will be looking at new technologies beyond renewable energy, and past weather and catastrophe forecasts, to advance business strategy and communications, and improve products and services. Expectations of disclosure evidence are rising, with a push for explicit evidence for points such as engagement at the board level and also with key stakeholders including regulators, customers, suppliers and employees.

ClimateWise members 2018



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Chair's foreword



It is a great pleasure to take the position of Chair of ClimateWise at this time of change in the financial services sector.

ClimateWise, and the ClimateWise Principles, has supported member activities for more than a decade, as they integrate a response to climate change across their business activities. It is also 10 years since the introduction of the UK's *Climate Change Act 2008*, marking a momentous time in the UK and globally for sustainable finance leadership. Now is an important point in time to reflect and consider how far we have come and where we are heading.

The financial services sector is moving rapidly to incorporate climate change risks into business strategy, risk management processes and reporting. Regulators and business leaders, including ClimateWise members, are giving clear examples of what is expected of the financial sector in response to climate change. The following report outlines our members' extensive activities and initiatives against the ClimateWise Principles. The Principles report and the updated Principles show the ambition of ClimateWise. ClimateWise members are taking steps to meet the challenges of climate change.

ClimateWise is uniquely placed to lead the insurance sector response and support the wider financial sector response to this momentum. Looking forward, we will be working with our clients on products and services that will grow their resilience. This is important as the world adapts to climate impacts that

are already factored into the system and critical to making sure increasing climate risks doesn't price out clients in the most climate exposed regions. ClimateWise members are committed to working with governments, industry peers and their clients on improving our risk management processes and products we offer, however no one group of stakeholders can solve the climate challenge alone. Working together, as a global community is more important than ever.

A handwritten signature in blue ink, appearing to read 'D Christian', written over a light blue background.

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

Momentum builds around regulatory interest in improved climate risk management

Over the past ten years, momentum has built towards a shift in the financial services industry to identify and incorporate climate change risks and impacts into their business strategy and planning. Banks, asset managers, pension funds, insurers and their regulators are actively seeking methods and tools to understand and develop responses to climate data and predictions. ClimateWise and its members have taken a leading role in demonstrating and proliferating the insurance industry knowledge of climate change and how to manage the impacts.

One year since the launch of the TCFD: regulators around the world are coming together

Just over a year ago, ClimateWise welcomed the launch of the Financial Stability Board's TCFD's recommendations. The recommendations put a strong emphasis on the need for financial and non-financial companies alike to develop and disclose forward-looking analysis of their exposures to both transition and physical risks. Today, more than 500 organisations have indicated their support for the recommendations, including financial institutions responsible for assets of nearly US \$100 trillion.¹ This includes a range of companies from diverse industries – utilities, energy, financials, real estate, and others.

Since the launch of the recommendations, regulatory interest has grown rapidly. The Sustainable Insurance Forum (SIF) is a network of insurance supervisors and regulators from around the world who are working together on sustainability challenges facing the insurance sector. In July 2018, the International Association of Insurance Supervisors (IAIS) and SIF released an issues paper² outlining the challenges presented by climate change that the industry needs to take into account.

In October 2018, the Bank of England's Prudential Regulatory Authority (PRA; the regulator for the insurance and banking industry) published its consultation³ on supervisory expectations in the banking and insurance sectors. It outlines its expectation that companies should take a strategic approach to managing the financial risks from climate change and identify the actions required today to mitigate current and future financial risks.

It expects to see board-level engagement, and calls on firms to allocate responsibility for identifying and managing financial risks from climate change to an existing senior management function. Insurers will be expected to include what they determine to be any material exposures relating to financial risks from climate change in their Own Risk and Solvency Assessment (ORSA). Further requirements are made explicit for Solvency II insurers under the Prudent Person Principle, including only investing in assets for which risks can be identified, measured, monitored, managed, controlled and reported.

Elsewhere, the Dutch Central Bank has recently conducted a climate-related stress test on non-life insurers, and is working on a stress test for transition risks. It found that insurers and pension funds could stand to lose up to 10 per cent of their assets over the next five years during the transition to a low carbon economy.⁴ At the EU level, the Insurance and Occupational Pensions Authority (EIOPA) has released its most recent financial stability report,⁵ which identifies climate risk as a key emerging risk for the market.

Meanwhile, the California Insurance Commissioner has become the first financial regulator in the USA to adopt the TCFD recommendation to use scenario analysis to assess insurers' exposure to climate-related transition risk. The Central Banks and Supervisors Network for Greening the Financial System (NGFS)⁶ has also been established, bringing together a group of central banks and supervisors from across the world to exchange experiences, share best practices, contribute to the development of environment and climate risk management in the financial sector and to mobilise mainstream finance to support the transition towards a sustainable economy.⁷ In April 2018, supervisors from over 30 countries and from more than 50 supervisory organisations came together at an International Climate Risk Conference in Amsterdam⁸ to discuss how climate- and environment-related risks could affect our financial institutions, and thus the mandate of financial supervisors.

Growing public interest

Beyond regulators, civil society has also been monitoring the uptake of the TCFD recommendations by companies. As a result, some companies have been publicly exposed for not disclosing enough climate-related risk information. In one instance, the environmental law not-for-profit organisation ClientEarth sent detailed legal letters⁹ to the Financial Conduct Authority (FCA)¹⁰ about three insurers for not reporting climate change as a principal risk in their annual reports. ClientEarth called on the FCA to impose a financial penalty on the firms and to force them to publish information on climate risks to rectify the alleged omission.

Progress made by companies in meeting the recommendations

The Task Force status report released in September 2018 provides a review of disclosure practices related to core elements of the TCFD recommendations one year since the recommendations were launched.¹ It focuses on climate-related financial disclosures developed by the largest companies in eight specific groups: the financial sector, divided into four industries (banks, insurers, asset managers and asset owners), and four groups of non-financial groups thought to be most affected by climate change and the transition to a lower carbon economy. It includes the review of disclosures from almost 2,000 companies.

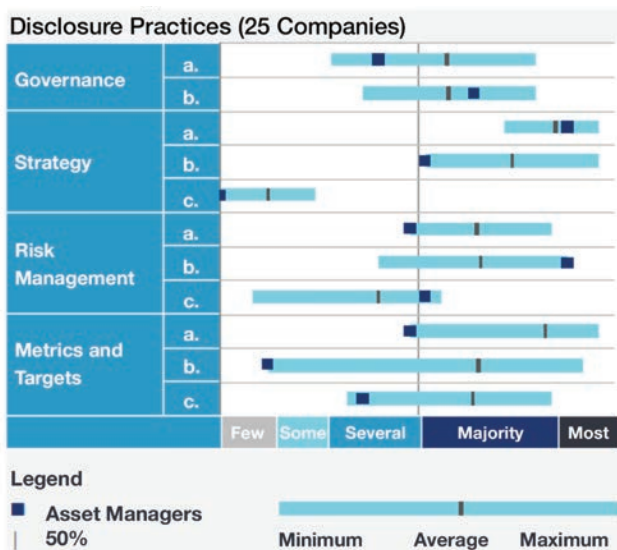
In terms of company performance, it shows that while progress has been made with disclosures, companies still have a long way to go to meet the TCFD recommendations. The report finds that disclosures differ across regions but the majority of companies disclose some climate-related information. However, few disclose the financial impact of climate change on their company, and information on the resilience of companies' strategies under different climate-related scenarios is limited.

The Finance Sector and TCFD

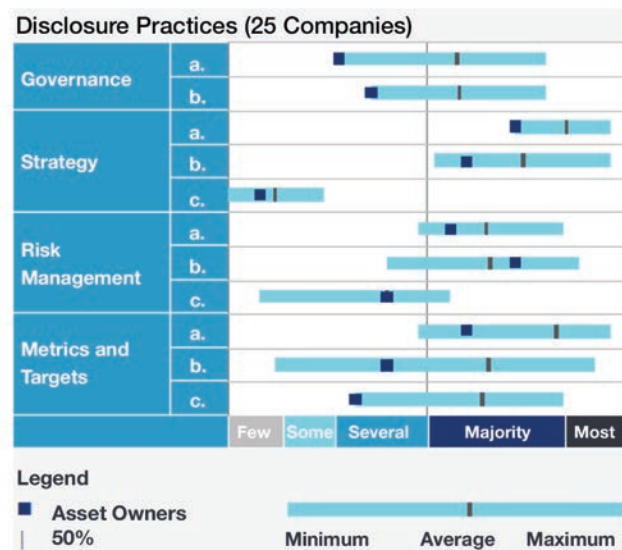
In its review of disclosures, the Task Force status report demonstrates a range of alignments with the TCFD reporting recommendations amongst the financial sector. Banks and insurers are demonstrating leadership in terms of climate-related disclosures in most areas. However, asset managers and asset owners are reportedly disclosing less well in most areas.

Performance of the finance sector against the four areas of the TCFD recommendations broken down by the 11 recommended disclosures

Asset Managers



Asset Owners

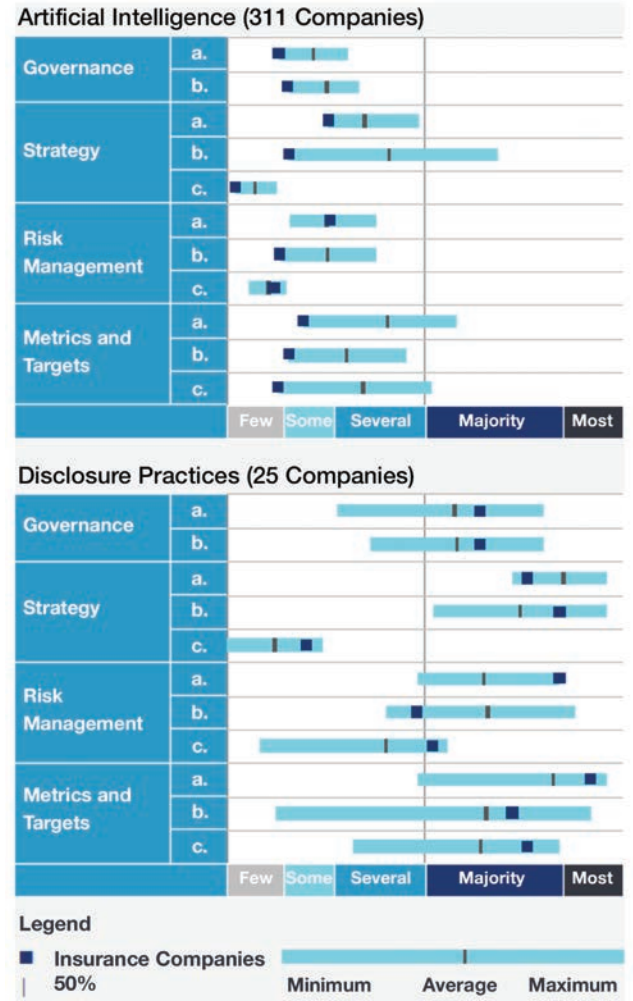


Source: TCFD Status Report 2018

Banks



Insurance Companies



Source: TCFD Status Report 2018

The insurance sector and TCFD

The TCFD status report describes how the majority of the insurance companies disclosed information on their climate-related risks and opportunities. The majority also provided information on the impact of climate-related issues on their business, strategy or financial planning. However, only half of the companies mention the use of a 2°C climate-related scenario. A majority of the insurance companies indicated that their processes for identifying, assessing and managing climate-related risks are integrated into their overall risk management processes.¹

