



The ClimateWise Principles Independent Review 2020

Defining paths for resilience

ClimateWise

Established in 2007, ClimateWise is a growing global network of 33 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's (CISL's) Centre for Sustainable Finance, which brings business, government and academia together to identify solutions to critical sustainability challenges.

Members are required to submit a report annually which summarises their actions taken against the ClimateWise 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 Centre for Sustainable Finance

Through a unique combination of deep industry collaboration, high-calibre research, and exceptional education programmes, the Centre for Sustainable Finance helps financial institutions to play a leading role in building a more sustainable economy. This is achieved by convening groups of leading firms across banking, insurance and investment, to develop tools that address industry barriers and knowledge gaps, setting ambitious examples of best practice for wider finance industry and equipping financial institutions to understand and improve their sustainability impact.

The University of Cambridge Institute for Sustainability Leadership

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

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Copies

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February 2021

The ClimateWise community

Addressing the global climate-risk protection gap for over a decade

A growing global network of leading insurance organisations

The ClimateWise community promotes a system-wide response to climate change, comprising a unique spectrum of over 30 leading global organisations from across the industry value chain. This includes professional bodies and associations, insurers, brokers, risk modellers, reinsurers and the Corporation of Lloyd's. This system-wide approach continues to attract new members, with the community growing by 25 per cent with seven new members in 2020. Through their signature of the ClimateWise Principles, established in 2007, members are demonstrating their commitment to global sector leadership. Members have demonstrated their commitment by integrating climate considerations into business decision-making and improving the insurance sector's resilience, and that of society to climate change.

This year members have continued to work both individually and collaboratively in leadership groups on climate action. ClimateWise provides a co-ordinated response to industry leadership and cutting-edge research and analysis. These are critical enablers that support the insurance industry enabling to play its part in the climate change solution.

Developing toolsets on climate risk for insurers of the future

The ClimateWise Insurance Advisory Council is comprised of C-suite executives from across ClimateWise's membership base. Under their leadership, the initiative continues to provide and develop innovative tools and research to drive the contribution to a climate-resilient transition.

In 2021 ClimateWise will launch a number of projects and publications currently underway and in development. There are extensions of Council-led Transition Risk and Physical Risk Frameworks and Managing Committee-led work on policy engagement and scenario analysis for underwriting.

ClimateWise Principles reporting in 2021 will continue to provide insights and benchmarks for members and the industry. Additional projects are underway on product innovation with Deloitte and insurance policy and regulation for COP26 led by the CISL Fellow Ana Gonzalez. ClimateWise is also looking to create practices, tools and knowledge to enable its members and the industry to commit to net zero underwriting.

“

Through our dual role as institutional investors and risk managers, the Insurance and Long-term Savings industry is uniquely placed to shape society's response to climate change, which is why the ABI remains proud of our longstanding membership of ClimateWise. A 10 per cent year-on-year increase in the sector's performance against the ClimateWise Principles will make a significant impact across the economy, especially as these principles align to the TCFD requirements. However, it is also clear from these findings that further progress is needed – and this will require a sustained effort across the sector. The ABI is committed to continuing to work with ClimateWise to drive collective action to both reduce the level of carbon emissions and make society more resilient to the threat of a changing climate.

”

Huw Evans, Director General, Association of British Insurers (ABI)

ClimateWise members 2020



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CLARENCE HOUSE

Over the past year we have witnessed an unprecedented test of the resilience of our global systems due to the Covid-19 pandemic. We have also witnessed an increasing number of floods, hurricanes and bushfires linked to global warming. The challenges we face across global health, the destruction of Nature and the climate crisis cannot be viewed in isolation. Ambitious, practical action is required at pace to transition business sectors and markets into a sustainable economy.

As I have tried to indicate for many years, the insurance industry has a key role to play through its understanding of physical and transition risks: as a significant asset owner; through its innovative underwriting; and through engagement with its clients across the global community. To mark 2021, as part of my Sustainable Markets Initiative, I launched the Terra Carta to provide a roadmap to 2030 in the pursuit of an ambitious and sustainable future; one that will harness the power of Nature, combined with the transformative power, innovation and resources of the private sector.

For what it is worth, from the point of view of the impact of the climate and biodiversity crises, I cannot help feeling that as understanding of climate risk improves, the insurance industry will try to increase its own resilience to those risks through new restrictions and coverage, as has happened in other previous insurance crises. Therefore, if I may say so, to move forward amongst many issues we face, three things are critical:

Firstly, a vital part of this group's mission and work streams is to innovate products that address climate change

Secondly, the insurance sector needs to insist on better construction methods with inbuilt resilience to natural catastrophes

Thirdly, there is an urgent need to have well organized and rapid post event responses.

A key metric in this will be a measurable and demonstrable reduction in the climate coverage gap. Those countries in regions in the firing line need the active assistance of this industry. Helpfully, while this reality represents a serious challenge, it must also be seen as a serious business opportunity, if handled in the right way.

When I launched the ClimateWise Principles in 2007, I was keen to encourage the insurance industry to take a more strategic and comprehensive view by evaluating the way every aspect of their business interacts with the natural world and the global economy – and to make transparent climate-related disclosures.

Fourteen years later, it is of course very pleasing to see a strong increase in the average ClimateWise Principles score over the past year, reflecting the action being taken across the industry. But I fear that progress is far too slow and must be expedited to ensure that our economy is in harmony with Nature's own economy. Without this, the accumulating cost to our lives and prosperity will be too great to bear.

We have seen clear industry leaders emerge (as evidenced by a few very high Principles scores) and it is imperative that they share their experience with the wider industry, which is why ClimateWise and other initiatives are so important. In addition, having seen engagement on the transition to net zero from the asset side of the business, we now need to see a move to net zero ambitions on the underwriting side, so that insurance companies can take action and drive change with their clients across the economy.

At this historic tipping point, with the lives and livelihoods of present and future generations in mind, building resilience in the economy and its transition requires the full endeavour of the insurance industry. I can only congratulate the ClimateWise members on the actions they have taken thus far and look forward to a further acceleration in their activity to address the increasingly urgent need for action.

A handwritten signature in black ink, appearing to read "Charles", followed by a long, horizontal, slightly wavy underline.

Chair's foreword



In 2020 we saw the global consequences for people and businesses of COVID-19, vividly reminding us of the interconnected nature of global risks. Obvious parallels with climate change emerged as we witnessed – and indeed continue to see – the stark imperative for unified action and resilience.

Both global systemic risks have clear parallels and provide us all with a clear warning around the cost of inaction. In the year which also became the joint warmest on record and in which we saw atmospheric carbon dioxide levels hit an all-time high, we have experienced first-hand that resilience is more critical and pressing than ever for the security of our society.

The first step in building resilience in the face of a changing climate is developing an enhanced understanding of the potential consequences we face. At Aon we have seen increasing interest in the need to understand and manage systemic risks this year, and the value of learning from peers. This is one of our most valued aspects of ClimateWise membership – the opportunity to learn from each other and tackle shared challenges together. This community building ethos defines our approach for ClimateWise Principles reporting with diverse members across the insurance industry value chain – and at different stages in their disclosure journeys.

Two years ago, the ClimateWise membership took the decision to align the Principles to the Taskforce on Climate-related Financial Disclosure (TCFD) recommendations, whilst retaining our ambition to lead in informing public policy and raising awareness of climate change among customers and clients. Mandatory TCFD disclosure is coming and our members are building on their decade of experience of voluntary disclosures under ClimateWise. I am delighted to see our average score increase by ten per cent this year, reflecting both the ambition of our growing membership and wider changes in the disclosure landscape. Yet we know the path is long and progress must rapidly be made.

2021 and the rescheduled COP26 will be a pivotal year for climate negotiations. The insurance industry and ClimateWise members are, as ever, ready to play their part.

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

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

Executive summary

The COVID-19 pandemic has reinforced the urgency of addressing global, systemic threats whilst underlining the role of insurers and the financial sector in supporting a resilient, sustainable economy. Despite economy-wide lockdowns, 2020 has been a year of record greenhouse gas emissions and the urgency of action on climate change has only increased.¹ In recognition of the climate crisis, the number of businesses committing to a net zero carbon footprint has doubled in less than a year.²

The insurance industry plays a critical role in the net zero journey, by providing specialist risk pooling, transfer and capacity to the wider financial system and society, and as large capital-holders and long-term investors in the low carbon transition. The ClimateWise membership brings together over 30 organisations globally across the industry value chain. Through this diverse network, the initiative provides a collaborative approach to leading the sector in strengthening societal resilience to climate change.

In 2020, increasing expectations were set by regulators globally on insurance firms' identification, management and resilience to climate-related risks (ClimateWise Principles 2 and 3). Whilst members are taking a lead on integrating climate into risk management frameworks and practices, the work of the International Association of Insurance Supervisors (IAIS) on the industry supervision of climate-related risks³ is serving to standardise approaches.

Alongside expanding regulatory stress tests, such developments are driving the industry to examine exposures and seize opportunities to be part of the solution. With many members having reported against the Principles for over a decade, the ClimateWise community is well prepared for these regulatory developments. Both the 26th United Nations (UN) Climate Change Conference of Parties (COP 26) and the Bank of England's Private Finance Agenda are calling for more urgent collaboration between governments, regulators, firms and civil society. This is recognised as crucial to achieving the global goals set by the Paris Agreement. The Private Finance Agenda highlights the creation of new products through the Insurance Development Forum (IDF) as key to reducing the insurance climate protection gap. The insurance sector has the ability to promote resilience by working closely with governments.

Such partnerships are likely to promote coverage and affordability, boost national recovery capabilities and increase revenue to the sector. The rising commercial and social challenges to the insurance industry demonstrate the need for public-private partnerships. ClimateWise's new member, **Flood Re**, is a leading example of how this can work effectively in practice.

Members of ClimateWise have been reporting against the ClimateWise Principles for 14 years and now set an industry-standard framework for meeting the expectations of the Task Force on Climate-related Financial Disclosures (TCFD). This has been whilst setting leading ambitions on wider public policy engagement, action on climate change and building societal resilience across the industry value chain. The benefits are already evident through the ClimateWise community's advanced progress in reporting compared with findings of the 2020 TCFD *Status Report*. In 2020, the annual member reporting against the ClimateWise Principles has seen a significant increase in the average group score, from 55 per cent in 2019 to 65 per cent this year. This progress is particularly noteworthy as the initiative welcomed seven new members in 2020, giving a 25 per cent boost to the membership base. The majority of these new members reported against the Principles this year for the first time. The increase in group scores in 2020 has been predominantly driven by members demonstrating significant progress in the incorporation of climate change considerations into investment and underwriting strategies, high participation by members in climate stress tests and improvements made in the integration of climate risk into existing risk management frameworks.

ClimateWise members are playing an active role in shaping the international climate policy and regulatory landscape. Through proactively sharing climate risk data, modelling, tools and research, members are contributing to the development of wider sector capabilities. This in turn is building financial stability and strategic resilience to climate change. Members are leading in the development of methodologies for climate scenario analysis and strategic response, through investment and underwriting. Harnessing the power of collaboration and a system-wide response, members are taking a leadership position, advocating for collective climate commitments.

Whilst progress amongst the membership has been significant, there is still a need for urgent action across the industry. The main focus for members this year will be on deepening the exploration and transparency of strategic resilience to climate change. This will most notably be through expanded adoption and depth of scenario analysis, demonstrating the outcomes and implications on resilience and the resultant impact on decision-making.

Regulation and supervision target financial stability against climate risk

Insurers are uniquely positioned to manage and mitigate the potentially catastrophic effects of climate change on the economy and society, given their position as large investors and their expertise in risk pooling and risk management.⁴

Because of this, global regulators are increasingly setting expectations on the identification and management of climate-related risks and the exploration of strategic resilience. Whilst many insurers are already taking a lead on integrating climate into risk frameworks and practices, these developments are serving to standardise approaches. This is forcing the wider sector to examine exposures and clarify the opportunities for insurers to be part of the solution.

International progress is still insufficient to close the gap between current atmospheric CO₂ levels and global goals set by the Paris Agreement. This is despite promising new climate commitments from China, the US and other nations. This gap in achieving climate goals contrasts with growing recognition of climate change as a key risk and the continuing rise in global insured catastrophe losses. The CRO Forum's *Major Trends and Emerging Risk Radar 2020 Update*⁵ identified extreme weather, climate tipping points and transition risk as high-impact risks for the insurance sector over a five-year outlook. Complementing this, the World Economic Forum (WEF) ranked climate action failure as the primary risk in terms of impact in the *2020 Global Risks Report*.⁶ To build systemic resilience, financial regulators across the UK, Europe, Singapore, the US, South Africa, Australia and Japan are already exploring and mandating climate risk assessments in periodic stress tests over 2020-21.

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ClimateWise is an important initiative, assisting the insurance industry in its critical role to build societal resilience.

Insurers have unique insights into the risks that the world is facing and the ClimateWise Principles provide guidance to share this knowledge more broadly; so informing public policy and supporting the identification, understanding and management of climate risk.

Through decisive action, insurance companies can facilitate the transition a low-carbon economy that is resilient to a changing climate, while reducing the climate risk protection gap.

”

Anna Sweeney

Chair, United Nations Sustainable Insurance Forum
Executive Director, Insurance, Bank of England

Regional trends in the regulatory landscape

International co-ordination on regulatory climate risk practices



The **Network for Greening the Financial System (NGFS)** published on scenario analysis, supervision practices as well as a status report on financial institutions practices regarding climate-related financial risks



The **International Association of Insurance Supervisors' (IAIS)** recent consultation on supervision of climate-related risks in the insurance sector provides guidance on how supervisors could integrate climate-related risks into their supervisory work internationally



The **New York State Department of Financial Services (NYDFS)** is the first US state banking regulator to set forth climate-related expectations, calling on insurers to integrate climate-related financial risks into their governance and business strategies

The **National Association of Insurance Commissioners (NAIC)** in the US has established a new Executive Committee-level "Climate Change and Resiliency Task Force" that will be active from 2021

N. America

S. Africa



In South Africa, the **Treasury's 2020 Technical Paper** recommended that regulators should develop a benchmark climate risk scenario for use in the stress tests for the financial sector

Europe



The **European Insurance and Occupational Pensions Authority (EIOPA)** consulted on its methodological principles of insurance stress testing and climate change risk scenarios in the Solvency II Own Risk and Solvency Assessment (ORSA). The next EIOPA-led EU-wide insurance stress test will take place in 2021



The Bank of England's **Prudential Regulation Authority (PRA)** has given insurers until the end of 2021 to embed an approach to managing climate-related financial risks under SS3/19

The UK's **Climate Financial Risk Forum's (CFRF)**, leading industry approaches to embedding climate-related financial risk into firms' governance and risk management processes have been shared

Through the **Bank of England's** Climate Biennial Exploratory Scenario (CBES), firms will need to evaluate vulnerabilities under each of three illustrative scenarios



The **Autorité de Contrôle Prudentiel et de Résolution (ACPR)** launched a pilot climate-related stress testing exercise in May 2020, with results due to be published in April 2021



The **Dutch National Bank (DNB)** released a report exploring biodiversity risks for the Dutch financial sector

Asia Pacific



The **Monetary Authority of Singapore** consulted on its *Proposed Guidelines on Environmental Risk Management*, seeking the integration of climate into firms' risk appetites, strategies, business plans, risk management and disclosures



The **Australian Prudential Regulation Authority (APRA)** has informed all regulated entities that it will be undertaking deeper assessments of the financial industry's vulnerabilities to climate change in an effort to improve resilience



The **TCFD Consortium of Japan** released its *TCFD Guidance 2.0*, including guidance for life and non-life insurance sectors



Financial regulators across the globe expect insurers to integrate climate change into risk management

Over the last year, there has been a strong regulatory focus on integrating financial risks from climate change into insurers' governance and risk management. Regulators and insurance firms are learning collectively. This has been demonstrated by the ClimateWise members' active participation in collaborative working groups and engagement in industry consultations.

In the UK, the Bank of England's Prudential Regulation Authority (PRA) has given insurers until the end of 2021⁷ to embed their management approach of climate-related financial risks established under Supervisory Statement 3/19.⁸ The Bank of England was the first financial regulator across the globe to publish supervisory expectations that set out how banks and insurance companies should develop an enhanced approach to managing the financial risks from climate change. The PRA identified risk metrics and quantification as the most challenging aspect of assessing these risks, while recognising the ongoing issues around data quality and tools.⁷ Cognisant of these challenges, the PRA is working closely with firms. At a minimum, it expects insurers to have taken steps to ensure they have sufficient capital to cover climate-related risks in their Solvency Capital Requirements (SCR).⁷ The UK HM Treasury is in the process of reviewing the UK's Solvency II regime and updating requirements to be consistent with the government's climate change objectives.⁹

Following collaboration amongst domestic financial regulators and industry through the Climate Financial Risk Forum (CFRF), leading industry approaches have been shared on embedding these risks into firms' governance and risk management processes.¹⁰ This includes recommendations developed as part of a wider guide published on climate-related financial risks. This guide was developed jointly by leading representatives across the banking, insurance and asset management industries, with 80 per cent of the insurance participants from constituent ClimateWise members¹⁰ (**Aviva, Lloyds of London, RSA Insurance Group, Zurich**). **The Association of British Insurers (ABI)** is an observer member of the Forum and worked with CFRF to incorporate the views of other (including smaller) insurance members in developing the guide. The guide recognises the key role played by stress testing and scenario analysis in risk management (two of the four working groups set up by CFRF were dedicated to these areas). The ClimateWise Managing Committee established the ClimateWise Policy Engagement Task Group to advance the membership's understanding of the international policy landscape and in 2021 will be publishing a paper identify access points and possibilities for engagement both with policy makers and with the wider financial sector.