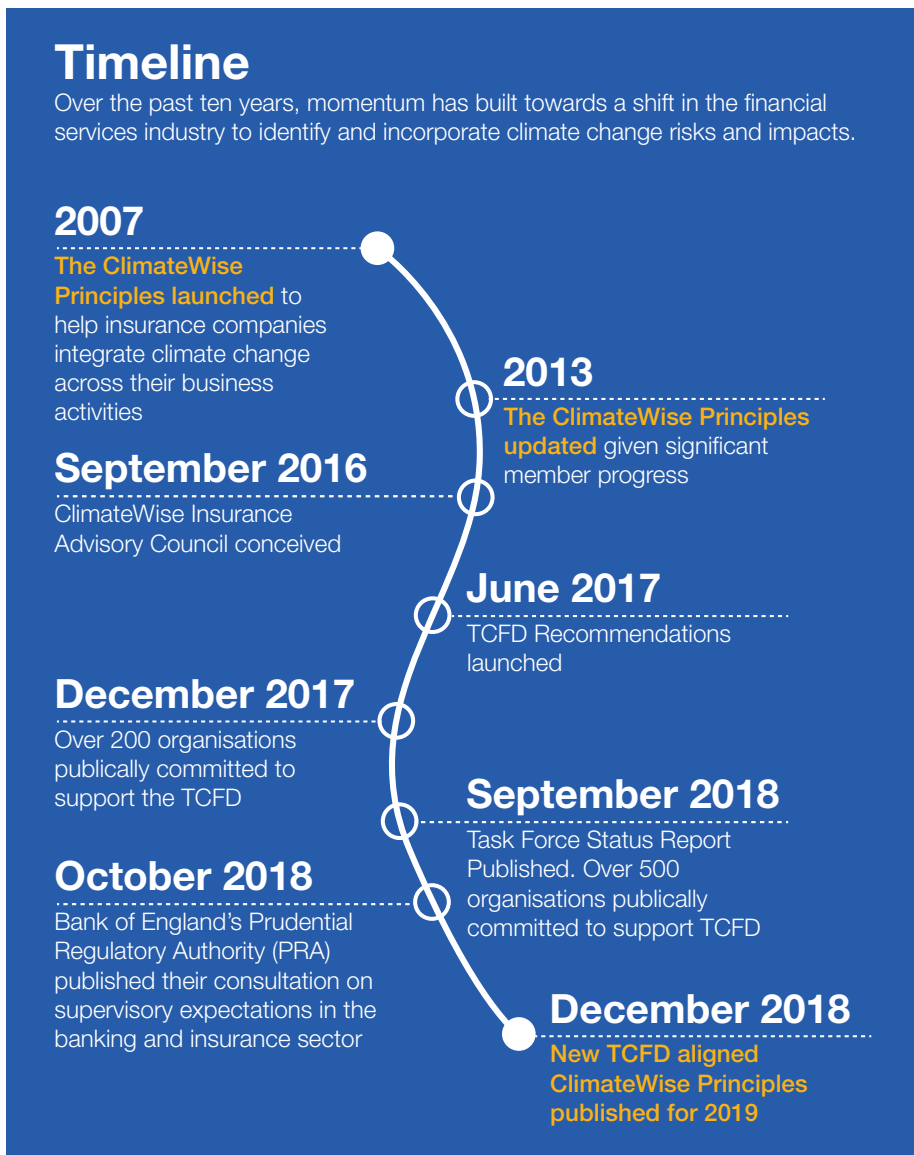
Separately, ShareAction and the Asset Owners Disclosure Project released a report assessing the insurance sector response to the recommendations of the TCFD and featuring an index of the world's 80 largest insurers rated on their approach to climate-related risks and opportunities.¹¹ ClimateWise members Aviva, Allianz SE, Tokio Marine and Swiss Re were reported as either leading the way on climate risk or showing the best year-on-year improvement, with European insurers dominating the leaderboard. The report recommends a rapid strengthening of insurers' management of, and disclosures on, climate-related risks and opportunities, including investment-related risks and opportunities.

Moving forward through collaboration

Since the release of the recommendations, many financial sector organisations have begun to work together on implementation efforts. For example, the United Nations Environment Programme Finance Initiative (UNEP FI) began a pilot project in July 2017 of modelling and stress testing to develop a scenario-based approach for assessing the potential impact of climate change on banks' lending portfolios.¹² UNEP FI launched a similar pilot project with investors in March 2018, and for insurance companies in July 2018.

The Institute of International Finance (IIF) has provided support for financial sector organisations by integrating the TCFD recommendations into multiple aspects of its annual agenda and bringing together organisations across the banking, asset management and insurance industries to work towards greater alignment of disclosures with the TCFD recommendations.¹³ Similarly, the Institutional Investors Group on Climate Change (IIGCC) formed an Investor Practices Programme to focus on climate-related governance, strategic tools and metrics, and practical support and guidance.¹⁴

Timeline showing the advancement of the TCFD recommendations and the ClimateWise Principles over the last decade



The evolution of ClimateWise in responding to the TCFD

ClimateWise continues to collaborate with companies and regulators

ClimateWise members have been integrating climate change across their business activities for over a decade. Back in 2015, the PRA accepted an invitation from the Department for Environment, Food & Rural Affairs (Defra) to complete a Climate Change Adaptation Report, focused on insurance. The PRA report identified three primary channels ('risk factors') through which the impacts of climate change may materialise: physical, transition and liability. These three classifications have now become a common theme within the discussion of climate change and its impacts.

ClimateWise contributed to the development of the PRA framework, including hosting three of the four roundtable discussions with the insurance industry. Under the auspices of its Insurance Advisory Council, ClimateWise has been involved in taking the framework presented by the PRA forward as research and practice.

The ClimateWise Insurance Advisory Council was conceived in 2016, following a period of innovative collaboration between the PRA and ClimateWise. The Council was aimed at increasing

the scope of research conducted within the group, as well as creating a private sector forum for C-suite executives to discuss the industry's approach to climate change. It also explores how insurance expertise can support other parts of the financial system in responding to these risks.

The Council's purpose is to leverage the capabilities of the University of Cambridge and its partners in areas where financial institutions and regulators need to take further leadership to promote a systemic response to climate change across the financial sector.

During its first two-year phase (2016–18), the Council has developed two multidisciplinary research outputs: an open-source framework to enable investors to assess transition risks in infrastructure investments, and a primer allowing real estate lenders and investors to understand their exposure to physical risks over time.

The Council continues with its objectives – to improve understanding on priority issues at the interface between climate risk and finance, to identify constructive opportunities for regulatory action and to support other industry bodies in taking relevant next steps.



ClimateWise response to climate change risks

Climate change risks	ClimateWise Insurance Advisory Council research
<p>Physical risks are the first-order risks that arise from weather-related events, such as floods and storms. They comprise impacts directly resulting from such events, such as damage to property, and also those that may arise indirectly through subsequent events, such as disruption of global supply chains or resource scarcity.</p>	<p>The ClimateWise Managing the physical risks of climate change report (launching in February 2019) provides a methodology for lenders and investors to explore physical risk exposure within their mortgage and lending portfolios under different warming scenarios and to examine how exposure can be reduced via property-level adaptation measures.</p> <p>The research is intended to encourage investors, lenders, insurers and policymakers to explore how they can best manage and respond to the increased physical risks of climate change.</p>
<p>Transition risks are the financial risks that could arise for insurance firms from the transition to a lower carbon economy. For insurance firms, this risk factor is mainly about the potential re-pricing of carbon-intensive financial assets, and the speed at which any such re-pricing might occur. To a lesser extent, insurers may also need to adapt to potential impacts on the liability side resulting from reductions in insurance premiums in carbon-intensive sectors.</p>	<p>The ClimateWise Transition Risk Framework (launching in February 2019) is an open-source model to support investors and regulators assess how the transition to a low carbon economy will impact the financial performance of infrastructure investments. The framework and accompanying step-by-step guide align with the FSB's TCFD and inform practical actions – for asset managers and owners – on capturing emerging opportunities from the low carbon transition.</p>

ClimateWise members and current TCFD performance

For over a decade, ClimateWise members have been publicly disclosing their individual response to climate change under the structure of the ClimateWise Principles. Consequently, notable overlap exists between the Task Force's recommendations and the ClimateWise Principles.

In 2018, as the first step in supporting members to move towards meeting the TCFD recommendations, ClimateWise asked PwC, the independent reviewer for the ClimateWise Principles, to conduct an analysis of members' ClimateWise reports to assess the extent to which the content disclosed already meets these recommendations and where gaps exist.

The analysis found that members are disclosing well in several areas but need to take steps to achieve the quantitative disclosures required by the recommendations:

- Members currently disclose against certain elements of governance and risk management processes.
- Many members disclose key climate-related risks and even break them down into physical and transition risks. Identification of associated opportunities is less common.
- Some members give information on how strategies are being adapted in light of climate-related risks, but very few are explicitly considering a 2°C scenario or assessing resilience against it.
- Most members disclose operational metrics around their carbon footprint, but more work is needed to disclose the quantitative financial metrics and targets beyond their operational footprint into their core insurance and investment businesses, as asked for by the recommendations.

Aligning the ClimateWise Principles with the TCFD recommendations

The release of the Task Force's recommendations, and the regulatory momentum around disclosure, has presented an opportunity to align the ClimateWise Principles with the TCFD recommendations. This will allow companies from across the insurance sector to 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 ClimateWise Principles will retain 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.

This alignment process has received the backing of the 27 insurance industry organisations constituting the ClimateWise membership, and has been led by an advisory group of six members, supported by the University of Cambridge Institute for Sustainability Leadership (CISL) and PwC. The revised ClimateWise Principles have undergone a consultation process with the wider ClimateWise membership, and can be found below. Members will be required to report against the newly aligned ClimateWise Principles from 2019.

The new ClimateWise Principles from 2019

Principle 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.
- 1.2 Describe management's (below board-level responsibility) role in assessing and managing climate-related issues.

Principle 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.
- 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 3 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).
- 3.2 Support and undertake research and development to inform current business strategies (including investments) on adapting to and mitigating climate-related issues.

Principle 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.
- 4.2 Disclose our Scope 1 and Scope 2 greenhouse gas emissions and Scope 3 greenhouse gas emissions using a globally recognised standard.
- 4.3 Measure and seek to reduce the environmental impacts of the internal operations and physical assets under our control.
- 4.4 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 5 Inform public policy making

- 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 6 Support climate awareness amongst our customers/clients

- 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 7 Enhanced reporting

- 7.1 Submission against the ClimateWise Principles.
- 7.2 Public disclosure of the ClimateWise Principles as part of our annual reporting.



The ClimateWise Principles: member progress

In light of the recent UN Intergovernmental Panel on Climate Change (IPCC) report,¹⁵ which warns of the risks of failing to limit global warming to 1.5°C, it is critical for both the public and private sectors to take action to reduce emissions. This year has seen further progress in the performance of members integrating the ClimateWise Principles across their business. The group mean score increased by 6 per cent, from 60 per cent to 66 per cent, and nine members scored over 70 per cent. This is the greatest year-on-year improvement in score since the revised Principles were introduced in 2014.

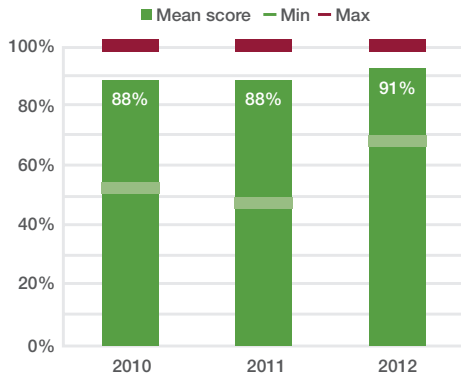
Across the ClimateWise Principles, the greatest change in group mean score was the improvement in Principle 2 (Inform public policymaking). The insurance industry plays an important role in understanding the financial impacts society is likely to face as a result of climate change. It is positive to see that members have been raising awareness of these risks, and improving the ways in which they are engaging in public debate on climate change. Several members have shown this by supporting the TCFD recommendations published by the FSB. Members have also been hosting international conferences on natural catastrophes and climate-related risks for a range of stakeholders including policymakers, risk managers and local citizens.

ClimateWise members have demonstrated a range of activities relating to the key theme in this year's ClimateWise report, centred on the TCFD. Here are a few of the headline activities that members have been engaged in over the past 12 months:

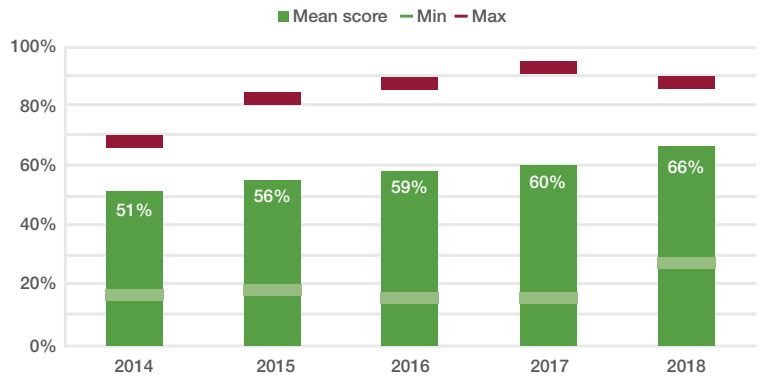
TCFD

- Eight ClimateWise members have publicly indicated their support for the TCFD recommendations.
- Allianz has applied the TCFD recommendations to its corporate reporting on climate change, and uses climate-scenario analysis to inform its insurance and investment strategy.
- Swiss Re's TCFD on governance are particularly thorough, and two board of directors committees (the highest governance level) are in charge of overseeing implementation of Swiss Re's climate change strategy.

Member scores over time (2010–2012)



Member scores over time (2014–2018)



Note: The introduction of the revised ClimateWise Principles approach in 2014, following a one-year gap in reporting in 2013, led to a significant decrease in mean score across the ClimateWise membership between 2012 and 2014. The minimum and maximum markers in the two graphs refer to the lowest and highest scorers of ClimateWise members.

Group means absolute score by sub-principle 2017 vs 2018





The ClimateWise Principles 2018 annual review

The annual assessment of the integration of the ClimateWise Principles across member business activities is based on members' reporting progress that is independently reviewed by PwC. It highlights the overall progress being made by the ClimateWise community, while giving members an individual ranking that allows them to benchmark progress against their peers.

Principle 1 Lead in risk analysis

See page 17

Principle 2 Inform public policymaking

See page 21

Principle 3 Support climate awareness amongst our customers

See page 24

Principle 4 Incorporate climate change into our investment strategies

See page 27

Principle 5 Reduce the environmental impact of our business

See page 30

Principle 6 Report and be accountable

See page 33

Summary

Lead in risk analysis

ClimateWise members have shown that they have been improving their research of potential future climate risks. Several members have partnerships with research and academic institutions, and have been strengthening national and regional forecasting abilities in response to the increasing magnitude and frequency of natural disasters. Mean scores in Principle 1 have improved from 2017.

Although the mean score in supporting national and regional forecasting improved, members are not explicitly stating that their research influences their business practices. Members should more clearly identify the ways in which the research they are undertaking, or supporting, links with their business strategy. Additionally, it would be good to see members evaluating how emerging technologies can support climate change more broadly, for example unmanned aerial vehicles (UAVs).

Inform public policy making

Members have demonstrated engagement with multiple organisations across a range of issues, and are increasingly doing so according to the areas most material to them. Several members have hosted international conferences on natural catastrophes and climate-related risks, enabling members to work with a range of stakeholders and actively contribute to the public debate on climate change. As a result, the mean scores in Principle 2 have increased, particularly in sub-principle 2.2 (Promote and actively engage in public debate on climate change and the need for action); the mean score has improved from 3.4 in 2017 to 4.7 in 2018.

To progress further, members should seek to demonstrate clearly the different ways in which they are engaging with, and informing, public policy, instead of stating that they have participated in conferences and are members of relevant industry groups.

Support climate awareness amongst our customers

Members continue to educate customers about the potential climate risks they face in a variety of ways. Increasingly, these are technologically enabled, with several members producing apps and online platforms for customers to use. Members have made further progress in extending their access to new markets, helping to address the protection gap in areas exposed to future climate risks. Members are encouraged to continue pursuing opportunities to access new markets. Mean scores across Principle 3 have improved, particularly in sub-principles 3.1 (Inform our customers of climate risk and provide support and tools so that they can assess their own levels of risk) and 3.4 (Through our products and services assist markets with low insurance penetration to understand and respond to climate change).

However, progress in sub-principles 3.2 (Encourage our customers to adapt to climate change and reduce their greenhouse gas emissions through insurance products and services) and 3.3 (Seek to increase the proportion of non-life claims that are settled in a sustainable manner) has been more limited. Members should aim to disclose their emissions avoided, as well as estimate the revenue derived from sustainability-based initiatives encouraging customers to adapt to climate change and reduce emissions. This level of disclosure will help to identify the most successful means of reducing emissions.

Incorporate climate change into our investment strategies

This year, ClimateWise members' mean scores have decreased slightly across Principle 4. This is due to a lower group mean score for sub-principle 4.1 (Evaluate the implications of climate change for investment performance and shareholder value), with members taking a light-touch approach to evaluating the implications of climate change. In line with the TCFD recommendations, members should identify and assess the climate-related physical, transition and legal risks and opportunities for investment performance.

Members continue to incorporate the material outcomes of climate risk evaluations into investment decision-making. Most members have an environmental, social and governance (ESG) framework, under which climate risk is considered, to guide investment decisions. There is further opportunity for members to improve the communication of their investment strategy on climate change to clients and wider beneficiaries.

Reduce the environmental impact of our business

The group mean scores for all sub-principles under Principle 5 have decreased slightly. Despite this decrease, members have been working to measure and reduce the environmental impact of their internal operations and physical assets through a range of initiatives. Members have also provided excellent disclosure of greenhouse gas emissions, using external standards to structure emissions reporting.

Members could improve their scores by disclosing further information on sustainability criteria used for supplier assessments, and by developing comprehensive programmes for employee engagement.

Report and be accountable

The group mean score has improved in sub-principle 6.1 (Ensure that the organisation is working to incorporate the Principles into business strategy and planning by encouraging the inclusion of the social and economic impacts of climate risk as part of the board agenda), as several members have demonstrated that they have governance structures in place to address and incorporate climate change issues into decision-making at the board level. Members should demonstrate evidence that the board is regularly reviewing climate-change-related risks and that there is a board-level sponsor to ensure climate issues are receiving sufficient attention. Scores for sub-principle 6.2 (Publish a statement as part of our annual reporting detailing the actions that have been taken on these Principles) have decreased slightly, so we would encourage members to respond to, and report on, as many sub-principles as possible, as well as encourage public disclosure in annual reports, in line with the TCFD recommendations.

Next steps for ClimateWise members

Strengths to build upon:

Evaluating the risks associated with new technologies.

Members have demonstrated that they are increasingly improving their assessment of the risks associated with new technologies addressing climate change impacts. Although more members are offering services in this area, it tends to be limited to providing insurance solutions for renewable energy initiatives. Members should look more holistically at the potential for emerging technologies to address climate change issues and enable them to offer a broader range of services and products in this area.

Engaging in the public debate on climate change.

This year, members have shown marked improvement in the ways they are participating in, and facilitating, the public debate on climate change. Members have demonstrated that they are able to influence the public debate by organising international conferences, enabling them to collaborate with a range of stakeholders across the public and private sectors. Members should continue to demonstrate that they are at the forefront of the public debate, and the most ambitious members are encouraged to establish themselves as leaders in this space.

Next steps for improvement:

Offer sustainable products and services to encourage customers to adapt to climate change.

Some members have started to use specific criteria to assess the sustainability of their products and services, demonstrating that sustainability is being integrated throughout the business. However, the majority of members are not doing this. ClimateWise members are encouraged to educate customers on the principle of sustainable claims to improve their awareness of climate change and to motivate them to reduce their emissions.

Engaging with the FSB's TCFD recommendations.

Following the release of the TCFD recommendations, board-level engagement with climate-related issues has increased. Several members have developed governance structures, including board-level sponsors and sub-committees that are responsible for incorporating climate-related issues into business planning and strategy. While some members have disclosed how strategies are being adapted in light of climate-related risks, members should consider the impacts of a 2°C scenario and assess resilience against it. Furthermore, while members have provided excellent disclosures of greenhouse gas emissions, more work is needed to disclose the quantitative financial metrics and targets, as asked for by the recommendations.