In Asia, the Monetary Authority of Singapore (MAS) consulted on its *Proposed Guidelines on Environmental Risk Management*.¹¹ This sets out expectations that insurers incorporate environmental considerations, including climate, into their risk appetites, strategies, business plans, risk management and disclosures.

The New York State Department of Financial Services (NYDFS) was the first US regulator to set forth climate-related expectations in 2020. NYDFS issued a circular letter¹² calling on insurers to integrate climate-related financial risks into their governance frameworks, risk management processes and business strategies. The National Association of Insurance Commissioners (NAIC) is also mobilising, having established a Climate Change and Resiliency Task Force that will be active from 2021.¹³ The Task Force has an array of workstreams to develop the NAIC's overall approach to policy and recommendations, including insurer financial disclosures (in line with TCFD guidelines).

At a global level, international best practice is evolving through the work of the International Association of Insurance Supervisors (IAIS). The IAIS's consultation on supervision of climate-related risks³ provides guidance on how supervisors could integrate climate-related risks into their supervisory work. The IAIS outlines best practice in the areas of corporate governance, risk management, Enterprise Risk Management (ERM), investments and disclosures in the context of climate change. Once finalised, the IAIS's Application Paper will provide supervisors with additional tools to assess climate risk across these areas. In addition, the paper will promote a globally consistent approach to addressing climate-related risks in the supervision of the insurance sector. This will complement the Network for Greening the Financial System's (NGFS) international guide to scenario analysis,¹⁴ which provides a practical methodology for international regulators and the sector's first globally harmonised set of climate scenarios. The work of the NGFS and IAIS in providing robust feedback on regulatory climate risk models and comparisons in approaches is anticipated to drive further standardisation in supervisory methodologies going forward. This standardisation is critical to support the regulatory pursuit of macroeconomic stability.

Climate stress tests drive exploration of firm and wider systemic vulnerabilities

Regulators consider stress testing a key financial stability tool in the regulation of financial services firms' risk management capabilities. This is consistent across multiple global jurisdictions, demonstrating the growing international focus on climate change as a systemic risk to financial stability. The COP26 Private Finance Agenda supports this, stating: "Climate change is however increasingly becoming a more immediate macroeconomic issue as physical risks, such as from extreme weather, and transition risks, as seen from so-called 'stranded

assets' in fossil fuel extraction and utilisation, crystallise causing disruption to economic activity and losses for the financial sector".¹⁵ Several regulators have recently announced or implemented industry-wide climate stress tests alongside developing analytical approaches to climate scenario analysis.

In France, for example, the Autorité de Contrôle Prudentiel et de Résolution (ACPR) launched a pilot climate-related stress testing exercise in May 2020, with results due to be published in April 2021.¹⁶ The ACPR will then complete methodological work to identify the key lessons learnt.

Despite a delay due to COVID-19, the Bank of England's Climate Biennial Exploratory Scenario (CBES) will be run in 2021.¹⁷ Through the CBES, firms will evaluate the vulnerabilities of their most significant individual counterparties as well as their own exposures under each of three illustrative scenarios.¹⁸ This will build on the 2019 climate insurance stress test,¹⁹ the first joint exercise with the Bermuda Monetary Authority (BMA) for natural catastrophe scenarios, and the feedback the PRA received from insurers. For firms not taking part in the 2021 CBES, the granularity of the scenarios and assumptions serve as helpful reference points in the further build of bottom-up approaches to climate stress testing.

The European Insurance and Occupational Pensions Authority (EIOPA) consulted on its methodological principles of insurance stress testing in 2020.²⁰ As a follow-up on its Opinion on Sustainability within Solvency II,²¹ EIOPA consulted on the supervision and use of climate change risk scenarios in the Solvency II Own Risk and Solvency Assessment (ORSA). As these are finalised in 2021, they will provide European supervisors with a toolbox to inform the future supervisory stress tests and also clarify how firms can develop their own internal stress testing capabilities. EIOPA's work on climate stress testing is also likely to inform its next EU-wide insurance stress test. This will take place in 2021 and have an important bearing on its work for the Solvency II review.

In Singapore, the Monetary Authority of Singapore (MAS) intends to broaden the inclusion of climate-related risks in its thematic scenarios as part of a future industry-wide stress test.²² Meanwhile, the Australian Prudential

Regulation Authority (APRA) plans to undertake a climate 'vulnerability assessment' for the largest deposit-taking institutions in 2021, with other industries to follow.²³

The APRA has informed all regulated entities of deeper assessments of the financial industry's climate change vulnerabilities in order to improve resilience. The assessment will be executed in 2021, starting with banks and followed by other industries, such as insurance and pension funds. Further, it also plans to develop industry guidance to provide better clarity on regulatory expectations in relation to climate-related financial risks. **QBE** has engaged with the APRA and the Climate Measurement Standards Initiative (CMSI) to establish a common set of guidelines to support the financial sector. The initiative is focused on measuring the impact of climate change on domestic assets²⁴ and building resilience for vulnerable Australian communities. QBE, alongside leading financial services firms and scientific experts, is working to more consistently assess climate-related risks to building and infrastructure assets, an area of rising losses from secondary perils. **Aon** reveals that "Eight of the last 10 years have seen higher economic losses from secondary perils than primary perils" – with secondary perils, such as the Australian wildfires, accounting for 60 per cent of 2020's losses.²⁵

In South Africa, the Treasury's 2020 *Technical Paper* aims to establish minimum practice and standards with regard to climate change and emerging environmental and social risks. The paper called for benchmark climate risk scenarios for use in stress testing the financial sector.²⁶

As firms use insights from regulatory stress tests to inform strategy development, insurers will need to consider their role in the context of the broadening climate risk protection gap.¹ This is necessary to avoid any unintended consequences linked to affordability and accessibility. These rising commercial and social challenges will serve to increase the criticality of public-private partnerships to the sector's role in the solution going forward. ClimateWise's new member, **Flood Re**, is a leading example of how this can work effectively in practice.



Developments to mandate TCFD up the ante for demands on disclosures

2020 has been a year of progress as governments, regulators and industry initiatives have responded to previous calls to “make TCFD disclosure mandatory”.¹⁵ The UK²⁷ and New Zealand²⁸ have already responded, announcing plans to mandate climate-related financial disclosures for the insurance sector by 2022 and 2023, respectively. Industry frameworks are also coalescing. 2020 was the first year of mandatory TCFD-based reporting for investment signatories to the Principles for Responsible Investment (PRI), 13 of which are ClimateWise members.

Despite progress, industry implementation of TCFD requires continued acceleration. The 2020 IAIS *Issues Paper* assessed that only around 15-20 per cent of insurers have made plans to, or are already taking steps to, implement the TCFD recommendations and to deliver TCFD-aligned disclosures.²⁹ The 2020 TCFD *Status Report* suggests that insurers are generally slightly ahead of the wider financial services industry in effective risk management disclosures including the integration of climate risk within overall risk management.³⁰ ClimateWise members have laid strong foundations by reporting against the Principles for over a decade, and leading participation with global regulatory working groups to improve industry-wide risk management capabilities. As a result, the ClimateWise community is on the front foot in responding to regulatory developments including upcoming TCFD reporting preparation, having already reported against the TCFD-aligned Principles for two years.

ClimateWise members particularly outperform the wider industry in the evaluation of climate-related risks and opportunities for business performance and investments. Over two-thirds of members analysed the impact of climate change on their business, strategy and financial planning. This compares with only 21 per cent of industry, according to the 2020 TCFD *Status Report*. Through reporting against the Principles for a number of years, members have established a strong base for climate risk identification and assessment. The majority of members this year have demonstrated comprehensive integration of climate into existing risk management procedures, including ORSA processes, to inform strategy and support adaptation. When compared with broader industry, the TCFD *Status Report*³⁰ shows that only 26 per cent of industry disclosures in climate risk integration have met the TCFD recommendations for effective disclosure. Developing risk metrics and quantification practices poses barriers to further climate risk integration, which should form key areas of focus for the industry next year. ClimateWise members continue to play an active role in the evolution of industry-specific TCFD guidance. **Tokio Marine & Nichido Fire Insurance Co** sit on the Japanese TCFD Consortium Steering Committee, which published the *TCFD Guidance 2.0* in 2020, including guidance for both life and non-life insurance sectors.³¹

Despite progress being made, insurers' risk management practices need to continue to evolve and expand

Regulators, policymakers and civil society are widening the scope of their focus on environmental risks to prepare for biodiversity and land degradation. This comes following estimations from the World Economic Forum (WEF) that \$44 trillion of economic value generation, more than 50 per cent of global gross domestic product (GDP), is moderately or highly dependent on nature.³² It also forms a critical component in global decarbonisation strategies according to a paper issued from the European Forest Institute (EFI) on Climate-Smart Forestry (CSF).³³

Recognising the systemic risks natural capital loss poses, insurance supervisors from the Sustainable Insurance Forum (SIF) released plans to undertake a scoping study³⁴ on the financial risks of biodiversity loss. They will analyse how insurance supervisors and firms are responding to these risks. Regulators have also begun to explore national exposures to natural capital risks. The Dutch National Bank (DNB) released a report in 2020 exploring biodiversity risks for the Dutch financial sector.³⁵ This report estimates that 36 per cent of all investments from Dutch financial institutions would be lost if the ecosystem services underpinning the Dutch economy were no longer available. The UK's HM Treasury established the Dasgupta Review in 2019 to assess the benefits of biodiversity and costs of losing it, with the final report ‘The Economics of Biodiversity’ published in February 2021.³⁶

Building on the successful foundations of reporting by the TCFD, in September 2020, the Task Force on Nature-related Financial Disclosures (TNFD) initiative was established. The initiative aims to launch the Task Force in 2021 and ultimately develop a reporting framework.³⁷ Firms must ready themselves for expanded disclosure expectations to cover broader interconnected risks from natural capital.

ClimateWise members are leading the industry's response. **AXA XL** recognised the biodiversity challenge as a natural extension of its climate efforts. In September 2020, AXA released a commitment to the new ‘Finance for biodiversity’ pledge. The pledge promotes financial-sector-wide collaboration and engagement on assessing biodiversity impact and promoting enhanced disclosure by 2024. In addition Swiss Re has developed a Biodiversity and Ecosystem Services (BES) Index to support the insurance industry in assessing and understanding the economic risks of deteriorating biodiversity and ecosystems within both underwriting and asset management.³⁸ Looking forward, lessons learnt through the exploration of climate resilience and in TCFD implementation will need to be quickly applied to a broadening and interconnected set of nature-related risks.

“

Willis Towers Watson has advocated for climate stress testing and disclosure since 2014 and promotes best practice developments via ClimateWise and the Climate Financial Risks Forum. By supporting the Willis Research Network academic partners, including The University of Cambridge, and our own teams we are developing advanced tools and techniques to assess and manage physical, transition and liability risks through our Climate Quantified platform.

Knowledge alone is not enough to bring impact. With our industry partners we have driven public and private sector collaboration via COP26 flagship initiatives including the Insurance Development Forum and the Coalition for Climate Resilient Investment and wider programmes such as The Thinking Ahead Institute of Asset Owners and Managers. With CISL's help, we believe that the financial sector can play its full part as stewards of the transition to Net Zero, climate resilient economies.

”

Rowan Douglas CBE, Head, Climate and Resilience Hub, Willis Towers Watson

Increased public-private partnerships will play a critical role in ensuring insurers remain part of the solution

Through exploration of strategic and systemic resilience partly gained through participation in regulatory climate stress tests, some members are exploring the criticality of partnerships with the public sector to reduce climate exposure and ensure continuity of existing product offerings. For example, **Willis Towers Watson's** Public and Private Sector Practice Group helps governments manage their physical risk exposure through risk transfer to the private sector.

For insurers, the priority is now on evaluating and disclosing the resulting strategic resilience to climate-related risks and opportunities. Considering implications on pricing and coverage, alongside examination of the climate risk protection gap, will help ensure that the sector remains part of the solution.



Scenario analysis driving strategic responses to climate change

Risk recognition, regulatory scrutiny and market competition are driving the exploration of strategic resilience to climate change.

Insured catastrophe losses observed in the first half of 2020 amounted to \$75 billion. This was up from \$57 billion in the first half of 2019.³⁹ Rising losses are reinforcing the need to build resilience to the downside risks of climate change. Regulators are already responding, with regulatory bodies across Europe and Asia Pacific having either already run, or announced plans to stress test insurers' climate resilience in 2020. ClimateWise members are working collaboratively with regulators to jointly build industry and regulatory capacity on climate risk. For example, **Aviva** chaired a working group that developed the Climate Financial Risk Forum's climate scenario assessment guide in conjunction with the UK PRA and Financial Conduct Authority (FCA). Similarly, **QBE** is a founding member of the Australian government's National Resilience Taskforce to develop a framework for financing adaptation and resilience to climate change.

Positive feedback loops are evident through industry collaboration with regulators. ClimateWise members **Aviva** and **Prudential** have used feedback from the PRA's 2019 climate insurance stress test to extend their own forecasts. One key finding recommended by the

PRA following the stress test was for climate-related work to be "uniformly embedded across firms", and for "intra-firm communication channels to be established".¹⁹ This is driving increased collaboration between actuarial, compliance and risk teams and across levels of seniority within firms.

Initial feedback from the PRA stress test reinforced the potential capital adequacy considerations linked to climate change. It indicated in a potential extreme physical climate change scenario, a one-in-100-year loss in the future may more than double today's one-in-1,000 year loss.¹ In order to assess the impact of this exponential rise in losses on the climate protection gap, EIOPA has piloted a dashboard. The innovative dashboard brings together data on economic and insured losses, vulnerabilities and exposure as well as insurance coverage across the EU.⁴⁰ ClimateWise members **Munich Re**, **Swiss Re** and **AXA XL**, played an active role in the dashboard validation. It is anticipated that the dashboard will support the identification of vulnerable regions and evidence-based decision-making to improve society's resilience against natural catastrophes.



Complementing these drivers of downside risk management are market incentives to establish a strategic advantage around new customer, investment and market opportunities. One of the priorities of the COP26 Private Finance Agenda is the “creation of new products and markets by building on the work of the IDF, the Coalition for Climate Resilient Investment (CCRI) and other key initiatives. These are in place to scale up resilient infrastructure spending and insurance coverage to close the insurance climate protection gap”¹⁵ Insurers such as **Santam** are committed to closing this gap between economic and insured losses. This is a key element of their new FutureFit strategy which aims to focus on developing new markets. This includes innovative business solutions to address the rising risk protection gap (for example, through collaboration with the Partnership for Risk and Resilience (P4RR) and the provision of its Green Book Tool).

Members are already part of successful public-private partnerships that seek to build societal climate resilience and to enable transferring risks to the re/insurance market. Looking ahead, these will play an important role as businesses, governments and society seek more effective risk mitigation and adaptation financing strategies at scale. Such collaboration with the public sector will be a key way insurers will play their part in the solution.

Scenario analysis is a key tool to understand climate risk, inform business strategy and narrow the protection gap

Scenario analysis has emerged as a key process financial sector firms should undertake to understand the impacts of climate change. In October 2020, a draft paper from the IAIS referred to scenario analysis as a key method for:

- gathering information,
- integrating climate-related risks in internal control functions,
- considering climate-related risks in underwriting and investment risk assessment.

Through its data and experience in climate modelling and scenario analysis, the insurance sector has the ability to work with governments to close the protection gap and promote resilience.⁴¹ Such partnerships are likely to promote coverage and affordability, boost national recovery capabilities and increase revenue to the sector. A key macro-prudential objective of climate stress testing is to assess the implications for future insurability of risks and the potential protection gap for the real economy.⁴² Looking forward, building financial stability to climate-related systemic risks requires a more connected approach to climate stress testing – recognising insurers as risk carriers for wider financial markets. Recognising this challenge raised through its 2019 insurance stress test, this forms a key element of the UK PRA’s planned climate CBES in 2021 – providing a connected view across both insurance and banking sectors. This is

anticipated to surface new insights in the role of insurers in building climate resilience and providing risk protection to wider capital markets.

Despite progress, the uptake of scenario analysis and disclosure of the results across the insurance industry remains slow. The 2020 TCFD *Status Report* found that less than half of insurers disclosed short, medium and long-term climate risks and opportunities in their 2019 reports. Only eight per cent described the resilience of their business strategy under different climate-related scenarios.³⁰ This is consistent with the IAIS’s 2020 *Issues Paper* on the implementation of the TCFD which concluded that the world’s largest insurers are currently driving action, with the majority of smaller insurers not yet taking progressive next steps.²⁹

This relatively slow rate of uptake contrasts with the progress evident within the ClimateWise community, where three-quarters of members undertook climate scenario analysis or stress tests in 2020. Despite these developments, scenario analysis is still too rarely used to its full potential. The use of scenario analysis remains in its early stages for the majority of members. This is in line with the Bank for International Settlements’ 2019 review of climate risk assessment in the insurance sector. It found that “risk quantification techniques and models that explicitly cover climate risks are most advanced for physical risks but are still at an early stage for transition and liability risks even in the most developed jurisdictions”.⁴³ To this end, the ClimateWise Managing Committee established the ClimateWise Scenario Analysis Task Group. This member led initiative aims to develop member capacity and will be publishing a paper in 2021 demonstrating the impact of scenario analysis for evaluating climate-related physical risk.

Collaborative advances in scenario design, methodologies and tools to support progress

The UN’s 2019 Climate Action Summit and COP26 Private Finance Agenda¹⁵ called for urgent collaborative action from governments, firms and civil society to achieve net zero emissions by 2050. Scenario analysis is intrinsic in mitigating financial stability risks from climate change and the low carbon transition. To build systemic resilience, a robust and consistent climate change framework is required; one that ensures firms can allocate capital to manage risks and seize opportunities from the journey to net zero. Improvements are needed in the quality and comparability of scenario analysis and data through increased standardisation of tools and methodologies.

Regulators are already responding, issuing industry consultations and through feedback loops with firms, as climate supervision learnings are developed. For example, the UK PRA published learnings following the 2019 climate insurance stress test, the 2020 letter to CEOs¹⁹ and the upcoming wider CBES test.¹⁷ To enable standardisation, there is a need for global agreement on definitions and scenarios by regulators, as well as robust feedback on

climate risk models and approaches. The IAIS's *Draft Application Paper on the Supervision of Climate-Related Risks*³ and the NGFS-published guide¹⁴ to climate scenario analysis are anticipated to drive further standardisation in the supervision of climate risk.

International standard setters are leaning in, recognising the need for standardisation regarding climate risk factors within internal management and financial reporting. In 2020, the International Organization for Standardization (ISO) commenced the development of the first international standard on sustainable finance (ISO 32210),

expected in 2022,⁴⁴ whilst the International Financial Reporting Standards (IFRS) Foundation consulted on the development of global sustainability reporting standards under a new Sustainability Standards Board.⁴⁵ Meanwhile, professional bodies are establishing initiatives to develop industry thought leadership. This includes ensuring skill sets are developed across business functions for specialist and operational roles; the goal is to empower and build professional capacity for the next phase of climate integration.

The Network for Greening the Financial System's (NGFS) referenced scenarios support international standardisation of climate scenarios for financial institutions¹⁴

The NGFS reference scenarios are built on previous climate scenarios designed for policymakers and research, developed by organisations such as the International Energy Agency (IEA) and Intergovernmental Panel on Climate Change (IPCC). The NGFS scenarios provide more appropriate and comparable reference scenarios for financial institutions. They also provide a globally harmonised set of climate scenarios to the sector for the first time. The scenarios are already being adopted into international supervision. They will serve as the basis for the PRA's Climate Biennial Exploratory Scenario climate stress test, due to launch in June 2021 for participating insurers.

The scenarios, which model a range of physical and transition risks until 2100, are as follows:

Orderly: climate policies including the introduction of an emissions price, are introduced early and gradually

become more stringent. Physical and transition risks are both relatively low. This is consistent with limiting warming to below 2°C.

Disorderly: climate policies and an emissions price are not introduced until 2030. Emissions reduction needs to be sharper, resulting in higher transition risk. This is consistent with limiting warming to below 2°C.

Hot house world: only currently implemented policies are preserved. Emissions grow until 2080, leading to severe physical risks over the medium and long term. This leads to more than 3°C of warming.

In addition, the NGFS has produced five alternate scenarios to consider different carbon emissions pathways. It has also produced assumptions relating to the level of carbon dioxide removal (CDR) technology deployment and government policy responses.



The Institute and Faculty of Actuaries (IFoA), for example, launched the collaborative Climate Change Working Party.⁴⁶ They produced practical guides to managing climate change for actuaries in life insurance, general insurance and investment. The Global Association of Risk Professionals (GARP) launched the Sustainability and Climate Risk Certificate.⁴⁷ This contains climate scenario analysis within the specified curriculum and supports the build of climate competency amongst risk professionals. A Climate Change Special Interest Group⁴⁸ was launched in 2020 by the Institute of Risk Management (IRM). They support organisations to research, enhance and share climate change risk management best practices and solutions.

A common challenge faced by firms on climate-related issues is data quality and availability. Members play an active role in the development of high quality open-source data sets. For instance, through **AXA XL**, **Swiss Re**, **Willis Towers Watson** and **Munich Re**'s role on the Governing Board of the Global Earthquake Model (GEM), providing open earthquake risk data. Members are using third-party models and internal tools alongside other industries and platforms to integrate climate change parameters in investment and underwriting. As an example, the United Nations Environment Programme Finance Initiative's (UNEP FI) pilot⁴⁹ (which features 22 global insurers with almost half of these being ClimateWise members) explores different methodologies to implement TCFD disclosure recommendations. Contributing members are responsible for supporting the development of consistent and transparent analytical approaches that can be used by the wider industry. These approaches help to identify, assess and disclose climate change-related risks and opportunities in insurance portfolios.

One of the methodologies is a heat map of country exposures to different climate hazards (eg coastal flood, extreme heat or precipitation, water stress, etc). Insurers can integrate this within their own risk data to assess both physical and transitional risks. Such tools typically adopt bottom-up approaches and can assess both company and asset-level exposures. For example, **Aviva** has collaborated with the UNEP FI, Carbon Delta and others to develop an internal Climate Value-at-Risk (VAR) measure. This assesses potential business impacts of future climate-related risks and opportunities. Aviva plans to share continued developments with the wider sector.

Individual ClimateWise members are at the forefront of developing climate-related solutions to mitigate climate risk and seize opportunities. Both **Zurich** and **RSA** have developed a flood resilience tool. The tool allows customers to assess their localised level of risk where they live and to take appropriate measures to reduce the devastating impacts of floods, even before a flood hits, and build resilience to this hazard. In addition, the **Lloyd's Lab** supports various start-ups that seek to provide insurance solutions to climate-related challenges, such as Oasis, with an open-source catastrophe-modelling platform to enable robust pricing of risk from extreme events. Despite progress, the climate crisis drives the need for further provision of specialist risk understanding, pricing and a wider transfer of knowledge. Due to the vulnerable nature of emerging economies to climate change, there are calls to build capacity, providing open-source climate data and risk-modelling toolsets to help build their climate resilience.



Strategic market responses and collaborative commitments to climate change

Within the ClimateWise membership, scenario analysis has led to a greater emphasis on the climate implications on investment portfolios. Members are taking action on the Private Finance Agenda's call for urgent collaborative action. ClimateWise member **Allianz** chairs the Net-Zero Asset Owner Alliance (including six other ClimateWise members). Members of the initiative pledge to reduce the carbon emissions of its portfolios to net-zero by 2050 and achieve interim reductions of 16-29 per cent over the next five years. Leading members **Allianz**, **AXA XL**, **Swiss Re**, **Tokio Marine Holdings** and **Zurich** have committed to the adoption of novel standardised target setting methodologies for transitioning investment portfolios. These targets were released by the Science Based Targets initiative (SBTi), the framework for financial institutions.⁵⁰

Furthermore, the 2020 Insuring Our Future Insurance Scorecard revealed that at least 65 insurers had adopted some form of coal divestment policies.⁵¹ This represents an almost doubling in the number of insurers from 2019 and approximately 43 per cent of the insurance industry's global assets. This market response comes against the backdrop of emerging findings on the sector's sensitivity. In December 2020, EIOPA published its first sensitivity analysis results of insurers' exposure to climate transition risks, finding that "losses on equity investments in the high-carbon sector can be high, reaching more than 25% on average". This highlights the financial risk of continued reliance on fossil fuels and disorderly transition scenarios.⁵²

Many members are ahead of the curve. As signatories of the Powering Past Coal Alliance, **Aviva**, **AXA** and

Swiss Re have committed to provide no new financial services and investments for unabated coal-fired power. They pledge to engage with investee companies for the phase-out of existing capacity by 2030 in the (OECD) and EU (2050 in the rest of the world). **Swiss Re** has developed a policy that includes withdrawal from intensive oil and gas production. From July 2021, **Swiss Re** will no longer provide insurance cover for the top five per cent carbon-intensive oil and gas producers and by July 2023 for the top ten per cent. ClimateWise members, **RSA**, **Zurich**, **Munich Re**, **LSM**, **Allianz** and **QBE** have also set coal-related divestment policies. They have made commitments to scale up green investments and grow the supply side of low carbon and transition solutions.

Insurers are also starting to examine transitional and net zero underwriting opportunities. Some members identify how specific investment decisions can be applied to reduce climate change risk in their insurance business. During 2020, a working group of the CRO Forum published a carbon footprinting methodology for assessing the carbon intensity of underwriting portfolios.⁵³ **RSA** has set a 50 per cent minimum threshold for renewable energy within its total energy underwriting portfolio. The IDF, chaired by **AXA**, aims to build resilience and protection in vulnerable communities facing natural disasters through insurance and risk management. **Lloyd's** and many of its market members are active in the IDF, including **Beazley**, **MS Amlin** and **RenaissanceRe**. **RenaissanceRe** is also part of the InsuResilience Global Partnership for Climate and Disaster Risk Finance and Insurance Solutions.

To summarise, scenario analysis is an essential process that allows firms to better understand their own climate exposures and build strategic and societal resilience. Whilst progress is being made, there is still a lot more to do. This challenge is illustrated by the words of Dr Bronwyn Claire at the University of Cambridge: "individual households may not be able to afford continued increases

in insurance premiums, and a reduction in coverage may inhibit the ability of the insurance pool to maintain the market, affecting disproportionately those most exposed to climate risks."⁵⁴ The insurance industry has a pivotal role to play in building societal climate resilience and supporting adaptation to close the protection gap.



ClimateWise Principles 2020 Annual Review

The annual assessment of the integration of the ClimateWise Principles across members' business activities is based on members' reporting progress, independently reviewed by Deloitte. It highlights the overall progress being made by the ClimateWise community and provides ClimateWise members with individual feedback, scores and rankings that allow them to benchmark progress against their peers and inform development of members' responses. The ClimateWise Principles have provided an industry-standard framework for TCFD disclosures, whilst also setting leading ambitions on wider public policy engagement and action on climate change and building societal resilience across the industry value chain.

Principle 1 Be accountable

1

See page 27

Principle 5 Inform public policy making

5

See page 45

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

2

See page 31

Principle 6 Support climate awareness amongst our customers/ clients

6

See page 49

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

3

See page 36

Principle 7 Enhance reporting

7

See page 53

Principle 4 Reduce the environmental impact of our business

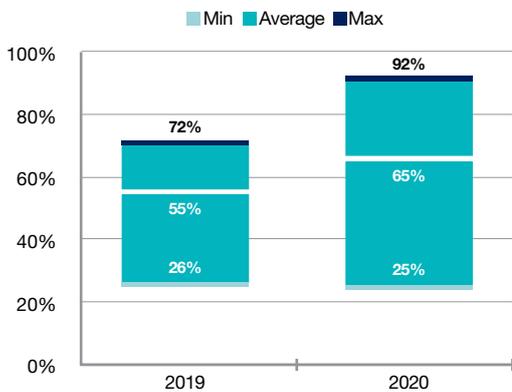
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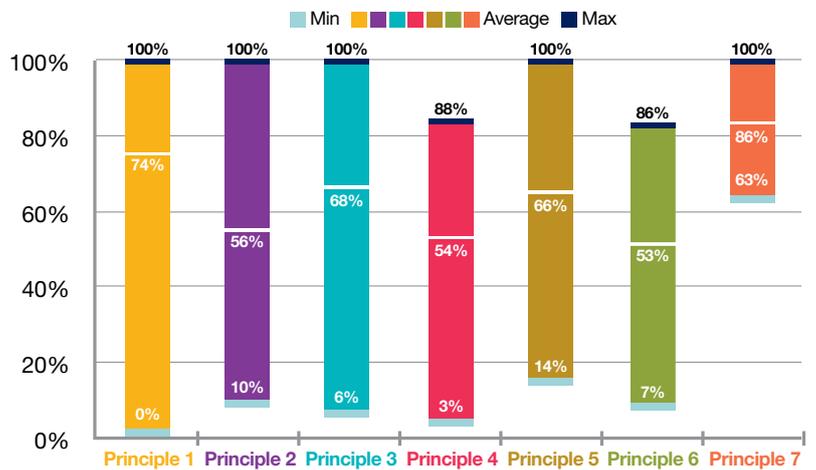
The ClimateWise Principles: member progress

2020 has been an important year for continuing progress towards the Paris Agreement and in the implementation of the TCFD Framework. Encouragingly, this year ClimateWise members rose to the challenge. 2020 annual member reporting against the TCFD-aligned ClimateWise Principles demonstrated a material increase in the average score, improving by 10 per cent, from 55 per cent in 2019 to 65 per cent in 2020. This is the greatest year-on-year improvement in scoring since the revised Principles were introduced in 2014. This improvement in membership score is particularly noteworthy as it has occurred simultaneously with a 25 per cent increase in the membership base, with the initiative welcoming seven new members in 2020 and the majority reporting against the Principles for the first time this year.

Member scores over time (2019-2020)



Normalised average absolute score by Principle



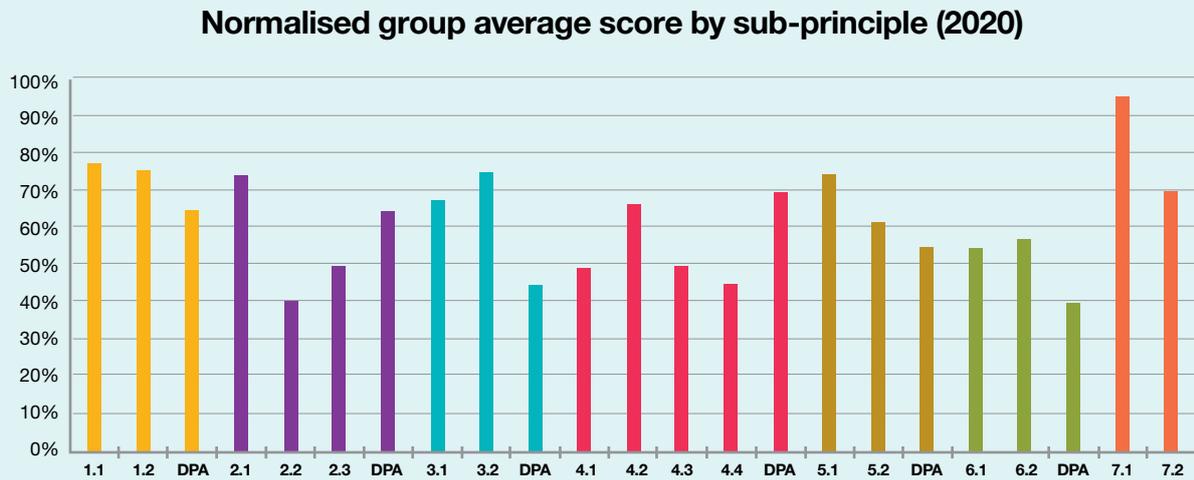
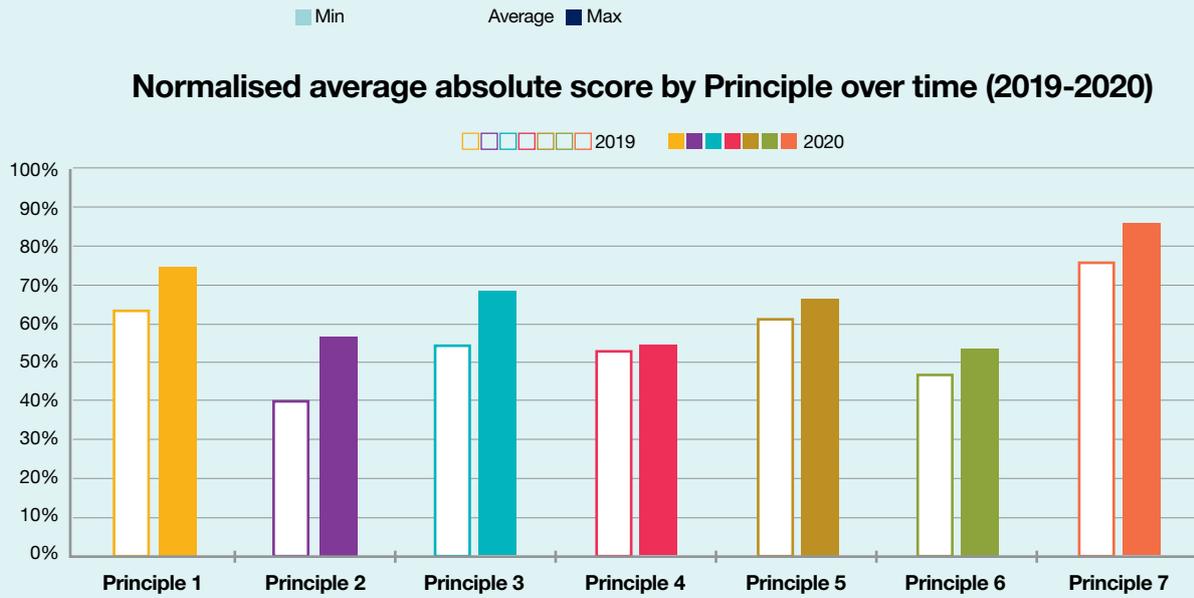
Across the ClimateWise Principles, the greatest increase in average scores for the group from 2019 was in Principle 2 where scores increased by 18 per cent. This is due to significant progress being made by members in the incorporation of climate change considerations into investment and underwriting strategies, demonstrating growing commitment to the exploration of strategic resilience to climate change. Many members have participated in climate stress tests this year and industry pilots to develop collaborative methodologies and frameworks for scenario analysis. Members have also made demonstrable progress in their identification, understanding and management of climate risk, with average scores increasing for Principle 3 by 13 per cent. The majority of members demonstrate processes over the integration of climate risk into existing risk management frameworks, such as ORSA returns and articulated the key impacts of climate change on their business model.