Appendices

Appendix 1: Member evidence against the ClimateWise Principles

Principle 1 Lead in risk analysis

The sub-principles

Research: 1.1

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.

Forecasting: 1.2

Support national and regional forecasting of future weather and catastrophe patterns affected by changes in the earth's climate.

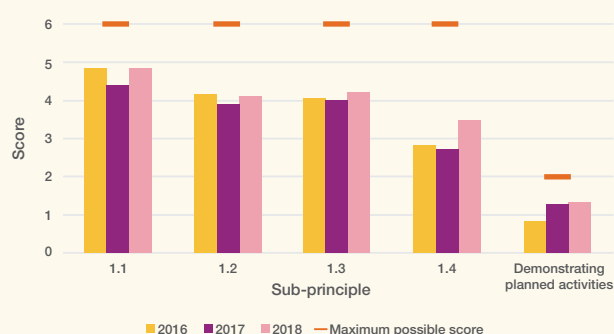
Application: 1.3

Use research and improve data quality to inform levels of pricing, capital and reserves to match changing risks.

Innovation: 1.4

Evaluate the risks associated with new technologies for tackling climate change so that new insurance products can be considered in parallel with technological developments.

Group mean absolute score by sub-principle



Note: The 'Maximum possible score' markers in the graph above reflect the total marks available under each sub-principle.

Improving the understanding of future climate risks is important for all insurance bodies, and this helps members to make more informed underwriting and claims decisions. It is therefore important that members are undertaking research and using

it to inform business models. Between 2016 and 2017, scoring in Principle 1 decreased slightly, so it is positive to see that this year scores have improved across all sub-principles. While sub-principles 1.1 and 1.2 have matched the mean score achieved in 2016, sub-principles 1.3 and 1.4 have demonstrated further improvement from 2016. Members have shown that they are undertaking or funding research to improve the assessment of future climate and technological risks, and using it to inform business strategies. It has been particularly satisfying to see the lengths to which members are going to share their research with a range of different stakeholders, hosting and participating in conferences, seminars and workshops, as well as publishing reports and journals.

Members have demonstrated that they are responding to the increasing magnitude and extent of recent natural disasters by strengthening their national and regional forecasting abilities. However, to improve further, members should seek to identify risks associated with new technologies, looking beyond those associated with renewable energy. Members should look more broadly at the application and development of emerging technologies and how they can address climate change.

Key strengths and progress achieved

As in previous years, the majority of members have scored well in Principle 1. Members have demonstrated that they are supporting and undertaking research with a variety of different organisations across a range of objectives. Members are actively sharing this knowledge through several different channels to spread awareness amongst stakeholders and customers of how they can best respond to climate change risks. **Santam** has been working with the Embedding Project, committing time and financial resources to support their work. The collaboration has involved working with researchers, academics and other corporate sustainability professionals to create guidebooks to help companies embed sustainability across their operations and decision-making. To share the lessons learned from the research, Santam hosted two workshops to bring together experts with the private sector. **If P&C** is working with the Research Council of Norway on a five-year research project, SUPER. The project explores human influence on short-duration extreme precipitation by studying aerosol use, the urban heat island effect, climate models and weather observations. If P&C involves key stakeholders in research projects and continuously shares findings through a variety of channels, such as conferences, seminars, workshops, reports and its risk management journal, *Risk Consulting*. **RSA** reviewed the emerging risk landscape, focusing on 'accelerating climate change' as a topic; and as part of its research, RSA assessed the reinsurance purchase for extreme weather trends. Following the sensitivity testing, the Group Volatility Cover (GVC) contract, which protects against natural catastrophes, risks and marine losses higher than £10 million, was updated to include additional protection for prolonged or greater frequency events.

The total value of economic losses from hurricanes in 2017 was nearly five times the average of the preceding 16 years (2000–16).¹⁶ Climate change is expected increase the intensity of such events, and the scale of potential disaster events presents a significant challenge for insurers. The scope extends beyond tropical cyclones and hurricanes too: water scarcity, food insecurity and other issues are likely to be aggravated by climate change. The development of strong national and regional forecasting abilities is essential practice for the insurance industry. More accurate forecasting of events will not only better inform pricing models, but also improve adaptation and resilience building efforts, as well as reducing claims. **Aon** has been heavily involved in several climate-related research initiatives, for example ELEMENTS 12, which expands model coverage while also increasing customisation and predictive capabilities to forecast losses up to 72 hours before an event. An open-source Oasis-enabled approach ensures that clients can take a broad view of risk and helps them identify new and emerging risks. **Willis Towers Watson** employs catastrophe analysts to operate 'catastrophe models' across a range of severe weather events, including storms, floods, tornados and hail. These models are used for a range of portfolios of value at risk, and analysts are then able to respond to climate-related questions from clients regarding risk assessments of their exposed portfolios. Willis Towers Watson is currently working collaboratively with the 2 Degrees Investing Initiative and using the research to address physical climate risk and align the investment processes of financial institutions with 2°C climate scenarios.

It has been encouraging to see members improving their data quality in response to changing risks, by using research to increase awareness of the possible future impact of climate change. **Allianz** has developed instruments and tools to integrate ESG considerations into everyday decision-making in its insurance and investment business, by conducting ESG assessments for insurance transactions and unlisted investments. The ESG analysis has influenced investment decisions, as the company has strategically invested in low carbon assets and implemented a group-wide divestment from coal-based business models. **Hiscox** has developed the Hiscox View of Risk (HVOR) to inform its pricing, capital, reserving and reinsurance models. HVOR is built upon a complex combination of research results, comparing its own research with actual loss data, multiple factor analysis and the use of multiple vendor modelling systems. Adjustments are made to take account of new scientific understanding and new regulatory requirements to define the most significant climate change-related risks.

As consumer demand for, and investment in, sustainable solutions increase, particularly for renewable energy, insurers will need to consider new modelling and pricing risks. It is important that members keep up with these changes; those who do not may be forced to exit certain markets.¹⁷ Several members have demonstrated that they are improving their assessment of the risks associated with technologies addressing climate change impacts and are improving the products and services that they provide. **Swiss Re** has included 'advancing sustainable energy solutions' as one of its five Top Topics affecting the risk landscape, recognising it as an issue of long-term and group-wide strategic importance. The company has focused on offering insurance and reinsurance products to support the construction and operation of renewable energy projects, including solar, wind, geothermal, small-scale hydroelectric, and biomass. **Lloyd's** managing agents **Tokio Marine Kiln** and **QBE** both consider technology when addressing climate-related impacts. Tokio Marine Kiln launched the first comprehensive insurance product to cover the risks associated with unmanned aerial systems (UAS), more commonly known as drones. Meanwhile, QBE explores new digital technologies using its Innovation Lab, which enables it to make more informed underwriting and claims decisions. This has involved underwriting renewable energy products, for example those offered by Lumos Global, a company offering clean and affordable solar power to a market of 1.3 billion potential customers who live off the electricity grid. Additionally, the Tokio

Marine Research Institute conducts research on future climate risks and societal changes and their business impacts on Tokio Marine Group's management, helping the group to formulate business strategies and make business decisions in parallel with technological developments. **Zurich** has demonstrated its commitment to use technology to better manage climate risks, focusing on providing cover for Carbon Capture and Sequestration (CCS) projects. Zurich's Climate Change Advisory Council has identified it as a priority technology, and Zurich has been a leading advisor to brokers and provided insurance solutions for major, multi-billion dollar CCS construction projects.

Recommended areas for development

Despite improvement from previous years, the largest area of development in Principle 1 remains evaluating the risks associated with new technologies, and the mean score for sub-principle 1.4 remains significantly lower than for the other sub-principles. As in previous years, members have struggled to identify the risks associated with new technologies and more specifically how they are affecting their businesses. Where members have identified the risks associated with new technologies, they tend to be focused on renewable energy. Members need to look broadly at the development of emerging technologies and how they can help to tackle climate change. It would be useful to see members identifying risks that are specific to the introduction of new technologies, and showing that they have used a clear process to do so. This should ensure that new insurance products are considered in parallel with technological developments. Emerging technologies represent a huge opportunity, and members should engage in assessing and supporting technologies for climate change mitigation and adaptation.

Only two members were able to score full marks for sub-principle 1.2. Members are not explicitly identifying how national and regional forecasting of future weather and catastrophe patterns research is influencing their business practice. While several members state that forecasting information informs strategy, they have not shown explicit examples of how they are doing it. It is crucial that members make it clear how their research links with their business strategy to improve their priority products and services. It would be good to see more examples of collaborative national and regional forecasting, showing that members are proactively sharing and engaging others in useful research.



Case study **Swiss Re's Innovative risk transfer solution**

As the demand for sustainable energy grows, so too do the associated risks. To reduce the challenge of underwriting these risks, Swiss Re has launched an innovative risk transfer solution, specialising in providing insurance solutions for offshore wind production.

With large expectations placed on the future growth of clean technology and renewable energy, Swiss Re has developed a strategy to support this area. As the demand for sustainable energy grows, so do the associated risks. As the output is heavily reliant upon weather conditions and the backdrop of declining support from government, the industry has to take on more of the associated financial risks of renewable energy.

Swiss Re has taken a particular interest in offshore wind. However, as with most sources of renewable energy, offshore wind presents very complex risks for the insurance industry. Given the lack of a long loss history, underwriting such risks is challenging. To reduce these risks, Swiss Re has taken several actions:

- It has developed in-house expertise in the domain and worked to continuously improve its understanding of the renewable energy sources. Swiss Re is sharing insights developed from this research with clients as well as with other insurers.
- Swiss Re has launched an innovative risk transfer solution, specialising in providing insurance solutions for renewable energy production. Swiss Re offers insurance and reinsurance products that support the construction and operation of renewable energy projects.

Nissum Bredning Vind Offshore Wind Farm:

In 2017, Swiss Re agreed to provide insurance protection to a Danish pilot project, the Nissum Bredning Vind Offshore Wind Farm. This was set up to test new offshore technologies and integrated design. For example, a key innovation being tested is a new 'gravity jacket foundation', which seeks to reduce the construction costs of offshore wind farms. Additionally, the project features a new cable and turbine concept with a higher voltage of 66 kV, which will result in lower costs for cabling and reduced transmission losses. This project could help bring significant savings to construction and operating costs, having a positive impact on the levelised cost of electricity (LCOE). The LCOE is the industry standard methodology for measuring the cost of energy over the course of the lifetime of a project, taking into account the initial capital costs, future operational costs and the present value of energy during the anticipated lifetime of the project.¹⁸

Trianel Windpark Borkum II

Swiss Re supports the first purely communal wind farm in the North Sea, Trianel Windpark Borkum II, by providing insurance at different stages of the project. The owners include 17 German municipalities as well as the electric utility of the city of Zurich. Construction of the wind farm is expected to be completed in 2019, and it has a planned capacity of 203 MW generated by 32 turbines, which is expected to power 140,000 homes and save 290,000 tonnes of CO₂ per year.