These improvements can partly be attributed to the active feedback loops from member participation in, and preparation for, regulatory climate stress tests – which have required participants to consider the impact of different climate scenarios on their assets and liabilities. New UK regulatory expectations by the PRA's Supervisory Statement 3/19 on board accountability have also resulted in significant improvements being made to members' governance structures in the management and oversight of climate change issues. ClimateWise members continue

to demonstrate leadership across the insurance industry in collaborative climate-related engagement activities, such as policy and regulatory engagement, in an important year of regulatory consultation, change and climate policy development. Members are actively involved in working groups set up to road-test risk management frameworks, and in founding industry alliances that encourage the just transition to a lower carbon economy. For example, members participated in the Insurance Development Forum (IDF), UNEP FI's pilot in exploring methodologies for implementing TCFD recommendations and the CRO Forum Emerging Risk Initiative.

Many members are working along the value chain, providing strategic responses and innovative solutions to the net zero transition, incentivising customers on their own journeys. As members continue to develop strategic solutions, expanded adoption and deepening of climate scenario analysis is required. Supportive of building systemic resilience and stakeholder interest from regulators, investors and customers, members should enhance disclosures around the outcomes from scenario analysis. Continuing progress in these areas will help ready ClimateWise members for regulatory climate stress tests and inform members' response to an issue that is becoming ever more urgent.





Normalised group average score % change by sub-principle compared to prior year



DPA = Demonstrating Planned Activities

Summary

Principle 1: Be accountable

The large majority of members demonstrated robust governance structures for climate change issues, with delegated board-level committees or sub-committees to monitor climate-related risks and opportunities, overseeing their incorporation into business strategy and planning. Members disclosed clear roles and responsibilities at the board and management level, in line with evolving supervisory expectations on climate change. For example, the Prudential Regulation Authority's (PRA) Supervisory Statement 3/19 included the requirement to allocate Senior Management Function (SMF) holder(s) responsible for identifying and managing the financial risks from climate change. This advanced industry practice across the membership base as firms had to assign responsibility, submit plans and start to deliver on these after the last ClimateWise review cycle.

Members can continue to improve by demonstrating how climate risk is regularly monitored and implemented at a management level. This should include the process by which key climate issues are continually assessed and integrated into strategic plans, goals and targets agreed by the board or board committees.

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

Members have made a significant step forward in incorporating climate-related issues into their business, underwriting and investment decision-making this year. An increasing number of members outlined the climate stress tests and scenario analysis processes undertaken, and how the results of these scenarios were incorporated into business decision-making.

We also observed participation in industry pilots developing collaborative methodologies and frameworks for scenario analysis, aiming to identify implications for business strategy and financial planning. For example, members have been involved in the development of the Climate Financial Risk Forum's (CFRF) scenario assessment guide and UNEP FI's pilot, exploring different methodologies to enable implementation of the TCFD recommendations. Due to the evolving sophistication of risk toolsets, many members assessed both transition and physical risk as part of their scenario analysis, with some also extending this to cover liability risks.

Despite the relative improvement this year, absolute performance against Principle 2 remains one of the lowest. To improve, members should coordinate their strategic decision-making in relation to climate change under a coherent strategy, with specific metrics and targets used to track progress. Members should also demonstrate the outcomes and implications from scenario analysis to articulate the resilience of their strategies and any resulting impact on decision-making.

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

Members made notable improvements in the processes used to assess and monitor climate risks and opportunities. Driven by supervisory expectations (such as the PRA's 'Dear CEO' letter¹⁹), many members provided additional information on climate within ORSA returns, and demonstrated significant developments in embedding climate within risk management processes. Through advancements in the global regulatory environment (such as the Network for Greening the Financial System's release of the first international referenced scenarios) the majority of members were able to articulate the key impacts of climate change on their business model, with many members providing detail across both underwriting and investments.

Most members are also continuing to explore their climate risks and opportunities through partnerships with others to support climate adaptation or mitigation efforts. This is evidenced by increasing membership of initiatives such as RE100 and Climate Action 100+. Members are undertaking new research to inform business strategies, and establishing innovative approaches to product development. These include for example, reductions on motor premiums for taking public transport options and pursuing repair instead of renewal of goods in claims resolutions. Significant improvements were made by members in describing their role in improving data quality to inform the research and analysis of climate-related issues. This was fuelled by recognised challenges around climate data quality and industry working groups, initiatives and innovations (eg Global Commission on Adaptation paper on insurance for climate adaptation).⁵⁵

To continue to improve, members could be more specific about how their research and product development activities are deliberately targeting improvements in climate data (a commonly cited barrier to climate risk management) and addressing the material climate risks and opportunities facing the business. Additionally, members could provide further evidence of how compliance is proactively managed against the backdrop of evolving and emerging climate-related regulatory and supervisory requirements.

Principle 4: Reduce the environmental impact of our business

Members continued to disclose performance trends in their operational environmental impacts and Scope 1, 2 and 3 (GHG) emissions. This is in line with the rise in corporate commitments to net zero and national and regional climate policy and legislation targeting climate neutrality this year. Similarly, new energy disclosure requirements drove increased transparency over energy consumption (eg the UK Streamlined Energy and Carbon Reporting regulation). As a result, there was an increase in members reporting on non-GHG environmental metrics and targets covering their internal operations and physical assets, including energy consumption and proportion of

renewable energy sourced. Five members have become RE100 signatories this year, driving increased renewables sourcing. The majority of members proactively engaged their workforce in environmental campaigns to raise awareness and collaboratively change behaviour. Members also demonstrated their commitments to improving the environmental sustainability of their supply chains.

To improve, members could measure and disclose further Scope 3 emission sources. Where relevant, members could disclose the emissions from investment and underwriting activities in line with developments in industry methodologies contributed to by members this year. For example, the CRO Forum's *Carbon Footprinting Methodology for Underwriting Portfolios*.⁵³ Members could also improve the proactivity of their management of environmental performance and the risk profile of their supply chain, to further reduce their impacts across the value chain.

Principle 5: Inform public policymaking

Members continued to demonstrate proactive engagement to influence policy on climate mitigation and adaptation strategies. Many members demonstrated a leadership position by founding or chairing industry forums, leading industry input to regulatory strategy and guidance development, and hosting conferences or seminars on building regional climate resilience and closing protection gaps. There were a number of industry and regulatory initiatives that provided members with many opportunities to engage with policymakers. This is due to the pace of climate regulatory and supervisory developments and industry forums established, in part to support the upcoming COP26. For example, multilateral steering groups such as the IDF and its Risk Modelling Steering Group, and industry risk forums such as the CRO Forum Emerging Risk Initiative, and Carbon Footprinting working group.

A large number of members conducted and commissioned research to support their clients and communities to adapt to climate change. This included bespoke research topics to address specific physical risks and promote climate resilience such as flood risk. The majority of members actively encouraged innovation in climate-related research, supporting academic research through PhD awards and the sponsorship of Master's programmes.

To further improve, where members are conducting or commissioning climate-related research, they should demonstrate how the outputs have influenced business decision-making or impacted external stakeholders' efforts to address climate change.

Principle 6: Support climate awareness amongst our customers/clients

Members' support of climate awareness amongst their customers and clients improved this year. All members are now communicating their organisation's beliefs and strategy on climate-related issues with customers and clients. Many members launched new climate strategies in line with the coming decade and in support of the COP26 prior to its rescheduled date. There were encouraging examples of collective commitments made following the launch of the Net-Zero Asset Owner Alliance in 2019, with many members developing and revising policy statements with associated communication campaigns to support portfolio alignment targets.

The majority of members increasingly equipped customers to become more resilient in the face of rising physical climate-related risks and events such as flooding, wildfires and hurricanes. Members provided advice and innovative tools to help customers understand their climate-related risks and to mitigate their exposure through, for example, natural catastrophe models and weather forecasting tools. This was supported by innovative offerings and tools to influence behavioural change through collaboration with educational institutions and authorities. For example, providing risk analytics to allow clients to assess their own level of risk.

To improve performance, members could do more to demonstrate the outcomes and impacts of customer campaigns, tools and offerings, and demonstrate how these have improved as a result of incorporating feedback. Members would also benefit from providing evidence of how customer engagement and knowledge sharing focuses on the most material climate risks facing customers and leads to the behavioural change needed to mitigate climate risk.

Principle 7: Enhance reporting

The majority of members incorporated elements of their ClimateWise Principles report into their annual financial reporting this year. This reflects the increasing number of voluntary and mandatory (ESG) reporting provisions as well as greater integration of TCFD recommendations in annual financial returns. As UN PRI signatories, 13 ClimateWise members participated in mandatory TCFD reporting this year.

That said, only half of members publicly disclosed their complete ClimateWise Principles report. Members should publish their report to encourage appropriate disclosure of climate-related risks and opportunities and demonstrate the members' commitment to transparency.

Appendix 1

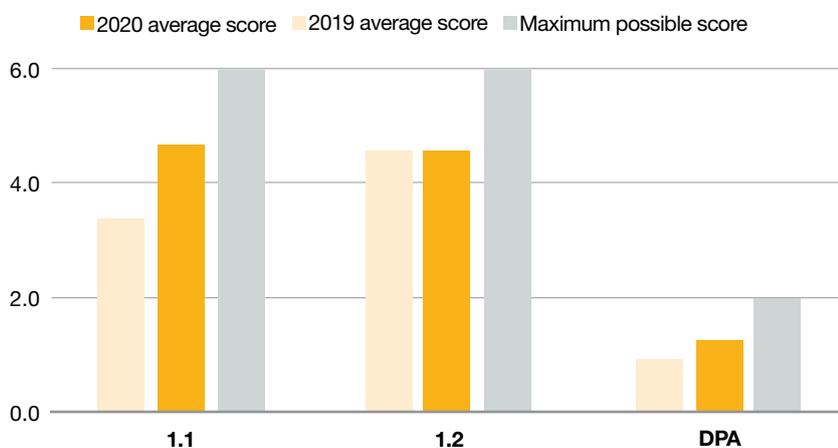
Member evidence against the ClimateWise Principles

Principle 1: Be accountable

The sub-principles

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

Principle 1: Group average absolute score by sub-principle



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

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

Consistent with the previous year, Principle 1 was one of the highest scoring of the ClimateWise Principles, with the most significant year-on-year improvements made in board accountability and oversight within sub-principle 1.1.

Two-thirds of members achieved full marks across all three levels of sub-principle 1.1, with scores increasing for the sub-principle by 21 per cent from the prior year. The majority of members described board-level oversight of climate-related issues by identifying the committees, processes and frequency through which the board or board committees are informed. An improvement can be seen in members' disclosure over how the board monitors and oversees progress against climate-related goals and targets. Only one-third of members scored either no points or partial points, down from the majority of members in 2019. There were also marked improvements in the number of members scoring maximum points for explaining how climate change is integrated into business strategy and planning at a board level, including the development of key metrics and targets.

For sub-principle 1.2, scores have remained consistent, with over two-thirds of members disclosing the key

management roles or committees responsible for climate-related risks, illustrating how these fit into the overall organisational structure and describing the reporting lines to the board. A similar number of members scored full marks for explaining the processes that inform management and enable appropriate management of climate-related issues, compared with just over half of all members last year. Just over half of members also described how management monitors the implementation of strategic climate plans and targets to address these issues.

There was an improvement in the number of members demonstrating planned activities – with only a quarter providing no evidence. The majority of members disclosed planned activities on climate-related governance that further improved scoring with half of those earning full marks for providing specific details and timescales for the plans.

Key strengths

A large number of members have demonstrated strong and robust governance structures including clearly defined roles and responsibilities at the board level. Where members are supervised by the Bank of England's PRA, SMF holder(s) have been assigned responsibility for identifying and managing financial risks from climate change: a specific requirement of the Supervisory Statement. For example, **Tokio Marine HCC** and **Liberty Specialty Markets** (LSM) appointed their Chief Risk Officers (CRO) as the SMF responsible for managing financial risks from climate change. LSM's CRO also chairs the company's Climate Change Forum. Several members delegated responsibility for climate-related issues to specific board sub-committees. **Willis Towers Watson's** Risk Committee reports directly to the board on climate-related risk. **Allianz** has a long-standing ESG Board with three Board of Management members and representatives from key group functions which meet quarterly. **Santam** extended the remit of the group's sub-committee for Social, Ethics & Sustainability (SESCO) beyond its statutory responsibilities to include ESG matters, including climate risk and amended the SESCO Charter to include the ClimateWise Principles. Santam's Group Investment Committee and Group Risk Committee also assist the board in their respective responsibilities for responsible investment and climate risk management.

There is increased evidence from the membership base this year of incorporating climate change issues into business strategy and enhancing disclosure of the processes used by the board to monitor and oversee progress against goals and targets. The importance of this was cemented by the PRA's 'Dear CEO' letter sent in June

2020.¹⁹ **RSA's** Board oversees the Group's Climate Change and Low Carbon Policy, and receives regular updates on progress against targets, with specific consideration of climate change in the Board's scrutiny of the operating plan. **Beazley's** Board has formed a working group for discussing the implications of climate change, which produced a climate change working paper discussed at the Board's recent strategy day. **Flood Re** devoted its annual Board and Executive Committee Strategy Day to analysing the impact of climate change on its purpose and strategy. One output of this was the identification and development of leading indicators to monitor and report on climate-related risk and progress on mitigation efforts. **Tokio Marine Kiln's** ESG committee is a delegated committee of the board and has three working groups including a dedicated Climate Group. **Argo** has a designated board member responsible for overseeing its approach to addressing the financial impact of climate change, whilst the Board Risk and Capital Committee is responsible for incorporating climate change issues into Argo's strategy.

There was also continued improvement in members' responses to sub-principle 1.2. Consistent with the prior year, members demonstrated strong oversight at a management level, disclosing clear roles and responsibilities for managing climate-related risks. For example, **Aviva** has established a rigorous governance process that ensures the identification, assessment and management of climate risks at every level of the organisation, and the integration of those risks and opportunities into the overarching business strategy. Aviva has also put in place defined roles and responsibilities to support its new climate change strategy. Each Market CEO is responsible for developing a market-level climate

change plan. **QBE** has also provided descriptions of roles and responsibilities at both a board and management level, including specific roles assigned to the Chief Finance Officer, CRO, Chief Operating Officer and the Chief Underwriting Officer. For example, progress on the board-approved roadmap for implementing the requirements of the Supervisory Statement takes place on a quarterly basis via the ORSA report submitted by the CRO.

Allianz has established inter-departmental ESG Task Forces to integrate ESG and climate change considerations through all lines of business. These Task Forces consist of ESG specialists and representatives across both local operating entities, and group functions, each sponsored by a Board of Management member or senior executive and meet bi-monthly to monitor progress and alignment.

The regular monitoring of activities including progress towards goals and targets is key to improving business performance. Some members disclose well in this area. For instance, climate change is a standing item on the agenda of **Liberty Specialty Markets'** executive meetings and updates are reviewed on a monthly basis. The **Hiscox**

board and its Executive Committee committed to twice-yearly updates and discussions on climate-related issues. **Santam's** Board receives quarterly updates from the CEO on the implementation of the group's 'Future Fit' strategy that embeds climate change considerations throughout operations. **Argo's** Board Risk and Capital Committee is updated quarterly on progress against the sustainability action plan by the Sustainability Working Group, supported by the Chief Risk and Sustainability Officer who is responsible for coordinating sustainability and climate change initiatives.

Recommended areas for development

The majority of members continue to score well in describing board oversight of climate-related issues and the responsibilities delegated to executive management. Two-thirds of members disclosed how climate risks and opportunities are routinely monitored and reviewed by the board, including how progress is measured against climate-related goals and targets. A similar number described how climate-related risks and opportunities are monitored at the management level.

Case study: Zurich

Zurich's Board and management-level climate governance

Global governance

Executive-level support and endorsement of climate-related activity is recognised and valued at Zurich as a driver of positive change. Zurich's Group Board approves the sustainability strategy and has ultimate responsibility for the Climate Risk Policy. The Board delegates the monitoring of aspects of the policy to the following committees:

- the Governance Nominations and Sustainability Committee supports the Board with regard to sustainability and meets at least twice a year,
- the Risk and Investment Committee supports the Board with the risk-relevant aspects and with the Responsible Investment policy, and meets at least four times a year,
- the Remuneration Risk Committee regularly evaluates the remuneration architecture system which entails the management targets and meets at least twice a year,
- the Audit Committee reviews the reporting on sustainability and climate risk with the Risk Committee and meets at least four times a year.

UK governance

In compliance with the PRA's Supervisory Statement, the UK Chief Risk Officer holds the Senior Management Function for identifying and managing the financial risks of climate change. Given the diversity of business lines within Zurich UK and where the first line management of climate change risk predominantly is, Zurich's UK Chief Financial Officer and the UK Chief Underwriting Officer also have specific climate risk responsibilities in their Statements of Responsibilities

Incorporation of climate change into business strategy and planning

Climate resilience is one of three focus areas of the Zurich Group's sustainability strategy. This climate strategy is guided by Zurich's commitment to the UN's Global Compact business 1.5°C pledge aimed at limiting average global temperature increases to 1.5°C. A comprehensive climate road map to transform Zurich into a 1.5°C compatible company is under development, with the goal of supporting customers and society to build resilience to climate impacts and transition to a zero-carbon economy. Within the UK, the UK Executive Committee has transposed this strategy into a specific UK sustainability strategy and is leading the design of specific, ambitious targets across business areas to ensure tangible results, expanding on the actions already underway. Zurich's UK Sustainability Risk Committee is responsible for overseeing the implementation of the UK sustainability strategy and reviews progress on targets, escalating to the Boards and Committees as necessary.

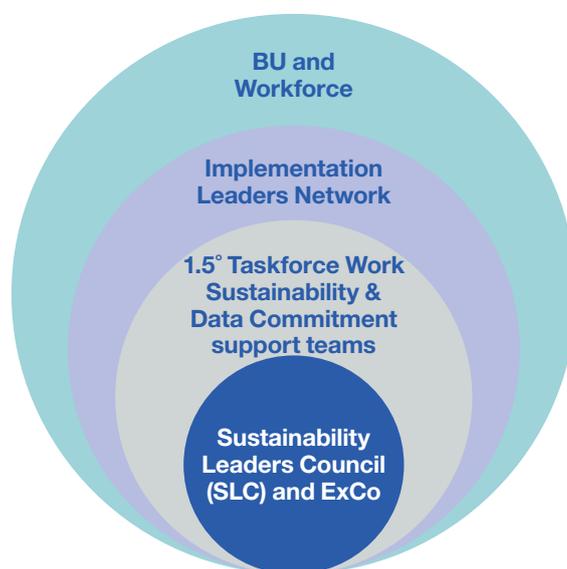
To improve scoring, the disclosure should include the process by which monitoring takes place and the frequency of reviews or committee meetings. Members should demonstrate how climate-related issues are incorporated into business strategy at a board level and provide further detail around how the strategy is implemented and monitored at a management level.

Where members have cited ESG committees, members should clarify the extent of specific climate-related considerations within ESG structures or strategies. All members should continue to demonstrate planned activities, providing detailed plans and implementation timelines to achieve full marks.

Case study: Zurich

Global Engagement Model

The Zurich Group has implemented the following specific Global Engagement Model to implement its sustainability strategy, which the UK plays an integral role in, participating at multiple levels:



Global Engagement Model | Zurich

Sustainability Leaders Council

The Sustainability Leaders Council (SLC) is responsible for communicating Zurich's global commitment and ownership across all targets, the delivery of the agreed commitments in functions and business units as well as determining prioritisation, indicators, and implementation plans in countries and functions. The SLC ensures that Zurich's approach to sustainability is effectively integrated in the way business is conducted and enables Zurich to live up to its code of conduct, its purpose and values, and the UN Global Compact.

The SLC meets quarterly to review progress, remove roadblocks and discuss collaboration opportunities; it regularly updates ExCo and leadership teams and approves 1.5°C reporting updates shared with ExCo quarterly.

Taskforces

The 1.5°C Taskforce supports and enables local implementation. This includes setting reporting frameworks and ensuring local participation as well as feeding a progress status into Business Reviews, E-Board (executive dashboard of key metrics for the Group ExCo) and the SLC.

Implementation Leaders Network

The Leaders Network collaborates with the taskforces, whilst supporting teams to drive local implementation. Its role is to coordinate regional or Business Unit governance and track progress against targets. It also enables knowledge sharing and establishes local ownership of targets to sustain long-term success. It engages with Group Sustainability and key stakeholders.

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

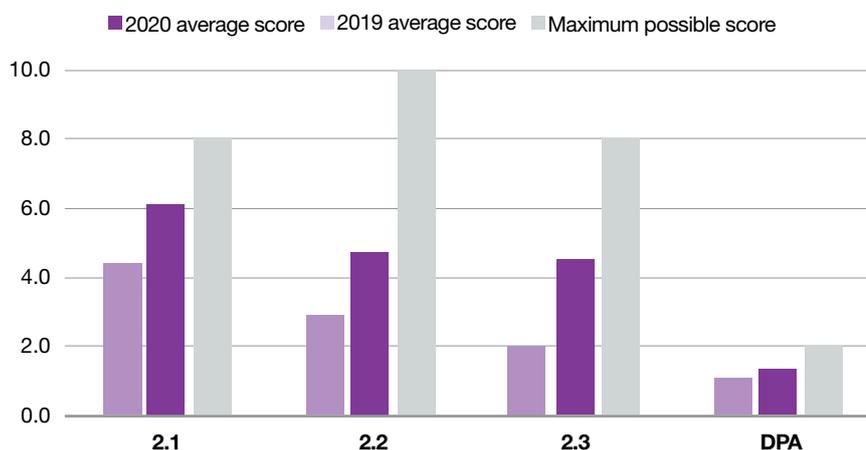
The sub-principles

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

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

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

Principle 2: Group average absolute score by sub-principle



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

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

Members increasingly demonstrated the identification and assessment of climate risks this year and the incorporation of material climate-related issues into their strategies and investments. Principle 2 has shown the greatest year-on-year improvement of all seven principles, albeit from the lowest base, demonstrating growing commitment to the exploration of strategic resilience to climate change.

Sub-principle 2.1 showed the greatest improvement, with average scores increasing by 20 per cent. More than two-thirds of members categorised climate-related risks and opportunities facing their businesses by type and materiality. An equal number of members analysed the consequential impacts on their business, strategy and financial planning, with some members demonstrating the influence this analysis had on business decision-making. Fewer members disclosed a coherent strategy for addressing climate risk and opportunities, including a measurable progress plan, with just half of members scoring full marks. Almost half of members demonstrated leadership through conducting or collaborating on new research to encourage better climate disclosure: a two-fold increase on 2019.

Sub-principle 2.2 showed a more gradual improvement. Whilst over three-quarters of members disclosed key metrics for managing climate-related risks and opportunities, only half of members scored full marks by including detailed descriptions of both qualitative and quantitative metrics. Over half of members provided historical data, giving transparency over performance trends, but only a quarter of members earned full marks by providing a narrative and analysis to explain those

trends. Half of all members disclosed management targets, with an encouragingly similar proportion disclosing how these targets were beginning to be incorporated into remuneration practices. Only a quarter of members scored full marks for outlining their metric and target methodologies.

Half of all members achieved maximum points in sub-principle 2.3 by providing comprehensive descriptions of scenario analysis undertaken, including methodology time frames, parameters and key assumptions used. Over two-thirds of members articulated how scenario analysis results were used to explore the resilience of business strategies against material climate risk. Only half of all members were then able to demonstrate the impact of the results of scenario analysis on decision-making. Two-thirds of members demonstrated strong collaboration efforts in the sharing of risk management and modelling expertise.

It was evident that members had strong planned activities to address gaps in their performance under this principle, with all but three members disclosing future plans. Examples of activities include scaling up efforts on stress-testing and scenario analysis.

Key strengths

It is essential that organisations have processes in place to evaluate the impact of climate change on their business and integrate the results into risk management processes to ensure the resilience of their business models in transitioning to a low carbon economy. Members increasingly use the framework and terminology of the TCFD to identify the types of prioritised climate-related risks: a key component of sub-principle 2.1. For example, the **Corporation of Lloyd's** clearly described the different types of priority climate-related risks and opportunities, categorising them into physical, transition and liability risks, and provided evidence of how these risks and opportunities have impacted business decision-making. **Santam** recently worked with external stakeholders on a climate risk assessment framework to assess the impact of climate change on its business and to inform the decision-making process. The impacts of these risks included increased claims and uninsurable perils, solvency challenges, evolving underwriting criteria and policy terms, and required investment in low carbon technologies. **Willis Towers Watson** regularly reviews key risks, including climate change, and the controls in place to identify key areas of focus to follow up through management actions. Some members also assessed the implications of climate risks and opportunities facing different parts of the business and across different time horizons. For example

Munich Re prioritises and assesses the implications of climate change facing each line of business across the short term (one to three years), medium term (four to ten years) and long term, and the remote future (2060–2100). **Munich Re** assesses current and emerging regulation as one of the business's most significant short-term climate-related risks and the technological risks involved with the transition to the low carbon economy and its subsequent impact on underwriting performance as one of the most significant climate-related risks across all time horizons.

Many members have significantly improved performance this year through demonstrating the integration of assessed climate risks and opportunities into their business strategies and including climate-related risks within their top ten business risks. For example, **Aviva** has widened the focus of its climate strategy, committing to aligning its business to the 1.5°C Paris Agreement target, and from primarily focusing on investments to creating a broader, joined up four-pillar approach across investments, insurance, operations and influence. **Aviva's** new strategy is iterative, being reviewed every two years in order to meet targets, and largely focuses on developing and offering a greater variety of climate-friendly products, taking pragmatic and commercially smart actions in meeting net-zero asset owner targets by 2050. **Sanlam** has also incorporated climate change into the key pillars of its strategy and climate-related risks are included in Sanlam's

top ten strategic risks. **Flood Re** has assessed the impact of climate change on insured losses and its strategic aims, including the threat posed to its purpose-led objective to exit the UK insurance market in 2039.

In sub-principle 2.2, members have made significant improvements to their score by utilising evolving risk toolsets, participating in regulatory stress and scenario tests and industry pilot projects. These developments provide members with a means to measure and articulate the impact of climate change on their business, influence strategy and set targets to support planning over short, medium and longer time frames. For example, as part of its commitment as a member of the Net-Zero Asset Owner Alliance to transition its investment portfolios to net-zero GHG emissions by 2050, **Allianz** conducted pilot portfolios on a climate-related target setting to identify gaps and determine steering approaches, including the implications for investment management decision-making. Allianz uses scenario analysis to develop forward-looking investment criteria to identify carbon-intensive business models and low carbon opportunities.

Zurich has sophisticated natural catastrophe modelling capabilities to identify exposure limits to climate-related natural catastrophe and risk-based capital measures. Zurich monitors the avoided CO₂ emissions equivalences on its holdings of European Investment Bank green bonds. **AXA XL** has adopted the the 'Warming Potential' methodology, leveraging a 'transition risk' model developed by Swiss environmental fintech Carbon Delta, to quantify the impact that investments may have on the climate. The methodology produces the Warming Potential metric expressed in terms of temperature. In addition to Carbon Delta, AXA XL also leverages a methodology developed by Beyond Ratings to assess the Warming Potential of its sovereign debt investments. **QBE** has set a Climate Action Plan including key targets for reducing the exposure of its investment and insurance activities to thermal coal. Next year QBE will set targets for climate-related risks and opportunities regarding their investment and underwriting activities.

Half of all members, including **RSA**, **Aviva** and **Prudential**, disclosed how they are beginning to incorporate climate-related metrics into remuneration policies and practice. For example, a portion of the Prudential CEO's bonus is dependent on achieving personal objectives, such as developing plans to determine the group's climate-related risks and opportunities. RSA defined key metrics and targets to manage performance, including weather-related losses, emissions embedded in its investment portfolio and percentage of renewables within its energy underwriting portfolio. These targets were included in the reward of senior management. For example, the CEO's scorecard included a reward for the agreement of a new policy on fossil fuels with the Board and to achieve a reduction in carbon emissions by 16.5 per cent per employee.

The PRA 2019 insurance stress tests included climate change for the first time. As part of these tests, the PRA conducted the economic and natural catastrophe scenarios jointly with the Bermuda Monetary Authority. This meant that more than half of all members participated in these tests. It is therefore not surprising that sub-principle 2.3 scores, which include the incorporation of climate risk scenarios in business strategy and decision-making, improved significantly. Many participating members described the process for undertaking these stress tests. Some members applied the scenarios beyond the scope of the PRA test to their entire portfolio, whilst others, such as **Aviva**, compared the PRA tests with their own methodology to find that the impact on insurance liabilities is more limited than on investment returns. Though more members were able to describe the scenarios undertaken, Aviva was one of the few members that demonstrated their understanding of the resilience of their business model and the impact of the results on decision-making.

Another example of the evolving understanding of resilience is **Zurich's** Climate Change Scorecard. Developed in 2019, Zurich's unique scorecard indicated a higher likelihood of missing the Paris Agreement's target of limiting global warming to 2°C or below than achieving it. This led Zurich to conduct further analysis under high transition risk and high physical risk scenarios, the outcome of which was a series of actions and changes to its climate change position, resulting in Zurich's commitment to the Business Ambition for 1.5°C Pledge that aims to limit average global temperature increases to 1.5°C above pre-industrial levels by 2030. Through scenario analysis Zurich was also able to determine the impact of climate-related physical risk on short-tail business and long-tail business and to adjust the respective risk profile accordingly. **RSA's** stress testing considered the impact of physical risks on assets and liabilities under three different climate pathways and transition scenarios, and included testing for insurance risk, market risk and transition risk associated with its investment portfolio. The results of RSA's regular stress testing reviewed by a Climate Change Scenario and Stress Test (SAST) Committee are reflected in specific management actions, such as ensuring material risks are taken into account in the pricing and selection of risks by the underwriting community (for example, limiting underwriting of new business within a geographical area exposed to the identified climate risk) and level of reinsurance.

Sub-principle 2.3 encourages members to collaborate and share knowledge of risk management and modelling expertise. Members have continued to score well in this area, with the majority of members demonstrating strong collaboration efforts. For example, **Ecclesiastical** has developed its own UK Freeze event model, which it is sharing with reinsurers to develop it further. **Aviva** works collaboratively with a number of regulators, peers and industry bodies, as well as international agencies such as the UNEP FI and the Net-Zero Asset Owner Alliance. Through these collaborations, Aviva promotes the use of its innovative tools and approaches.

Recommended areas for development

Members should broaden the description of their identification process and explain how the materiality and prioritisation of climate-related issues is determined. Members should also explain how identified material climate risks and opportunities will impact both the asset and liability side of the balance sheet, providing quantification where possible. Currently, only half of members provide this level of granularity and include some level of quantification over climate-related risks, with very few members providing quantification over climate-related opportunities. Members should build on the identification of material climate-related risks and opportunities by implementing a strategic plan including metrics and targets to drive performance. Disclosures of climate action plans

should be accompanied by a narrative explaining annual performance against the plan, including variance analysis against historical periods.

With more than three-quarters of members now undertaking climate scenario analysis and stress testing, it is anticipated that members will improve future scores by making further detailed disclosures. Less than half of members currently provide evidence of how the results from the scenario analysis have impacted on key decision-making and how strategies might change to address identified potential risks and opportunities. Members who conduct mainly natural catastrophe stress and scenario tests (over half of members) are encouraged to incorporate transition and litigation risks in their scenario analyses.

Case study: Flood Re

Flood Re's scenario analysis has demonstrated how useful this exercise can be in testing the resilience of an organisation's business model and helping to improve business decision-making

Flood Re is the Scheme Administrator for the Flood Reinsurance Scheme, which is a joint initiative between the UK insurance industry and the UK government. Flood Re's purpose is two-fold: to promote the availability and affordability of flood insurance for vulnerable homes and to manage the transition to risk-reflective pricing for household flood insurance by 2039.

Climate change scenarios and stress testing

Flood Re's Board and Executive Committee devoted a Strategy Day to climate change and its implications for Flood Re's objectives. This involved interrogating the results of scenario and stress testing. The scenarios used to test the resilience of Flood Re's transition strategy included the impact of various climate change pathways and public policy initiatives.

To understand the implications of climate-related risks, Flood Re's Risk Function and Transition Team engaged with Sayers and Partners LLP, a consultancy firm specialising in water management and associated risks. Sayers and Partners' Future Flood Explorer (FFE) model was used to analyse the projected number of homes that will be at high-risk of flooding-out to the 2080s. The FFE model relies upon nationally available datasets and provides a consistent UK-wide view of key changes in flood risks arising from various sources including the Met Office, National Adaptation Programme and Climate Change Committee (CCC).

The FFE combines three different scenarios with three sub-scenarios each: (1) Climate Change: 2°C, 4°C and H++ or High Risk Homes increase; (2) Population: no growth, low growth and high growth; and (3) Adaptation: low, current and enhanced.