Principle 2

Inform public policy making

The sub-principles

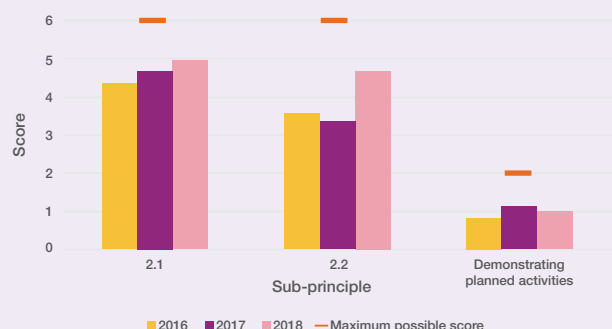
Policy engagement: 2.1

Work with policymakers nationally and internationally to help them develop and maintain an economy that is resilient to climate risk. This should include supporting the implementation of emissions reductions targets and where applicable supporting government action that seeks to enhance the resilience and reduce the environmental impact of infrastructure and communities.

Stakeholder Engagement: 2.2

Promote and actively engage in public debate on climate change and the need for action.

Group mean absolute score by sub-principle



Note: The 'Maximum possible score' markers in the graph above reflect the total marks available under each sub-principle.

The insurance industry plays an important role in understanding the financial impacts society is likely to experience as a result of climate change. Members should use this position to advocate

for greater recognition of climate risks with policymakers and other important stakeholders, such as regulators and with the public, by supporting the TCFD recommendations. Members have continued to score well in Principle 2, and the mean score increased from last year as a result of members showing high levels of engagement with policymakers. Members have improved the ways in which they are engaging with the public debate on climate change, and several members have shown their support for the TCFD recommendations. This has helped to drive improved performance in this area across the membership.

Members have improved how they prioritise their public policy engagement, increasingly doing so according to the areas most material to them. Members are moving beyond just participating in relevant conferences and events, increasingly supporting a range of different initiatives. It is becoming typical for members to host international conferences, enabling them to work with a range of stakeholders, including policymakers. As a result, members are progressively being recognised as leaders in encouraging action on climate change.

Key strengths and progress achieved

One of the three recommendations from the Geneva Association's report *Climate change and the insurance industry* was that different stakeholders, including governments, policymakers and regulators, should "work in a more coordinated fashion".¹⁹ It is therefore pleasing to see that most members have demonstrated that they are interacting with multiple organisations across a range of issues, with senior and board members participating in climate-related policy matters. Members should be congratulated for engaging with their most material issues. In particular, several members are important contributors, informing public policy about the risk management of natural hazards and disasters.

Tokio Marine Nichido Fire has focused on natural catastrophes and climate-related risks, which were identified as the most material issues for the business. As a result, the company hosted a forum entitled 'Building a disaster-resilient community in the Asia-Pacific – The power of science and insurance' at the 1st World Bosai Forum. Senior corporation staff at Lloyd's have spoken publicly about the issue of climate change, presenting work on mitigation and adaptation opportunities. For example, **Lloyd's** staff have spoken at the International Cooperative and Mutual Insurance Federation (ICMIF) Meeting of Reinsurance Officials and the Onshore Energy Conference and have also been involved at COP23. **Hiscox** has committed to working with policymakers and other stakeholders to improve resilience to climate risks, particularly around access to insurance for UK homeowners who are vulnerable to flooding. Hiscox CEO Bronek Masojada

collaborated with members of the House of Lords, the Treasury Select Committee and other key government stakeholders to bring attention to the issue. As a result, Flood Re was launched, a programme to provide affordable flood insurance for homeowners living in areas at a high risk of flooding; it is anticipated that it will provide insurance for an additional 350,000 homes. **ABI** engaged with the European Commission's High-Level Expert Group on Sustainable Finance as it prepared its January 2018 report, as well as participating in the UK Green Finance Taskforce insurance work stream, in particular helping to craft messages on the Solvency II matching adjustment.

ClimateWise members have been actively engaged in the public debate on climate change, and several have shown this by supporting the TCFD recommendations published by the FSB. **Santam** has assisted municipalities to enhance resilience to events such as fire and flooding. The company was a key collaborator in an event themed 'Changing climate, changing risk', which brought together a governmental department (Western Cape Disaster Management Centre) with the private sector to help the city of Cape Town understand the potential implications of a drought from a risk management perspective. **Zurich** hosted its annual Global Risk Management Summit (GRMS) in September 2018, which was attended by about 70 risk managers from around the world. Insights into the latest trends in risk management were showcased, including those associated with extreme heat waves and storms. To coincide with the European Commission's work on the role of insurance in climate adaptation, **Swiss Re** hosted a high-level conference in Brussels entitled 'Insuring natural catastrophe risk: how public-private partnership could make Europe more resilient'.

Recommended areas for development

Members have scored well in this Principle; however, to score full marks, it is necessary to demonstrate the different ways that members are engaging with and informing public policy, rather than simply stating membership of industry groups. Members should clearly state how they are engaging in the public debate, and how this work is affecting policy. It is important to clearly identify their specific role within this, and where possible to

show that they are taking a leadership position, rather than just participating. Members would benefit from sharing more tangible evidence that their engagement activities link with material issues. It seems, however, that members need greater clarity on the material issues they face in order to best address them. It would be useful for members to disclose a list or register defining what their material issues are, to clarify how and why they are prioritising certain engagements.



Case study **Allianz - Policy engagement activities linked to material issues**

Allianz has identified the climate risks and issues that are most material to its business. These have been reflected in the company's policy engagement actions and public debate initiatives, helping Allianz to make more informed business decisions.

These risks have been split into both physical risks and transition risks. This includes physical risks such as impacts caused by warming temperatures, extreme weather events and rising sea levels, as well as transition risks such as changes in climate policy, technology or market sentiment arising from a shift to a low carbon economy. Allianz has committed to understanding stakeholders' needs and concerns to inform products, services and approach. This has helped to focus the Corporate Responsibility Strategy, and engagement activities are based on the four stakeholder groups most affected by the business: investors, customers, society and employees.

Allianz's most material issues influence the public policy engagements it has participated in. Allianz regularly encourages regulatory measures, such as carbon pricing and the phase-out of subsidies for fossil fuels, to encourage sustainable finance and to ensure the goals of the Paris Agreement are met. Allianz's engagement activities to match these aims have included an international business declaration calling on G20 governments to implement concrete measures to encourage the phase-out of fossil fuels and the development of a carbon tax, as well as being a signatory to the Frankfurt Declaration on Accelerating Sustainable Finance.

Moving forward, given Allianz's status as an asset owner, the company has committed to increasing investment in infrastructure, particularly in markets and sectors where it is possible to have a positive social, economic and environmental impact. Allianz plans to measure the social and environmental impact of its investments, aligning its strategy with the Sustainable Development Goals (SDGs) that facilitate the greatest impact. Additionally, there are plans to integrate ESG aspects into unit-linked products and ensure the portfolio contributes to the low carbon economy.

Allianz has committed to working with a range of stakeholders, partners, governments and institutions, to identify sustainable solutions to the challenges society faces. Allianz actively engages in political lobbying to contribute expertise and knowledge to support policy development. Allianz also organises issue-led events to foster collaboration between stakeholders and government representatives. For example, in February 2018, Allianz co-organised the sixth Berliner Demography Forum to raise awareness of, and explore solutions to, the long-term consequences of a demographic change, bringing together over 250 leading international experts from academia, the media, politics, the business community and civil society.

Principle 3

Support climate awareness amongst our customers

The sub-principles

Advice: 3.1

Inform our customers of climate risk and provide support and tools so that they can assess their own levels of risk.

Products: 3.2

Encourage our customers to adapt to climate change and reduce their greenhouse gas emissions through insurance products and services.

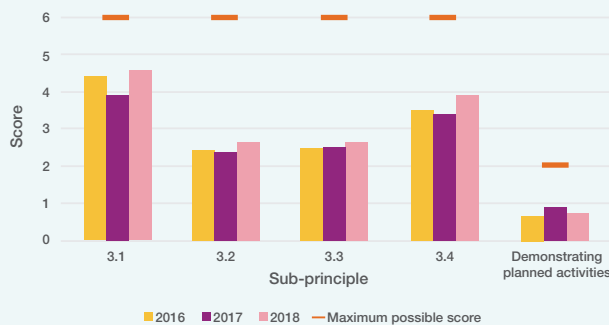
Claims: 3.3

Seek to increase the proportion of non-life claims that are settled in a sustainable manner.

Market Penetration: 3.4

Through our products and services, assist markets with low insurance penetration to understand and respond to climate change.

Group mean absolute score by sub-principle



Note: The 'Maximum possible score' markers in the graph above reflect the total marks available under each sub-principle.

The insurance industry is in a position to influence and encourage customers to consider the climate risks they face. Members should seek to educate customers to help them

integrate climate risks into their decision-making, to better respond to the potential future climate risks. Members have improved their mean scores across each sub-principle in Principle 3, which is pleasing given that scores fell for this Principle 3 between 2016 and 2017. In particular, there have been improvements to sub-principles 3.1 and 3.4. Members have been particularly strong in informing customers of the climate risks they face, producing several innovative and interactive tools to help them to prepare and manage potential risks. Members continue to extend their access to new markets with low insurance penetration to address the protection gap through a range of initiatives and partnerships. This represents a significant opportunity for insurers to access new markets that are increasingly exposed to the risks brought about by climate change. Although mean scoring has improved in sub-principles 3.2 and 3.3, it remains low. Members are encouraged to fully disclose emissions avoided and estimate the revenue derived from sustainable initiatives that encourage customers to adapt to climate change and reduce emissions.

Key strengths and progress achieved

Members have continued to inform customers of their climate risks in new ways. Notable interventions include MS Amlin, which is part of the **Lloyd's** market, launching a flood toolkit. This includes the latest thinking on flood risk assessment, emergency planning and flood resilience, and was developed in conjunction with leading industry experts to assist in creating a flood mitigation strategy for businesses. It is designed to help accurately assess the level of flood risk and improve pre-flood preparation and resilience, as well as support customers to prepare for a claim. In partnership with the British Red Cross, **Aviva** launched an Emergency Response app to provide severe weather flood warnings at a local level. By March 2017, the app had been downloaded over 56,000 times, and was used by a large number of customers in the flooded areas of Cumbria and Yorkshire. Codan, the Danish brand of **RSA**, has developed several tools to help the public prepare for weather-related risks before they occur. This includes an SMS service to inform people about the upcoming risks and how best to prepare. **RSA** has produced several risk control guides to help customers across several areas, such as winter precautions, water damage and photovoltaic panel risk.