Assessing solvency implications of counterparty risk

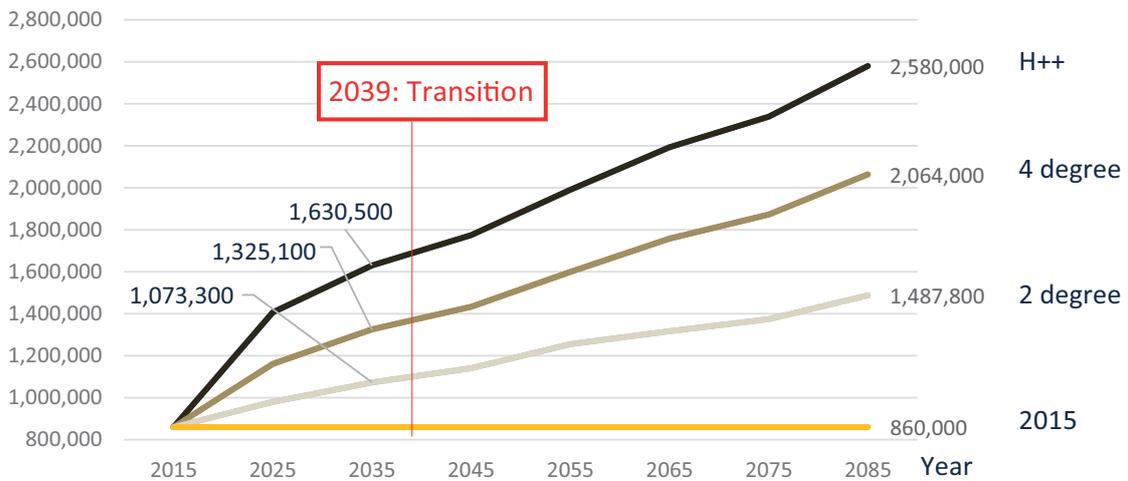
Flood Re also identified behavioural changes of key counterparties as a risk to continued operation of the reinsurance scheme. Flood Re delivered a scenario assessing the solvency implications for a shift in the risk appetite of both their ceding insurers (increased ceding to Flood Re as perception of UK Flood Risk changes) and their outwards reinsurance counterparties (increased cost of outwards cover).

This scenario considered the potential impact of climate-related changes, to both insurers and reinsurers, with responses based on the assumption of a sudden shift in perceptions relating to UK Flood Risk (a similar climate change driven behavioural change impacting investments was considered by the PRA in their 2019 General Insurance Stress Test (GIST) climate change scenarios).

Research on social vulnerability and flood risk exposure

The Transition Team also conducted research on social vulnerability and flood risk exposure to increase Flood Re’s understanding regarding flood vulnerability today and in the future due to climate change. The analysis examined the intersection of low income, exposure to flood risk and insurance take-up at present and in the 2050s and 2080s. Flood Re also commissioned an analysis of 702 home insurance claims for flooding from two insurers over the years 2013-19 to enhance the evidence base around key factors affecting cost and duration of flood damage claims.

Projected number of UK properties at high-risk of flooding
with a 1 in 75 or greater annual probability of flooding by climate change scenario



UK property flood risk | Flood Re

Accountabilities and hand-offs

Having considered the outcome of the scenario analysis, the Board consciously shifted its focus on the medium- and longer-term risks to its transition strategy. It identified increased investment in flood defences and effective flood risk management as essential to reduce the frequency and severity of future flooding. Flood Re has also made practical proposals to mitigate these risks, such as the ‘Build Back Better’ initiative, where Flood Re proposes to pay claims that include an additional amount for resilient or resistant repair. Another proposal is for ‘discounted premiums’ that reward householders who have proactively taken action to make their homes flood-resilient. Flood Re presented these proposals to the Secretary of State for Environment, Food and Rural Affairs on 8 July 2019. Flood Re is awaiting the response.

In the meantime, Flood Re will continue to track observed climate change, projections, levels of adaptation and UK government spending using data published at regular intervals by the Met Office, the National Adaptation Programme, the CCC and others as a means to manage the impact of climate change on its strategic objectives.



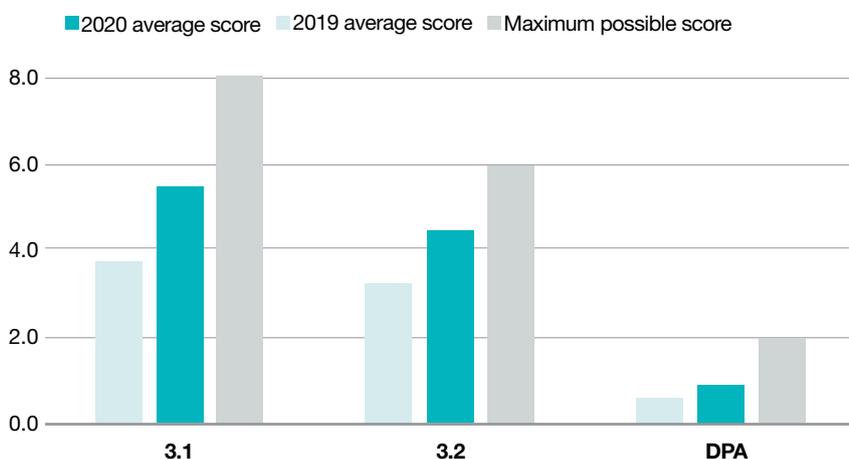
Principle 3: Lead in the identification, understanding and management of climate risk

The sub-principles

3.1 Ensure processes for identifying, assessing and managing climate-related risks and opportunities are integrated within the organisation (including investments).

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

Principle 3: Group average absolute score by sub-principle



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

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

The identification, understanding and management of climate risk continues to be a core strength and competency of the sector. This year notable progress was made by members in the support and undertaking of research and development to feed into this process, inform business strategy, and support adaptation (sub-principle 3.2).

In sub-principle 3.1 almost all members described their current practice and processes for identifying and assessing climate-related risks, with the majority of members scoring full marks. Although most members explained the processes for regular management and review of climate-related issues, less than half of all members outlined the impact on decision-making. Over three-quarters of members demonstrated the comprehensive integration of climate into existing risk management procedures however, less than half of all members explained their processes for ensuring compliance with current and emerging regulatory requirements.

Sub-principle 3.2 ranks amongst the top five highest scoring sub-principles as members demonstrate leadership in research and development activities, supportive of maximising the opportunities presented

by climate change. All members demonstrated evidence of new product development or collaboration to support innovation for climate mitigation or adaptation, with the majority scoring full marks. Almost all members recognise data quality as a key area of development to improve analysis of climate risk and describe their contribution to the improvement of data quality. Three-quarters of members describe the alignment of the work undertaken to develop new products and partnerships to the organisations' most material climate-related risks and opportunities.

The number of members providing evidence of planned activities to address the gaps in their Principle 3 disclosures remained low, with eight members providing no evidence of future planned developments in risk management procedures, and exploration of financial and strategic implications.

Key strengths

Consistent with the prior year, the majority of members have identified climate change as a significant risk and clearly described the impacts of climate change on their business model. Increasingly, members have detailed processes for regular monitoring and demonstrated comprehensive integration of these processes into existing risk management procedures, with some members disclosing the integration of climate-related risks within the ORSA process. Over three-quarters of members disclosed sufficient evidence to be awarded full marks. For example, **Sanlam** integrates climate change issues into its existing enterprise risk processes and associated strategic decisions. The Sanlam Risk and Compliance Committee is tasked to ensure that climate change considerations are embedded in the ORSA compliance processes, including in determining Sanlam's risk profile and approved risk appetite. In addition, Sanlam Group's responsible investment policy embeds ESG considerations including climate change into core investment processes with broadened and extended investment horizons. **LSM** identifies climate change as one of its top five material risks. As such, climate change is integrated within LSM's enterprise risk management processes as well as being a focus in LSM's ORSA and in stress and scenario tests. **RSA** incorporates climate change into its overarching enterprise risk management framework. RSA regularly reviews the emerging risk landscape. It has identified 'accelerating climate change' as a subject for deeper analysis and a designated area of concern. Consequently, RSA amended its risk appetite for exposure to carbon-intensive sectors and introduced a Climate Change and Low Carbon policy that informs both underwriting and investment decision-

making. **Hiscox** examines current scientific studies into natural catastrophes, including the impact of climate change, and incorporates these into the Hiscox View of Risk, which feeds into capital management decisions.

Munich Re has a comprehensive process for identifying and assessing climate-related risks and opportunities, and cultivates cross-divisional/departmental cooperation, encouraging a holistic and strategic response to the risk or opportunity. Some members have created specific processes and management information formats that provide senior management with a clear overview of the risk and opportunity presented by climate change. **Willis Towers Watson's** quarterly internal enterprise risk management reporting dashboards highlight material climate-related business continuity risks. **Zurich** has developed a climate change scorecard, which it updates annually to identify the physical risks and transition risks of climate change. It uses quantitative data and draws on climate change scenarios constructed by the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA), and includes developments in the areas of policy, technology, emissions, sentiment and behaviour. The August 2019 scorecard has seen an improvement in CO₂ emissions and social trends during the year, with carbon pricing remaining the most prominent risk.⁵⁶ **QBE's** ESG Business Policy Committee reviews climate risks through quarterly updates, as part of its ESG Risk Standard and Emerging Risk Standard, which outline governance and oversight, associated roles and responsibilities, and minimum requirements for managing ESG risks. This includes a clear five-step process with monitoring and reviewing as a final stage.

Many members have established innovative approaches to product development. For example, **Munich Re** provides risk transfer solutions for green and low carbon technologies such as photovoltaic, on- and offshore wind, bioenergy and waste-to-energy, geothermal and battery technologies. A key pillar of **Swiss Re**'s sustainability strategy is to develop new products to mitigate or adapt to climate change. Swiss Re aims to become a leading provider of re/insurance solutions for low carbon transition opportunities. It provides all types of renewable energy re/insurance with a particular expertise in offshore wind solutions.

To accelerate product development, many members set up specific work streams or incubation teams as well as conducting or sponsoring research to enhance knowledge and share learnings with clients and industry peers. **Willis Towers Watson** developed its bespoke analytical solutions for clients through its Climate and Resilience Hub, including: Catastrophe Analytics, Climate Resilience Finance, Disaster Risk Financing and the Global Ecosystem Resilience Facility. Willis Towers Watson has also established a Public and Private Sector Practice Group to help governments manage their physical risk exposure through risk transfer to the private sector. **TMNF** has developed innovative eco-friendly insurance products through several activities, including the development of micro-insurance products for Indian farmers, based on local experience and data. **AXA** has undertaken research contributing to the wider understanding of climate change, and has developed products which aim to help communities that are most exposed to the danger of natural catastrophes and perils. In particular, AXA XL has a focus on understanding ocean risk. It launched its Ocean Risk Initiative in 2017, which has three key focus areas: to drive the insurance industry's response to ocean risk, catalyse new product innovations and increase ocean literacy. **RSA** works in partnership with **Flood Re** to offer affordable insurance to people living in areas that are at a high risk of flooding and help the most vulnerable customers in the UK gain access to home insurance markets.

During the year there has been a significant increase in members working in partnership with others to support climate adaptation or mitigation efforts. For example, as signatories to the Powering Past Coal Alliance Finance Principles, **Aviva**, **AXA XL** and **Swiss Re** actively engage with coal companies to encourage them to adopt more sustainable practices. The **Association of British Insurers (ABI)** has established a Climate Change Network, which has more than 100 representatives, through which it monitors and disseminates developments in climate change policy, regulation and the media. This two-way communication channel allows for the efficient identification, assessment and prioritisation of emerging climate-related issues. In essence, the Network is informed of climate change developments in the insurance industry and related ABI activity such as consultations to which the ABI is coordinating responses. The ABI also considers concerns raised through its stakeholder engagement activities by third sector organisations, such as Unfriend Coal and the Global Center on Adaptation. **Flood Re**'s analysis of its climate-related impacts has led it to increase its engagement with

the planning sector as a key stakeholder. This is to ensure that new building developments are built in areas that do not have an increased risk of flooding in the future.

The climate change data deficit remains an issue for members and their clients. Some members are taking active steps to address this issue. For example, to test the data quality, **Munich Re** has analysed its equity and fixed income assets against a number of climate indicators, such as carbon footprinting metrics, climate strategy, and exposure to physical and transition risks; it intends to review its portfolio against these metrics annually.

Willis Towers Watson works extensively on improving its clients' physical climate risk data to reduce uncertainty. A recent example of this is the group's collaboration with Newcastle University on developing better UK flood risk data for clients. The **Lloyd's Tercentenary Research Foundation** has funded research into how smart reforestation can support climate-resilient development in the Panama Canal region. **MS Amlin** published a paper on scenario analysis under the auspices of the Lighthill Risk Network and plans to speak at the second symposium on Hurricane Risk in a Changing Climate in 2021.

Recommended areas for development

More than three-quarters of all members provide details of current business practices and processes through which climate risks and opportunities are identified, prioritised and managed on an ongoing basis. To improve the scoring further, members should disclose how their assessment of climate risk and opportunities informs key decision-making and investment decisions, by providing specific examples.

In the reporting year, a new level was introduced to Principle 3 to specifically draw out the TCFD Risk Management recommendation to consider regulatory requirements related to climate change. Only half of all members provided evidence to support this. To embed this new level into reporting practice, members should provide evidence of the processes by which the organisation remains up to date and compliant with current and emerging regulatory requirements.

All members provide evidence of supporting research, with more than three-quarters gaining full marks. This drops to just over half of all members scoring full marks for describing their role in improving data quality issues to inform the research and analytics of climate-related issues. To address the data deficit, members could consider providing further detail on their contributions to research that specifically contributes to the improvement of data quality issues relating to climate risks and opportunities.

Three-quarters of members have developed specific products or services but only one-quarter describe how these developments are contributing to the business and addressing the organisation's most material climate-related opportunities and risks.

Case study: Aviva

Aviva’s embedding of climate change into risk management

Risk management and governance

Aviva has built a strong system of governance, with effective and robust controls. The Risk Management Framework sets out how it identifies, measures, manages, monitors and reports on climate-related risks, whilst the CROs are responsible for ensuring that the climate-related risks and opportunities are managed well through Aviva’s Risk Management Framework, being in line with their risk appetite.

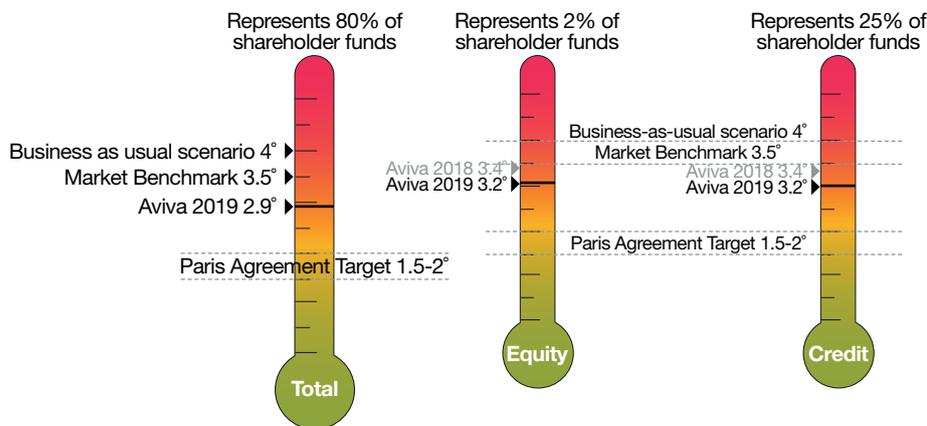
In response to new climate-related regulatory requirements, Aviva updated its Enterprise Risk Framework in 2019, including updating the Group’s ORSA policy. The Risk Committee and Governance Committee meet regularly to review, manage and monitor all aspects of risk management, to ensure that the assessment of climate-related risks and opportunities is integrated into Aviva’s overall strategy, decision-making, risk management and reporting frameworks.

Risk appetite and identification process

Aviva is actively engaged in public policy debate on the risks and impacts of climate change to its business and customers. The Group identified climate change as an increasing risk affecting most of its General Insurance, Credit and Market Risk segments, and the Group seeks reinsurance to reduce the financial impacts of catastrophic weather events. Aviva’s risk identification process detects the transmission channels for physical and transition risks, such as new climate policies or increases in average temperature. Once these have been identified, Aviva conducts an exposure analysis to understand the impact on its most material exposures.

Climate change is also monitored through Aviva’s emerging risk spectrum, which is primarily a qualitative assessment informed by quantitative indicators. Aviva considers climate change to be one of the most material long-term risks to its business model. It has designated climate change a ‘proximate’ risk and this demarcation has provided an impetus for Aviva’s efforts to build resilience to climate-related risks, including the risk of stranded assets.

Aviva has developed a variety of metrics and tools to manage and monitor climate risk exposure, including its bespoke Climate Value at Risk (VaR) measure, which enables the inclusion of climate change in its annual Stress and Scenario Test programme, carbon footprinting of investments, analysis of portfolio warming potential and investment in green assets. Going forward, Aviva plans to use the ClimateWise Transition Risk Framework to identify the key risk exposures across its portfolio.



Portfolio warming potential 2.9C | Aviva

Climate Value at Risk measure

Aviva found that traditional approaches to risk management tended to be centred on backward-looking analysis. To remedy this, the firm developed the Climate VaR measure in conjunction with the UNEP FI investor pilot project. This measure enables the potential business impacts of future climate-related risks and opportunities to be assessed in each of the IPCC scenarios and in aggregate. The VaR measure looks at the evolution of climate-related risks and opportunities over the next 15 years, but with the ability to consider shorter time periods (three to five years) where appropriate. Essentially, the VaR is used to assess the impact on Aviva's investments and insurance liabilities.