Very few members scored well in sub-principle 3.2, with none scoring full marks and just one member scoring more than three points. This is consistent with trends in recent years. **Allianz** has performed strongly, developing a set of criteria against which products and solutions are scored and therefore whether they are considered sustainable. The revenue figures are reported for all products and solutions that qualify. In 2017, Allianz generated €1.21 billion from 165 sustainable solutions. The quantification shows that Allianz is incorporating sustainability measures throughout the business. Other members have improved in this area from last year, particularly in incorporating sustainability more broadly into the business. **Aon** has been encouraging its clients to adapt to climate change by promoting innovative insurance products to lower the cost of clean technologies, and addressing

the underinsurance of infrastructure and chronic climate risks, such as weather volatility. **Hiscox** has had success implementing insurance products to respond to the growing customer base for products and services related to environmental risks and climate change. This has included initiatives to provide solar panel cover for policyholders with home insurance and bespoke open-market insurance for energy assessors who rate the energy efficiency of properties under the government's regulations.

Performance in settling non-life claims in a sustainable manner has continued to improve; however, this remains an area of weakness for several members. Leading members have shown that they are educating their customers and suppliers in the principles of sustainable claims, while also increasing the percentage of repairs being conducted in a sustainable manner. **If P&C** performed strongly, particularly with regard to improving the sustainability of vehicle repairs. The company has stringent environmental procedures when working with repair contractors to ensure the reuse and recycling of spare parts; as a result, the tonnage of reused materials in vehicle repairs has increased by 18 tonnes between 2015 and 2017. **RSA** has developed a strategy to drive repair over replacement, and over the past two years suppliers have devised new repair methods to mitigate the need for replacements. **Willis Towers Watson** has partnered with Global Communities to promote resilience for communities that are susceptible to weather-related risks. This involves educating clients in the insurance claims process, and improving the awareness of municipalities, so that they are able to better formulate their risk tolerance and make informed decisions on risk transfer solutions.

Members are increasingly focusing their efforts on addressing the protection gap, by increasing insurance coverage in low- and middle-income customer markets, enhancing their resilience to climate change. There have been improvements where members are describing the process of identifying and prioritising different initiatives more clearly. For example, **Swiss Re** focuses on high-growth markets and natural

catastrophes, and it has made a commitment to the Grow Africa Partnership, an initiative that promotes public-private collaboration and investment in African agriculture. Swiss Re's involvement has been based around improving access to tools such as weather and yield index insurance, investing the equivalent of US\$2 million into supporting the development of sustainable agricultural risk management markets and providing agricultural insurance for up to 1.4 million smallholder farmers.

Aviva provides life insurance cover in markets with low insurance penetration, despite most of its business being based in Canada and Northern Europe. In India, Aviva provides life insurance products to rural communities. During the year under review, Aviva overachieved its regulatory target by selling 29 per cent of policies in the rural sector as against the target of 20 per cent.

Prudential plc is currently undergoing a demerger to maximise insurance penetration in the growing markets of Asia and Africa. The company has recently launched 'Mind the Gap', a protection calculator for customers to understand the insurance products required in developing markets that are prone to the impacts of climate change. **XL Catlin** is supporting the Insurance Development Forum (IDF), a public-private partnership led by the industry and supported by the UN and World Bank. This is supporting the G7 InsuResilience target of extending insurance coverage to an additional 400 million vulnerable people by providing technical expertise to help governments assess and manage their risks.

Recommended areas for development

Although there have been reported improvements in meeting the requirements of this Principle, particularly with regard to sub-principles 3.1 and 3.4, members have not scored as strongly in sub-principles 3.2 and 3.3, with no members scoring full marks in either. As for previous years, members could improve their disclosure of emissions avoided and estimate the revenue derived from sustainable initiatives that encourage customers to adapt to climate change and reduce emissions. Doing so would help members to monitor the demand for, and performance of, different products and services, such that they are able to prioritise the most successful ones.

While many members are demonstrating that they are engaging with some encouraging initiatives to support their customers, the rationale or motivation for doing so is not clear. It would be good to see members identifying priority areas, for example through research or roundtable discussions to clarify how sustainability links with their business structure.

Members should seek to provide further information on how they plan to increase the number of claims settled in a sustainable way, and how members engage and educate customers or suppliers on the principle of sustainable claims.



Case study Lloyd's - Customer support during hurricane season

Climate change is increasingly affecting Lloyd's customers around the world as the severity and frequency of natural catastrophes related to changing temperatures increase. Lloyd's is focusing on making sure it is providing products and services to policyholders that help them to build resilience to climate threats and to recover quickly post-disaster by paying claims.

Lloyd's City Risk Index estimates that climate-related risks together account for US\$123 billion of the total \$546.5 billion GDP@Risk, and this sum is expected to grow. In response to the above-average hurricane activity in 2017 and significant losses recorded by several insurers globally, Lloyd's produced the *After the Storms* report. It was made publicly available and shared across Lloyd's social media channels. The report included specific insight for all stakeholders around climate change, using research and evidence to highlight the potential losses associated with flooding. It is hoped this will advance thinking and understanding among underwriters both in the Lloyd's, London and international insurance markets.

The report highlighted the importance of: strong portfolio management, having a robust catastrophe underwriting philosophy and strategy, and using sophisticated modelling

frameworks, if insurers are to remain competitive in catastrophe-affected classes of insurance. The report study called on insurers to make sure all the underwriting fundamentals are in place for wind peril and that their business models are robust, so they can provide the best value to policyholders.

As with all its reports, Lloyd's made sure the information was shared through its social network channels, reaching more than 100,000 stakeholders across LinkedIn and Twitter. Lloyd's carries out several other activities to help customers and build awareness of its climate change work. For example, Lloyd's publishes annual information for those who live or work in areas at risk of hurricanes, which includes regional forecasts, guides on how to assess and mitigate wind-peril risks, and how to contact Lloyd's for further information, including claims.

Principle 4

Incorporate climate change into our investment strategies

The sub-principles

Evaluate: 4.1

Evaluate the implications of climate change for investment performance and shareholder value.

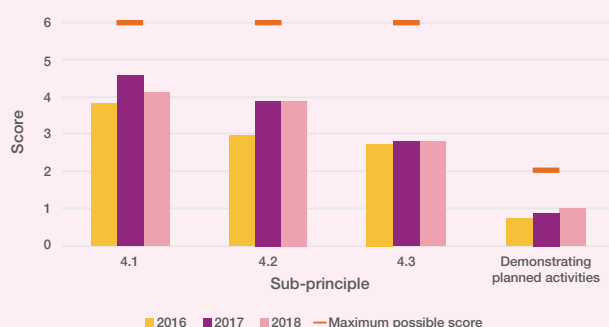
Incorporate: 4.2

Incorporate the material outcomes of climate risk evaluations into investment decision-making.

Engage: 4.3

Communicate our investment beliefs and strategy on climate change to clients and beneficiaries.

Group mean absolute score by sub-principle



Note: The 'Maximum possible score' markers in the graph above reflect the total marks available under each sub-principle.

The expected transition to a low carbon economy necessitates an estimated US\$1 trillion of investments a year to 2030,²⁰ presenting new investment opportunities. In parallel, the

estimated value at risk to 2100, as a result of climate change, to the total global stock of manageable assets ranges from US\$4.2 trillion to US\$43 trillion.²¹ It is therefore increasingly important for insurers to incorporate climate change into investment strategies.

This year, members have demonstrated a slight decrease in scores against Principle 4, due to a lower group mean score for sub-principle 4.1; members have reported taking a light-touch approach to evaluating the implications of climate change. With increasing pressure from investors for companies to improve climate-related financial disclosures, for example by following the TCFD recommendations, members should identify physical, transition and legal risks and opportunities presented by climate change, and incorporate the outcomes into decision-making. Members should also continue to communicate their investment beliefs to stakeholders.

Key strengths and progress achieved

Despite the slight decrease in members' mean score for sub-principle 4.1, members have still evidenced activities to evaluate the implications of climate change for investment performance and shareholder value. This includes taking a leadership position by advocating the use of metrics and supporting research into this area. For example, **Swiss Re** demonstrated the use of metrics by measuring the weighted average carbon intensity of its listed equities and credit portfolio. Eastspring, the Asian asset management business of **Prudential plc**, recently produced a report outlining the importance of ESG investments in Asia and identifying several obstacles to climate change conscious investment.

ClimateWise members continue to incorporate the material outcomes of climate risk evaluations into investment decision-making. Most members have an ESG framework, under which climate risk is considered, to guide investment decisions.

Aviva uses ESG heat maps that include proxy risk metrics to analyse investments. EdenTree, the investment subsidiary of **Ecclesiastical**, uses carbon footprinting to assess carbon risks in portfolios. Going even further, **Santam** and **Zurich** have shown how ESG strategies have affected investment decisions. Through the Santam Resilient Investment Fund, the company makes targeted investments in companies that address ESG needs and reduce long-term systemic risks to Santam's business. As of 2018, the fund has grown to R126 million. Zurich details its responsible investment strategy in a white paper and has set seven objectives for its investment activities, which include strengthening ESG integration. At the end of 2017, Zurich had invested US\$2,411 million in green bonds, and committed \$30 million to two clean-tech-focused impact private equity funds, demonstrating the impact of its strategy on investment decisions. See case study for more information.

ClimateWise members continue to communicate their investment beliefs and strategy on climate change to clients and beneficiaries. **Swiss Re's** Corporate Responsibility

Report includes a section detailing how climate change and ESG considerations are part of the company's investment approach. In addition, Swiss Re directly engages with investors and shareholders who may have specific questions about the company's sustainability performance. **The Corporation of Lloyd's** engages with companies in which Lloyd's Central Fund invests as a shareholder through BMO Global Asset Management. One of BMO's key engagement projects is involvement in the new global five-year investor initiative known as Climate Action 100+. The initiative will target the world's largest corporate greenhouse gas emitters, asking them to develop low carbon business strategies and strengthen climate-related governance as well as financial disclosures.

Recommended areas for development

Member performance in evaluating the impacts of climate change for investments has declined since last year. Some members are still taking a light-touch approach to climate risks and opportunities, by considering them as part of wider ESG criteria. In line with the TCFD recommendations on strategy, members should identify physical, transition and legal risks and opportunities presented by climate change, to inform the development of long-term strategies to guide their investment approach.