Aviva will continue to develop and incorporate Climate VaR into its overall strategy, risk management and reporting frameworks. It intends to refine and improve the approach in light of new research and data, as well as emerging best practice, including using output from the UNEP FI Insurance TCFD pilot. Aviva also notes that litigation risk could be explicitly modelled, as could transition risk for sovereign bonds, or physical risk modelling extended to cover wider factors such as the supply chain, demand for products or services and access to capital.

Scenario and stress testing

As well as participating in the PRA's insurance stress testing, Aviva conducted an exploratory climate change scenario within its annual Scenario Stress Testing exercise to assess the potential financial impacts on Aviva Investors. This scenario included increases in carbon taxes affecting liquid funds under management and accelerated implementation of energy policy, leading to increasingly stringent regulation in real estate, causing downward pressure on real estate valuations. The stress scenario was run against Aviva Investors' three-year plan and reported to the Board as part of the wider Scenario Stress Testing report. Although the impacts of the stress scenario were mild compared to other scenarios, the climate change scenario will be retained over the coming years and reassessed in order to capture new risks as they materialise. Aviva plans to use the ClimateWise Transition Risk Framework to identify the key risk exposures specifically across their portfolio of infrastructure assets.

Aviva also uses a portfolio warming potential metric from MSCI (Carbon Delta). It is used to assess Aviva's shareholder funds' alignment with the Paris target, but not across underwriting. Calculated as a weighted average of an individual issuer's warming potential, it is based on the alignment of each company within the portfolio to the sectoral GHG emissions intensity needed for each sector to reach the Paris Agreement target of 2°C. Overall, whilst the total warming potential for Aviva's shareholder funds was estimated at 2.9°C in 2019, this still represents a year-on-year progress being lower than the warming potential of the market benchmark portfolio at 3.5°C.

Carbon footprinting of investments

In line with the TCFD guidelines, Aviva regularly monitors the carbon footprint of its credit and equity portfolio. Aviva's disclosure of emissions related to the carbon footprint of their credit and equity portfolios demonstrates commitment to measuring material Scope 3 emissions. Aviva assesses its exposure to potential increases in carbon prices in shareholder funds using carbon footprinting and weighted average carbon intensity measures (tCO₂e/\$m sales).

Overall, the carbon footprinting intensity of Aviva's credit and equity portfolios reduced compared to 2018, due to proactive investing by Aviva into less carbon-intensive industries. In 2019, some 13 per cent of Aviva's corporate credit and equities shareholder funds were exposed to the most carbon intensive sectors – utilities, oil & gas and building materials. These sectors contribute an aggregate 71 per cent of the weighted average carbon intensity. The utilities sector is the largest single contributor representing nine per cent of Aviva's portfolio, but contributes up to 59 per cent of the weighted average carbon intensity. Aviva's objective is to reduce over time the carbon intensity of its investment portfolio in order to reduce its sensitivity to carbon price increases.

Aviva Heatmap Algorithm

Aviva Investors also incorporates climate change impacts into its 'House View', along with other macroeconomic factors, which form the basis for strategic allocation decisions across all portfolios and multi-asset funds. Aviva Investors' analysts and responsible investing teams perform regular sectoral deep dives to determine the specific climate-related risks and opportunities that are relevant to the particular sector under review. The portfolio and risk team conducts monthly analyses of metrics used to monitor exposure, looking at directional trends as well as movements against the portfolio's benchmark. The results are fed into the Aviva Heatmap Algorithm (AHA). For example, if a company is in a sector that has a high exposure to climate change then the weighting of climate change in the overall AHA score is increased to reflect such a risk.

Principle 4: Reduce the environmental impact of our business

The sub-principles

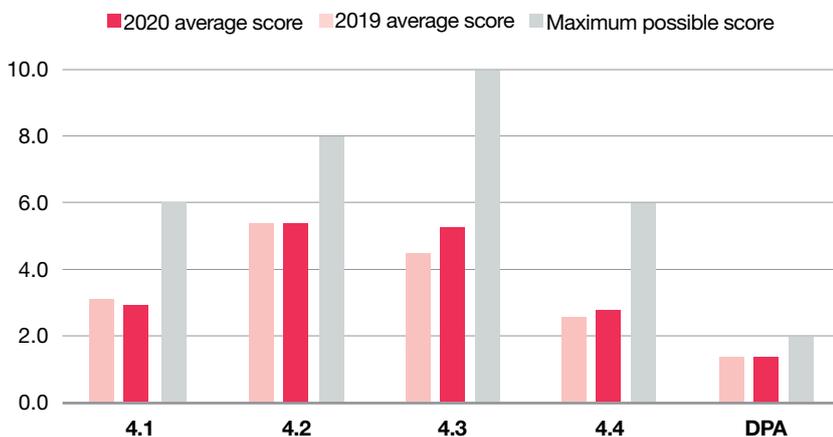
4.1 Encourage our suppliers to improve the environmental sustainability of their products and services, and understand the implications these have on our business.

4.2 Disclose our Scope 1, Scope 2 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 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.

Principle 4: Group average absolute score by sub-principle



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

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

Members demonstrated commitment to improving the environmental performance of their operations, with strong quantified reporting. Opportunities remain for further quantification of financed emissions and associated targets. Whilst members continued to engage employees and suppliers to improve environmental impacts across the value chain, only a quarter of members demonstrated the success of initiatives.

Within sub-principle 4.1, three-quarters of members had procurement policies that were aligned with their environmental policies, and over two-thirds demonstrated processes are in place to ensure compliance with those policies. There is an opportunity for more members to describe the broader impact of environmental issues on their supply chains, with almost half of members scoring no points for this requirement.

In sub-principle 4.2, whilst the majority of members reported their Scope 1, Scope 2 and Scope 3 GHG emissions, comparatively few members disclosed Scope 3 emissions relating to their investments. Three-quarters of members disclosed an absolute or intensity target, explained performance trends and described the globally recognised standards and methodologies used for GHG emission measurement.

Sub-principle 4.3 showed a modest improvement, with three-quarters of members now disclosing environmental key performance indicators aligned to material climate-related risks and opportunities, with explanations provided over performance trends. More members set targets this year to reduce environmental impacts.

However, only a third scored full marks for setting targets over a stretching timeline and providing analysis on performance against these targets. Only two members scored full marks for outlining the methodologies used to calculate metrics and targets. Almost all members provided details of a range of projects designed to reduce environmental impact across the organisation.

In sub-principle 4.4, the vast majority of members engaged their workforce on environmental topics, with three-quarters of members developing continued and targeted communication campaigns. The measurement of success for these campaigns is less mature, with only a quarter of members gaining full marks for disclosing the uptake and impact of the activities conducted and half of members not setting any engagement targets.

Members continued to score well in demonstrating planned activities, with more than half of the members scoring full marks through disclosing activities to address gaps in performance. Many members are revisiting strategy and targets that expire in 2020. Most members will continue to pursue energy efficiency in their operations.

Key strengths

The majority of members engage suppliers on environmental issues, aligning their procurement policies with their environment and sustainability policies. Most members have also demonstrated processes are in place to take remedial action in the event of non-compliance with environmental standards. For example, **AXA XL** is actively working with suppliers to tackle environmental issues within its supply chain, using corporate responsibility scoring to rank suppliers and support the alignment of procurement decision-making with its own sustainability policies. **Prudential** has established an ESG procurement policy, which includes specific questions in the supplier tender document relating to environmental protection, combined with other ESG-related questions, to support contractual decisions. **Lloyd's** has defined environmental criteria in its supplier code of conduct and provides evidence of how these criteria are assessed when purchasing products and services. **Zurich** supports supplier awareness of its Group Environmental Policy, which embeds environmental considerations in the procurement of goods and services, and encourages suppliers to adopt equivalent standards as appropriate.

Many members tackle wider environmental issues through engagement with suppliers and in joining alliances to target specific transformative action. For example, one-quarter of members, including **Allianz**,

Aviva, **AXA XL**, **Swiss Re** and **Zurich**, have joined RE100, a global corporate renewable energy initiative that encourages large businesses to commit to sourcing 100 per cent renewable electricity. A few general insurance members are providing innovative leadership on sustainable claims, particularly in motor and home insurance. **Allianz** launched a 'restore over replace' pilot project, in which Allianz engaged with suppliers to offer customers sustainable alternatives when claiming on their insurance.

Sub-principle 4.2 is the highest scoring sub-principle within Principle 4. The vast majority of members disclosed Scope 1, 2 and 3 GHG emissions, together with an explanatory narrative. Most members disclosed an absolute or intensity target against a baseline, with historic data to allow for variance analysis. As an example, **MS Amlin** comprehensively disclosed its Scope 1, 2 and 3 emissions, with historical data provided from 2017 and 2018, to demonstrate performance trends. **QBE** has disclosed Scope 1, 2 and 3 emissions along with other climate-related environmental key performance indicators (KPIs), with historical data provided back to 2016. Most members provided a description of the methodology used, which, in the majority of cases, was the GHG Protocol. **Munich Re** follows best practice in the reporting of GHG emissions and setting targets, using the GHG Protocol and in verifying published figures by the engagement of independent auditors.

Most members have set emissions reduction targets. **RSA** has set a new carbon reduction target to reduce emissions by 50 per cent by 2030 and an interim target to achieve a 37 per cent reduction by 2025 (against a 2016 baseline). To set this target, RSA used the Science Based Target initiative methodology as far as currently possible, and is reviewing its methodology for the recently released financial services sector-based approach. **Allianz** provided thorough evidence of its Scope 1, 2 and 3 emissions, along with supporting narrative explaining performance trends and the methodology behind its targets. This information helped in understanding how Allianz achieved its goal to reduce GHG emissions by 30 per cent per employee by 2020, against a 2010 baseline. Allianz is planning to set new goals to reduce emissions further, including its interim targets as an Asset Owner Alliance (AOA) signatory.

The majority of members disclosed Scope 3 GHG emissions related to their operations but few disclosed emissions related to investments – a TCFD recommendation. **Aviva's** disclosure of the carbon footprint of its credit and equity portfolios demonstrates its commitment to measuring material Scope 3 emissions. As a member of AOA, it also has a target to transition its investment portfolios to net-zero GHG emissions by 2050.

Two-thirds of members disclosed environmental metrics and targets beyond GHG emissions in response to sub-principle 4.3. **The Hartford** has six environmental impact reduction projects and uses several environmental metrics and targets to monitor progress. The Hartford's targets include sourcing 100 per cent renewable energy for its facilities by 2030, reducing water usage by 15 per cent and non-recyclable waste by 20 per cent by 2022, doubling the percentage of hybrid fleet vehicles and moving to 100 per cent electric campus shuttles and security vehicles by 2022. **RSA** disclosed a range of other environmental indicators and provided a comprehensive list of the key projects and actions it is taking. These include estate efficiency projects, such as transitioning to renewable energy sources, business travel reduction policies and digital customer communications.

The final sub-principle 4.4 encourages members to engage employees on climate change, helping them to contribute to workplace efforts and support them to make climate-informed choices in their lives outside work. The vast majority of members score well in engaging their workforce on environmental topics and half of members are beginning to set engagement-related targets. For example, as well as regularly updating staff on its sustainability strategy, **RSA** has a continuous programme of employee engagement, each with clear objectives and measures for success. Campaigns such as 'Better Ways of Working' and 'Sustainability starts at home' focus on encouraging employees to embrace more digital and agile ways of working that result in opportunities to reduce resource consumption, such as using tele/video conferencing technology. The campaigns

are linked to RSA's target of reducing operational emissions by 50 per cent by 2030. RSA attributed a saving of 800 tonnes of CO₂ to a successful campaign to encourage the use of Skype instead of face-to-face meetings and the promotion of its new travel policy.

Munich Re has demonstrated innovative and engaging campaigns to raise awareness and change behaviour, including adopting climate-friendly food consumption and sustainable travel options. The firm has introduced a 'climate-friendly' menu, offering regional and organic food, and has made it available to over 18,000 employees since October 2019. This provided the opportunity to engage with employees regarding carbon-intensive food production and promoted climate-conscious food consumption. **Swiss Re** has a unique employee engagement programme, COyou2, which offers subsidies to employees for a range of climate-friendly investments. **The Hartford** conducted employee engagement activities to raise environmental awareness, with the Hartford Environmental Action Team carrying out 30 environmental activities throughout 2019. These included quarterly climate change discussion groups and the annual Memorial Day tree planting ceremony at The Hartford, Connecticut campus.

Recommended areas for development

Three-quarters of members have an environmental or sustainable procurement policy that is applicable across all operations. Yet, only four members scored full marks when providing evidence of work and services undertaken to assess the environmental sustainability of products purchased and any corrective action taken. To improve scoring, members could provide examples of remedial actions taken when suppliers or products fall short of their environmental standards. Members could also better demonstrate their understanding of how broader environmental issues affect their value chain. Only half of all members explained how they engaged with selected suppliers to improve the sustainability of products and services. As recommended in TCFD guidance, members could consider encouraging suppliers to adopt TCFD recommendations.

Whilst the majority of members disclosed Scope 1 and Scope 2 GHG emissions, the disclosure of Scope 3 GHG emissions was restricted to operations. Only one member included emissions embedded in investments. Similarly, most members described the methodologies used to determine metrics and targets for GHG emissions but only three members explained the methodologies used for non-GHG emissions metrics and targets.

Three-quarters of members conducted engagement activities throughout the year. This tended to be on an ad hoc basis rather than a comprehensive programme of engagement across the business. Members could consider developing engagement campaigns, including engagement targets over the short, medium and long term.

Case study: RSA

RSA's responsible supply chain strategy leverages its buying power to effect positive change

RSA's Corporate Responsibility strategy, Confident Futures, has a focus on responsible supply chains as a key element of the 'Managing the Everyday Well' pillar of the strategy. Work under this pillar includes a supplier road map to improve performance that builds in sustainable practices such as fixing and restoring damaged goods rather than replacing them.

RSA's Third Party Contracts Policy and its Environment Policy govern its relationships with suppliers. The former includes a Supplier Code of Conduct that sets out the broader ESG criteria attached to RSA's supplier standards, requiring material suppliers to work towards minimising their environmental impacts and to demonstrate progress against targets.

Assessing supply chain environmental performance

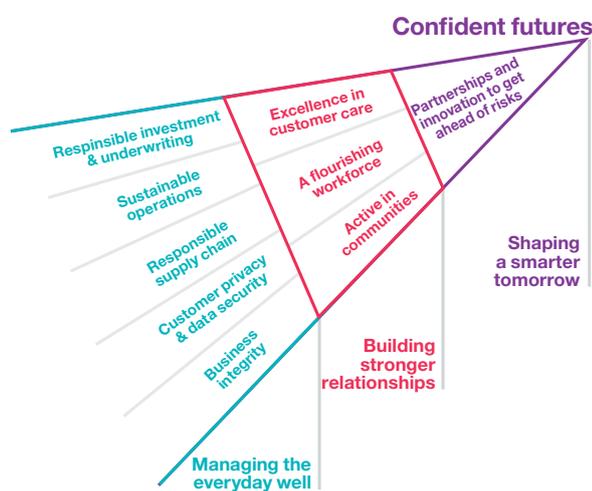
During the reporting year, RSA implemented a new monitoring process to assess the risks associated with a service or product. This process flags high-risk suppliers for further scrutiny by subject matter experts. To support these efforts, RSA launched a new supplier management platform that enables the assessment of suppliers against ESG criteria and stores information such as suppliers' environmental management policies. Additionally, RSA has conducted a full assessment of its supply chain carbon emissions, covering both carbon emissions from purchased goods and services, and emissions associated with the delivery of its claims solution.

Engaging suppliers on sustainability issues

In addition to the work to improve systematic monitoring, RSA directly engages with key suppliers to better understand their approach to managing their environmental impact and identifies opportunities for improvement. During 2019, RSA's supply chain managers engaged with larger suppliers in its motor and home supply chains to gain a better understanding of how these suppliers integrate sustainability into their operations.

As part of the supplier road map to improve performance, there are three key elements of RSA's approach:

- **repair over replace** – fixing and restoring damaged goods rather than replacing them where this can be avoided,
- **encouraging innovation** – making greater use of innovation in the damage management process,
- **operational efficiency** – encouraging more resource-efficient working practices by focusing on minimising travel, delays (and associated additional damage) and unnecessary work, this includes:
 - o improving communication between field adjusters and suppliers at a local level,
 - o adopting rapid drying systems to increase speed of drying after a flood,
 - o reducing stripping out.



Confident futures strategy | RSA

Future plans

For 2021, RSA has committed to continue to review and update its approach to third-party management in line with evolving expectations and working with regional markets to establish how the lessons learnt from the UK can be adopted across the business. This includes improving the sophistication of the responsible supply chain metrics. Further, RSA plans to embed ESG issues into its supply chain performance management process and look to better understand its suppliers' carbon emissions targets and commitments to adopt more sustainable practices.