There is an opportunity for members to improve the communication of their investment strategy on climate change to clients and wider beneficiaries. In line with the TCFD recommendations on governance, members should be clearer about their governance arrangements for climate-related risks and opportunities, which should include disclosing the scope of investments they manage responsibly. When assets are managed externally, members should have oversight of their external asset manager's approach to climate change. For example, members could develop a responsible investment policy that external asset managers must adhere to, or require them to disclose the metrics used to assess and manage relevant climate-related risk and opportunities.

Case study Zurich: Responsible Investment white paper

In 2017, Zurich released a white paper, *Responsible Investment at Zurich: What we want to achieve, and how we do it*, outlining their market-leading responsible investment policy.

The investment strategy is based upon three pillars:

- ESG integration – When analysing individual investments and investment managers, in addition to examining the financial performance, Zurich also assesses the ESG performance.
- Impact investing – Zurich aims to fund institutions or projects that, while generating a safe, adequate return on premiums, also generate targeted and measurable positive environmental or social impacts.
- Advancing together – Zurich supports collaborative initiatives and seeks to work with a broad group of stakeholders to help to make responsible investment more mainstream.

Zurich's strategy to incorporate climate change into investment decisions is spread across seven areas. Zurich has worked with high-level scenarios, highlighting how underrepresented physical risks currently are in ESG ratings and climate change tools. As a result, Zurich is working to use additional data and tools to raise awareness among investment professionals and to support integration in investment strategies. Taking risks and opportunities into account can lead to over- and underweighting investments in relation to their benchmark. Zurich is testing the use of special benchmarks that incorporate a climate risk assessment; the application of such benchmarks will be evaluated for new and existing portfolios on a case-by-case basis.

Zurich is committed to helping finance the transition to a low carbon economy. In 2017, Zurich reached (and exceeded) its multi-year target of investing US\$2 billion in green bonds, as part of its impact investing initiative. This has helped Zurich target investments to transition to the low carbon economy, increasing exposure to investments with a strong ESG profile. For example, Zurich invested €150 million in green bonds in the Spanish multinational utility Iberdrola, enabling it to reduce CO₂ emissions by 55,000 tonnes per year.

Zurich has set ambitious targets totalling US\$5 billion for their entire portfolio of impact investments. This will be invested in impact investments across asset classes and around the world. Zurich will establish a measurement framework to track the impact of these investments, as the company seeks to avoid five million tonnes of CO₂ equivalent emissions annually and enhance the sustainability of five million people per year. Zurich has recently announced plans to divest equity holdings in companies that derive more than half their revenue from mining thermal coal, or utility companies that generate half their energy from coal. The policy will be implemented over the course of 2018, and it is hoped that this will lead the way for other organisations to follow suit with their investment strategies

Principle 5

Reduce the environmental impact of our business

The sub-principles

Supply chain: 5.1

Encourage our suppliers to improve the sustainability of their products and services.

Operations: 5.2

Measure and seek to reduce the environmental impact of the internal operations and physical assets under our control.

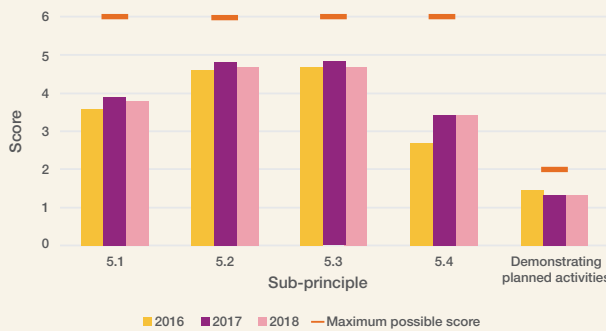
Direct emissions: 5.3

Disclose our direct emissions of greenhouse gases using a globally recognised standard.

Employee engagement: 5.4

Engage our employees on 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.

Group mean absolute score by sub-principle



Note: The 'Maximum possible score' markers in the graph above reflect the total marks available under each sub-principle.

While the direct environmental impact of members' businesses may be small compared with their indirect impacts via underwriting and investment activities, members are expected to demonstrate strong sustainable business practice. ClimateWise members have provided good examples of impact reduction activities, including estimates of emissions avoided. Members have also provided excellent disclosure of greenhouse gas emissions, including targets and performance trends; 50 per cent of members scored full marks for sub-principle 5.3. Members could improve their scores by disclosing further information on the sustainability criteria used for supplier assessments, and by developing comprehensive programmes for employee engagement with the implementation of engagement targets.

Key strengths and progress achieved

Despite the slight decrease in members' mean score for sub-principle 5.1, most members have integrated sustainability criteria into their supplier onboarding processes. For example, **RSA's** due diligence processes for contracts with a value over £500k include questions on human rights, modern slavery, environmental impacts, waste disposal, and health and safety. Members are also working in partnership with suppliers to improve the sustainability of their products and services.

XL Catlin works closely with its on-site catering team to ensure that food waste is minimised and packaging waste is recyclable. **If P&C** has a preference for products and services that are certified according to environmental criteria, for example the Nordic Swan Ecolabel, and is a member of the Buy Ecolabelled Network. **The Corporation of Lloyd's** has gone a step further, involving in-house suppliers to develop annual environment action plans.

Many ClimateWise members are working to measure and reduce the environmental impact of their internal operations and physical assets, through a range of initiatives. **Ecclesiastical** has specifically targeted emissions improvements to its fleet, and has worked with its fleet management supplier to provide and promote more efficient models. Fleet emissions have reduced to 104 g/km against its target of 120 g/km. **Tokio Marine Nichido Fire** implemented 29 major environmental reduction projects in 2017, including using recycled auto parts for vehicle repair. This is estimated to reduce carbon emissions by 23.1 kg for a bumper and 97.3 kg for a door. In addition, **Hiscox** continued to introduce local environmental initiatives, with its London site becoming a zero-waste-to-landfill location, meaning the overall UK recycling rate rose from 76 per cent in 2015 to 94 per cent in 2017.

Half of ClimateWise members scored the full six marks available for sub-principle 5.3, despite a slight decrease in mean score since 2017. **ABI** discloses its carbon emissions and also outlines how the downward trend from 2016 has continued, mainly driven by actively reducing international travel, reworking the IT system and staff initiatives. As well as disclosing emissions for the reporting year, members have set targets demonstrating increasing ambition to reduce emissions, including Aon, **Swiss Re** and **Allianz**. Members are also using several external

standards to help structure emissions reporting; for example, **If P&C** follows the Greenhouse Gas Protocol Corporate Standard.

ClimateWise members continue to engage employees on their commitment to address climate change throughout the year. **Swiss Re's** COyou2 Programme offers subsidies for a range of investments through which employees can reduce their private carbon footprints. In 2017, Swiss Re granted a total of 2,528 subsidies spread across three product categories: home appliances, home infrastructure and mobility. Many members also offer training for employees; for example, **Santam** includes two days of sustainability training as part of a four-week programme that runs annually for 30–50 managers, raising climate change awareness of both business and life impacts. **RSA's** Better Ways of Working campaign focuses on encouraging employees to embrace more digital and agile ways of working – changing how they think and go about work – and opportunities to reduce consumption, including adopting video conferencing technology.

Recommended areas for development

As mentioned above, many ClimateWise members have integrated sustainability criteria into their supplier onboarding process. However, members should disclose further information on the specific criteria used to assess the sustainability of suppliers, and who these criteria apply to, for example tier one or significant suppliers only. Furthermore, members have typically given one example of supplier collaboration. To improve, members should consider how they can engage with all key suppliers, for example by developing supplier action plans with targets and regular monitoring.

While many ClimateWise members have provided evidence of employee engagement, often these are standalone examples such as participation in Earth Hour. To improve, members should show how these activities are part of a comprehensive programme of engagement across the business, aligned to significant areas of impact. Members should also consider setting and disclosing engagement targets to measure the level of uptake.




Case study **Tokio Marine: engagement with employees and promotion of climate awareness-raising activities**

Tokio Marine Nichido Fire (TMNF) contributes to resolving climate issues through promoting 'all employee participative initiatives' to raise climate awareness amongst employees and society.

TMNF encourages all employees to participate in climate-related initiatives. By empowering corporate social responsibility key persons (CSRKP), those who have leadership roles for improving the understanding of the Group CSR Charter, TMNF works to help resolve climate issues while also enhancing corporate value. For employees to acquire the necessary skills and knowledge as well as to promote climate-related initiatives globally, TMNF provides various engagement and training opportunities. These are spread across a range of activities, for example corporate social responsibility (CSR) e-learning training for all employees to promote the philosophy behind the company's CSR activities. In addition to affirmation of the CSR Charter, the training includes topics such as confirmation of environmental impact reduction targets and the environmental management system (EMS). TMNF holds CSR Communication Meetings across domestic and international subsidiaries to encourage employees to exchange opinions, with the aim of deepening employees' understanding of CSR initiatives. TMNF also runs CSRKP conferences and seminars to discuss and share CSR strategies and initiatives, both with employees and with companies and organisations in need.

Once a year, the Group hosts the Marunouchi-Citizen Environment Forum, an event where they raise environmental awareness of Marunouchi (the location of the TMNF head offices) for employees and the general public. In 2017, Professor Norichika Kanie of Keio University gave a lecture about the UN SDGs entitled 'Think about NOW from a future viewpoint'. Additionally, each Group company has introduced an EMS to reduce the environmental impact of its business activities, and has encouraged its employees to reduce environmental footprints. TMNF not only promotes environmental footprint reduction activities for achieving a carbon neutral status every year, but also encourages its employees and customers to make climate-informed choices. TMNF encourages its employees to participate in COOL CHOICE, a national campaign that encourages 'smart choices' that contribute to countermeasures for mitigating and adapting to climate change. For example, COOL CHOICE encourages measures such as investing in energy-efficient facilities, purchasing environment-friendly products and services, and changing behaviours so as to align with the creation of a low carbon society.





Principle 6

Report and be accountable

The sub-principles

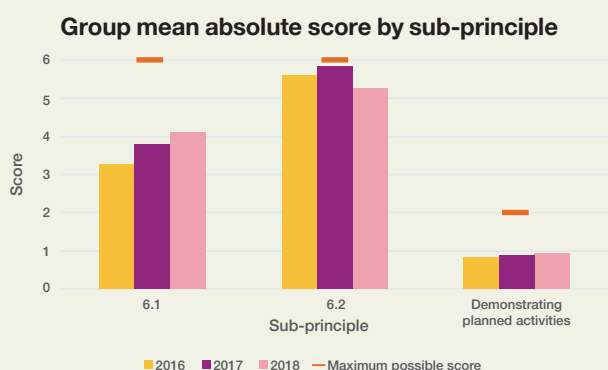
Strategy: 6.1

Ensure that the organisation is working to incorporate the Principles into business strategy and planning by encouraging the inclusion of the social and economic impacts of climate risk as part of the board agenda.

Transparency: 6.2

Publish a statement as part of our annual reporting detailing the actions that have been taken on these Principles.





Note: The 'Maximum possible score' markers in the graph above reflect the total marks available under each sub-principle.

Integrating climate risk into the overall organisational structure is important for the insurance industry. The release of the TCFD Recommendations in 2017 has brought greater attention to this area, and members have demonstrated that they are increasingly incorporating the recommendations into their business strategy and planning. The majority of members have a board-level sponsor or separate sub-committees to oversee sustainability and climate-related risks. Although scoring in sub-principle 6.1 has increased, there has been a decrease in sub-principle 6.2; several members have given themselves self-exemptions and not responded to certain sub-principles.

Key strengths and progress achieved

Following the release of the TCFD recommendations, board-level engagement with climate issues has increased. This is reflected in the improvement in the scoring of sub-principle 6.1, demonstrating that ClimateWise members have governance structures in place to address and incorporate climate change issues into decision-making at the board level. For example, **XL Catlin's** Governance Committee formed a Corporate Social Responsibility Sub-Committee in 2017. This sub-committee is designed to oversee possible climate risks and impacts on the company as well as participation in climate change-related disclosures. Overall, this function provides oversight to CSR policies and practice, and ensures participation in climate-change-related disclosures. **Aviva** has highlighted climate change as one of four key risk trends that is reviewed by its Board Risk Committee. Additionally, to implement the TCFD recommendations, Aviva will conduct climate-related scenario analysis that is consistent with the recommendations, and progress will be reported against the relevant board committees. **If P&C** has an Environmental Steering Group, which is currently chaired by the deputy CEO. The group meets biannually to discuss climate change trends, climate-related products, and overall environmental strategy and policy. **Prudential plc** has integrated climate change risks and opportunities into its Group Risk Framework, and climate change information is incorporated into its board-level strategy. The board regularly reviews climate change and CSR performance, and since 2016 the company has released an annual ESG report. **Tokio Marine Nichido Fire** holds CSR Board and CSR Key Performance Conferences twice a year. These bodies evaluate different CSR initiatives and potential CSR responses. Additionally, progress reports to corporate management on CSR strategy are given at least once a year.

The mean score for sub-principle 6.2 remains very high, despite a slight decline from last year. In total, only four members failed to score full marks in this category, demonstrating that members are committed to reporting transparently to implement the ClimateWise Principles.

Recommended areas for development

Where members have not scored well in Principle 6, it is often because they have not provided explicit evidence of engagement at the board level. Although participation in conferences and other events demonstrates an awareness of climate change risks, it is important for members to show how this is being incorporated to influence business strategy and planning. Members need to demonstrate evidence that they have a board-level sponsor and that the board regularly reviews climate-change-related risks. The Geneva Association report, *Climate change and the insurance industry*, found that 33 per cent of C-level executives consider climate change to be purely an environmental and sustainability issue, rather than a core business issue. To align with the TCFD recommendations, members need to demonstrate that climate risk is being incorporated into the core business strategy, rather than sidelined as a separate issue. Where performance has declined in sub-principle 6.2, it is largely because members have given limited information on how they are responding to a sub-principle, or given themselves self-exemptions and not responded to certain sub-principles as they deem them irrelevant. Moving forward, all members are encouraged to engage and disclose fully against each sub-principle.



Case study

Aviva: Board Risk Committee and Board Governance Committee

Aviva has established a Board Risk Committee and a Board Governance Committee to oversee the management of climate-related risks.

Overall responsibility for Aviva's corporate responsibility and therefore climate change response lies with Aviva's Group Chief Executive and the Aviva plc board. Climate change has again been highlighted as one of eight key risk trends and movements, and as an emerging risk in the 2017 Annual Report & Accounts. In 2017, the Board Risk Committee met eight times and reviews, manages and monitors the risks, ensuring it does not reduce Aviva's ability to write profitable business over the longer term. Aviva has established processes, using its embedded market and group emerging risks, to assess risks on their proximity and significance to Aviva. The Committee has incorporated emerging risk scenarios into Aviva's scenario planning, enabling a review of the most significant risks that would affect the company's strategy.

One of the responsibilities of Aviva's Board Governance Committee is to oversee the way Aviva meets its corporate and societal obligations. This includes setting the guidance, direction and policies for Aviva's customer and corporate responsibility agenda, and advising the board and management on this. This Committee met six times in

2017 and formally considered Aviva's strategic approach to climate change during the year. The Committee continues to ensure the board remains informed on the issue.

Aviva has developed a strategy to implement the TCFD recommendations, including conducting a climate-related scenario analysis that is consistent with the recommendations. It is expected that the scenario analysis will promote the embedding of ESG factors into all internal decision-making and business processes, ensuring that climate risks and opportunities are more clearly identified, which in turn will help to ensure appropriate action is taken to manage them. To follow this up, this year Aviva will be working to identify appropriate climate-related scenarios, assess these scenarios and develop reporting formats for the results of the scenario analysis. Aviva will continue to partner with industry associations, sector peers, academics, professional bodies, external consultancies and regulators, and international agencies to ensure consistency in scenarios and analysis. Aviva hopes to report on the progress against scenarios in the first disclosure next year.



Appendices

Appendix 2: Scoring methodology

Each sub-principle has three levels of evidence against which members are scored as follows:

Six points	All three levels of evidence are provided
Five points	All three levels of evidence are partially provided
Four points	Two levels of evidence are provided
Three points	Two levels of evidence are partially provided
Two points	One level of evidence is provided
One point	One level of evidence is partially provided
Zero points	No evidence is provided

An additional two points are available against each Principle for demonstrating planned activities. This is intended to encourage members to provide evidence of proposed activities and initiatives to drive improvements against each Principle.

Member scores are also weighted based on their organisation type to reflect the need for prioritisation of efforts on the most material areas.

Members are also exempt from responding to certain sub-principles based on their organisation type. These exemptions are summarised below:

A Professional bodies and associations	1.3, 3.1, 3.2, 3.3, 4.1, 4.2
B Insurers	None
C Brokers	4.1, 4.2
D Risk modellers	1.3, 1.4, 3.3, 4.1, 4.2
E Loss adjusters	4.1, 4.2
F Reinsurers	3.2, 3.3

Members can also exempt themselves from up to a further four sub-principles, providing a justifiable explanation is provided.

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 six Principles and highlighting areas where further clarification could be provided.

3. Discussions 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 scores

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 a 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.

Appendix 3: Member ranking

Member	2018 score	2017 score
Member A	89%	91%
Member B	78%	71%
Member C	78%	74%
Member D	78%	77%
Member E	77%	64%
Member F	77%	61%
Member G	76%	83%
Member H	74%	69%
Member I	73%	75%
Member J	65%	59%
Member K	64%	61%
Member L	62%	59%
Member M	57%	39%
Member N	49%	-
Member O	34%	-
Member P	28%	35%

Appendix 4: Compliance breakdown

		Score available:								Exemption	
		0	1	2	3	4	5	6	Self	Fixed	
1. Lead in risk analysis											
1.1	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.	1	1	0	0	1	6	7	0	0	
1.2	Support national and regional forecasting of future weather and catastrophe patterns affected by changes in the earth's climate.	1	1	0	0	3	8	2	1	0	
1.3	Use research and improve data quality to inform levels of pricing, capital and reserves to match changing risks.	0	1	0	5	1	5	3	0	1	
1.4	Evaluate the risks associated with new technologies for tackling climate change so that new insurance products can be considered in parallel with technological developments.	1	0	1	5	3	3	2	1	0	
<i>Demonstrating planned activities</i>		2	8	6					0	0	
2. Inform public policy making											
2.1	Work with policy makers nationally and internationally to help them develop and maintain an economy that is resilient to climate risk. This should include supporting the implementation of emissions reductions targets and where applicable supporting Government action that seeks to enhance the resilience and reduce the environmental impact of infrastructure and communities.	0	0	0	0	1	8	6	1	0	
2.2	Promote and actively engage in public debate on climate change and the need for action.	0	0	1	3	0	8	4	0	0	
<i>Demonstrating planned activities</i>		4	8	4					0	0	
3. Support climate awareness among our customers											
3.1	Inform our customers of climate risk and provide support and tools so that they can assess their own levels of risk.	0	1	0	2	2	6	4	0	1	
3.2	Encourage our customers to adapt to climate change and reduce their greenhouse gas emissions through insurance products and services.	1	2	0	10	9	1	0	0	2	
3.3	Seek to increase the proportion of non-life claims that are settled in a sustainable manner.	0	2	2	5	2	2	0	2	2	
3.4	Through our products and services assist markets with low insurance penetration to understand and respond to climate change.	1	1	0	1	3	7	2	1	0	
<i>Demonstrating planned activities</i>		5	9	2					0	0	

Appendix 4: Compliance breakdown *continued*

		Score available:								Exemption	
		0	1	2	3	4	5	6	Self	Fixed	
4. Incorporate climate change into our investment strategies											
4.1	Evaluate the implications of climate change for investment performance and shareholder value.	1	0	0	3	2	6	1	0	3	
4.2	Incorporate the material outcomes of climate risk evaluations into investment decision-making.	2	1	1	0	2	4	3	0	3	
4.3	Communicate our investment beliefs and strategy on climate change to clients and beneficiaries.	2	2	2	4	3	3	0	0	0	
<i>Demonstrating planned activities</i>		2	12	2					0	0	
5. Reduce the environmental impact of our business											
5.1	Encourage our suppliers to improve the sustainability of their products and services.	2	1	1	3	0	6	3	0	0	
5.2	Measure and seek to reduce the environmental impact of the internal operations and physical assets under our control.	1	0	0	3	0	6	6	0	0	
5.3	Disclose our direct emissions of greenhouse gases using a globally recognised standard.	0	1	1	2	2	2	8	0	0	
5.4	Engage our employees on 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.	1	2	2	3	1	6	1	0	0	
<i>Demonstrating planned activities</i>		1	9	6					0	0	
6. Report and be accountable											
6.1	Ensure that the organisation is working to incorporate the Principles into business strategy and planning by encouraging the inclusion of the social and economic impacts of climate risk as part of the Board agenda.	1	0	2	2	1	8	2	0	0	
6.2	Publish a statement as part of our annual reporting detailing the actions that have been taken on these Principles.	0	0	1	1	2	0	12	0	0	
<i>Demonstrating planned activities</i>		5	7	4					0	0	

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