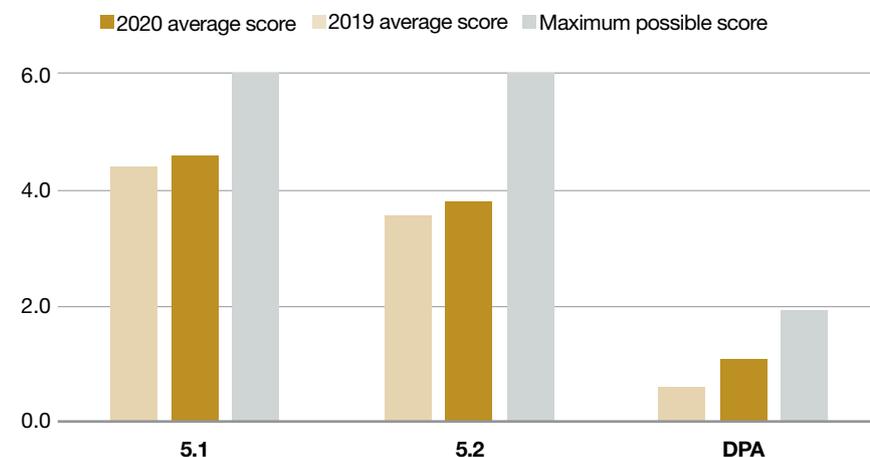
Principle 5: Inform public policymaking

The sub-principles

5.1 Promote and actively engage in public debate on climate-related issues and the need for action. Work with policymakers locally, regionally, nationally and internationally to help them develop and maintain an economy that is resilient to climate risk.

5.2 Support and undertake research on climate change to inform our business strategies and help to protect our customers' and other stakeholders' interests. Where appropriate, share this research with scientists, society, business, governments and NGOs in order to advance a common interest.

Principle 5: Group average absolute score by sub-principle



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

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

Members continue to demonstrate a strategic approach to engaging with policy makers and wider society to advance climate change adaptation and mitigation efforts in response to sub-principle 5.1. The large majority of members proactively shared research results, risk data and contributed to societal risk knowledge. However, fewer members demonstrated how those research outcomes were used to inform business strategies.

In sub-principle 5.1 all members outlined engagement activities that have occurred throughout the year to influence public policy on climate mitigation and adaptation. Almost half of members scored full marks for demonstrating the alignment of engagement activities to the organisation's material climate issues, with only three members providing no evidence. Over three-quarters of members described strong collaboration efforts through membership of industry bodies and new research collaborations.

There was a slight increase in member scores for sub-principle 5.2 from the prior year. Over three-quarters of members described research projects conducted during the year. However, few members referenced the outcomes of research or explained how the research informed business strategies. Over two-

thirds of members proactively shared research results widely across the industry, up from less than half in the previous year, including providing access to risk data and sharing knowledge at key events. There was a three-fold increase in members scoring full marks this year for their leadership position on engagement and strategic approach, demonstrating that the research plays an integral part in influencing business strategy and advancing the common interest.

Whilst the majority of members demonstrated planned activities to address the gaps in their disclosures from Principle 5, only one-third of members achieved full marks. Many of these members are in the process of working on thought leadership pieces, for example, to help conceptualise climate risk.

Key strengths

One of the key focuses of the Private Finance Agenda this year in the lead-up to COP26 and in building a net zero financial system, is to “share knowledge and build capacity around climate risk measurement and practices” across the industry.¹⁵ Members demonstrated very strong engagement activity this year with local, regional and international policymakers to influence public policy on climate adaptation and mitigation strategies, with many members exemplifying a leadership position in engagement activities.

RSA demonstrated this approach by engaging in industry consultations with the aim of sharing best practice and developing the sector's response to climate risk. RSA's CRO chairs the CRO Forum's Emerging Risk Initiative. A key output of the initiative was the publication of a positioning paper entitled *The heat is on*,⁵⁷ which looked at the role of the insurance sector in increasing societal resilience to climate change. RSA also benefitted from this collaboration through being able to consider different scenarios including tipping points, to assess investment management implications and to explore resulting implications for investment strategies.

Swiss Re has demonstrated its proactive engagement in climate-related issues including being a signatory to the UN Global Compact Business Ambition for 1.5°C and a founding member of the UN's Net-Zero Asset Owner Alliance, launched in the reporting year. Six other ClimateWise members also joined the Alliance including: **Aviva, AXA XL, Allianz, QBE, Munich Re** and **Zurich**.

Several members cited their input into key government and regulatory strategy. **Prudential** has engaged with public policy through its participation in the Monetary Authority of Singapore's Sustainable Insurance Taskforce, which is developing guidelines for sustainable insurance. **Zurich** engages with policymakers across the EU, leading in discussions around flood resilience, providing support to the UK government's Flood Insurance Review. Zurich has also participated in a European Policy Centre Issue Paper on the EU climate adaptation policy.

Munich Re is actively involved in the annual UN climate change conferences and founded the Munich Climate Insurance Initiative with representatives from the World Bank, non-governmental organisations (NGOs) and academia to provide risk management suggestions to organisations such as the UN Framework Convention on Climate Change. Munich Re's CEO has advocated for a meaningful price on carbon emissions in Europe through his media interviews and Munich Re's public annual general meetings.

TMK participated in the ClimateWise Policy Engagement Task Force that will publish a paper focused on underwriting in Q1 2021.

Several members target their engagement activities towards narrowing the climate risk protection gap. For example, as well as advocating for better natural catastrophe policy by the US government, **RenaissanceRe** has engaged with public policy through co-sponsoring the Aon Protection Gap Conference.

The conference brought together finance and insurance sector leaders with governments and NGOs to increase the coverage of natural catastrophe insurance in the face of the physical impacts of climate change. **MS Amlin** has contributed to public policy relating to climate change through its participation in the Insurance Development Forum (IDF). As part of IDF, MS Amlin is involved with advising the Risk Modelling Alliance which is helping governments of developing countries access risk-transfer products necessary to bridge the protection gap. MS Amlin also sponsored the Aon Protection Gap Conference referenced previously. **Beazley** is a founding member of the Lloyd's Disaster Risk Facility, which engages with governments and other organisations to enhance the resilience of countries exposed to natural disasters. This year the facility issued a Hurricane and Earthquake bond to the government of Puerto Rico.

Conducting or commissioning research is a way in which members support their clients and communities to adapt to climate change and is the focus of sub-principle 5.2. For example, **RSA**, in partnership with WWF Canada, conducted research on the topic of climate-resilient communities with a focus on flood risk. To date the partnership has helped organise and fund nature-based flood defences along the Saint John River in New Brunswick, Canada. **Chubb** outlined its support for research through its contribution to the Geneva Association's Climate Change Working Group and Task Force on Scenario and Stress Testing, as well as its research collaboration with the University of California, Santa Barbara on wildfire risk. **Zurich** continues to be one of two 'strategic partners' to WEF's *Global Risks Report*⁶ (GRR), providing editorial input, guidance and advice into the report's overall strategy and scope. In 2020, the GRR found, for the first time in ten years, that the top five global risks in terms of likelihood are linked to the environment.⁶

Over half of members demonstrated a strategic approach to research, and could demonstrate how it was used to inform business strategy. For example, **Flood Re's** 'The Future Housing Risk' research revealed the number of homes projected to be exposed to a high risk of flooding from the present out to 2080. The research instigated Flood Re's engagement with the housing planning sector and the Bank of England. Flood Re participated in the Town and Country Planning Association's (TCPA) conference and will be working with the National Flood

Forum and the TCPA to develop capacity-building workshops for local planners in communities at risk of flooding.

Some members actively encouraged innovation in climate-related research through sponsorship. One such instance is **Allianz's** annual Climate Risk Research Award for PhD students, which supports research focused on reducing the risk of extreme weather events linked to climate change and fostering resilience through applied technology solutions. The 2020 longlist includes a range of studies, from the use of new satellite-based data-driven flood simulations to the viability of winter tourism. **Ecclesiastical** has supported the Master's degree course in Sustainable Heritage at University College London for over a decade. This support demonstrates Ecclesiastical's commitment to ensuring that key skills are preserved.

Recommended areas for development

Members cite many and wide-ranging engagement activities to influence policymakers. Members should consider disclosing how they prioritise these engagements, explaining how activities align with the priority material climate-related risks and opportunities identified by the organisation and specific leading contributions made by members. Over half of members did not sufficiently demonstrate how they prioritise their policy engagements.

As well as providing details of the outputs from research undertaken, members should explain how the research has influenced business decision-making to demonstrate action taken to manage and mitigate these risks and any strategic implications. Again, over half of members did not provide enough evidence over how their research activities helped them to assess and address their key climate-related risks. Similarly, through external engagement on research insights, where proactively shared, members could further demonstrate the impact and key contributions of research for wider societies and key stakeholders.



Case study: Santam

Santam's engagement on building climate resilience in South Africa and a focused exploration of the South African risk protection gap

Throughout 2020, Santam has been engaging with the broader industry, with academia and with policymakers on the transition risk challenges for South Africa and in building regional climate resilience, with targeted exploration of the South African risk protection gap.

South African Risk Protection Gap Laboratory

Santam hosted the first South African Risk Protection Gap Laboratory in 2019, which aimed to collectively understand the South African risk protection gap and explore ways to narrow the gap. The event served as a catalyst for numerous stakeholders, including the scientific community, local government, insurance industry and those involved in disaster risk management. The lab participants explored the measures taken by industry actors and governments to narrow the risk protection gap (eg public-private partnerships (PPP) for risk management), next steps for the industry and future commitments in narrowing the risk protection gap, and more broadly how to integrate ESG risks into underwriting decisions.

Representatives from the insurance, regulation and science sectors as well as disaster risk management and local government joined the lab. The key barriers identified as contributors to widening the gap were lack of protection, in terms of limited physical and institutional infrastructure, as well as very low penetration of insurance cover amongst the population. In response to these challenges, participants acknowledged that a strategic framework addressing risk reduction and further encouraging PPPs on this matter is required.

Exploring regional transition risk challenges and promoting the adoption of the Financial Stability Board's (FSB) TCFD Framework

Santam is an active member of the National Business Initiative (NBI) and through engagement with the Initiative, in 2019 the Group hosted a roundtable event jointly with the University of Stellenbosch Business School. This roundtable event debated South Africa's transition risk challenges. The event also introduced the FSB's TCFD Framework, explored key regional transition risks and considered the implications for South African organisations.

Collaborative engagement on South African agricultural climate resilience and the risk protection gap

In 2020, Santam Group co-hosted with Zimnat General Insurance, an associate of the Santam Group in Zimbabwe, an event focused on building resilient cities, narrowing the risk protection gap, and exploring challenges within the food and agriculture sector. Leading practitioners and thought leaders in the African risk management and insurance ecosystem attended the event and shared experiences and ideas that will enable the growth of a more resilient and sustainable insurance sector in Africa. The meeting resolved to drive sustainability insurance practices, including a strong focus on embedding ESG considerations in underwriting and climate risk scenario frameworks. The participants agreed to engage with policymakers to enable sustainable business for smallholder farmers, and Zimnat is leading this pilot initiative.



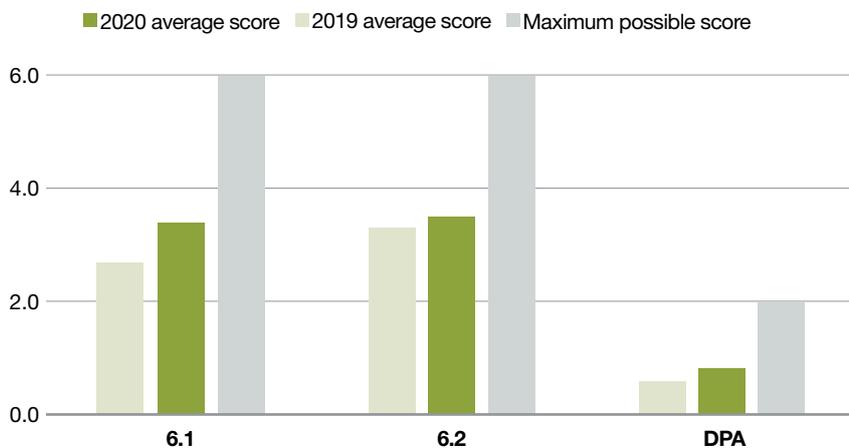
Principle 6: Support climate awareness amongst our customers/clients

The sub-principles

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

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

Principle 6: Group average absolute score by sub-principle



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

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

Members have demonstrated an increasingly proactive approach to promote the awareness of climate change and support customers and clients in their efforts to combat the climate challenge faced by businesses and communities, contributing to an increase in scoring for Principle 6.

Sub-principle 6.1 saw one of the largest increases in member performance this year. All but two members scored full marks on communicating their organisation's beliefs and strategy on climate-related issues with customers and clients, with many publishing new strategies and revising policies and positioning statements on climate change. Half of all members also scored full marks for demonstrating robust client engagement plans on climate change, a significant increase from the prior year. Despite these improvements, over two-thirds of members provided no evidence of quantitative disclosures of customers engaged through engagement campaigns, the impacts of those engagements, or of feedback mechanisms to shape and influence future activities.

Members performed slightly better than last year in sub-principle 6.2. A third of members provided sufficient evidence to demonstrate identified behavioural change needed to mitigate climate risk. However, a third of

members also provided no evidence of this. Three-quarters of members continue to engage customers to promote climate awareness and resilience through knowledge sharing. Members demonstrated particular advances in the provision of tools to allow customers to assess their own exposure to climate risk, which was the strongest scoring element. More than half of all members achieved full marks for equipping their customers and clients with tools and guidance to manage their climate exposures, often linked to particular weather-related perils faced by local communities.

More than half of all members demonstrated planned activities in the coming year to improve scoring further on this principle. Next year, it is expected an increased number of members will provide evidence of tools (such as Swiss Re's CatNet tool and Willis Towers Watson's Climate Quantified solutions) to help clients assess their own level of climate risk.

Key strengths

Against the backdrop of the upcoming 26th UN Climate Change Conference of the Parties (COP 26), delayed due to the COVID-19 pandemic, many members refreshed their climate strategies, policies and positioning statements this year. More members than ever provided enhanced transparency around organisational climate commitments and positioning, demonstrating real leadership in building client awareness and engagement on climate issues.

Willis Towers Watson communicated its beliefs and strategy on climate-related issues on its website, publishing a range of policies, statements, reports and climate change articles. On the website, it describes climate change as "the greatest challenge facing the world today". Willis Towers Watson was one of a few members to provide quantitative analysis of communication efforts, which included 72 articles on climate change published through the financial year. It explained how it uses campaign statistics to evaluate impact and outreach of different communication strategies by recording the number of unique page views.

Some members have developed comprehensive communication campaigns and engagement programmes to raise awareness around climate change or specific perils that communities face. **Munich Re's** approach to regular client communication is tailored to

individual client needs and has the objective of raising knowledge and awareness of climate-related risks. Its online magazine prominently addresses the issue of climate-related risks and resilience-building systems. Munich Re's biannual NatCat Press Release provides information on worldwide loss developments categorised by different perils and regions, raising awareness of the need for protection against natural hazards, with a focus on emerging and developing countries. In addition, clients have opportunities to have consultations with Munich Re's subject matter experts on their specific questions.

Sharing knowledge is another important objective of members' engagement programmes. The **Chartered Insurance Institute (CII)** included climate-related topics within its continuing professional development programme this year. An example of this was the Professional Focus webinar that the CII developed in partnership with ClimateWise, which drew out key implications for the insurance industry from recent climate research. The **ABI** used its convening power to host industry roundtable events dedicated to climate-related issues, including a panel webinar attended by over 300 people. The webinar focused on the regulatory changes needed to expedite the transition to a low carbon economy, along with the balanced roles and responsibilities of government, regulators and industry in facilitating this transition, including supporting the increased investment in green assets.

In response to sub-principle 6.2, some members use an array of data available to determine the behavioural change needed to mitigate the risks of climate change and to target engagement with clients. **RSA** identifies these key areas by performing in-depth analysis of claims data and bespoke natural catastrophe models, as well as applying in-house expertise. This allows RSA to support its customers by highlighting the risks they face, such as flooding risk, and providing advice on mitigation actions they could take to improve their resilience. For example, RSA recommends that all customers consider property flood resilience measures. **Chubb** informs customers on climate risk and supporting mitigating activities through the provision of thought leadership papers on specific climate risks to clients, highlighting the protection gap.

Most members provided advice and guidance directed at the specific risks customers and clients face in their geographic locations. In Canada, **RSA** equipped brokers with information, advice and tools such as the Climate Smart website, which hosted The Canadian Wildfire Information System, a government agency that monitors wildfire risk and occurrence in Canada. RSA also provided training to brokers on offering advice to customers on weather-related risks.

Members' strong customer orientation is evident in the provision of specific tools to help clients assess risks and take appropriate mitigation or adaptation measures. In its property risk engineering assessment services, **Zurich** makes available to clients its Natural Hazards Radar app. This app allows customers to assess their home or apartment's level of exposure to 11 different natural hazards and take appropriate adaptation or mitigation measures. Zurich also publishes specific flood guides for local authorities and residents. **Willis Towers Watson** offers an extensive range of tools and guidance materials to customers and clients to encourage climate awareness and promote climate resilience. These include proprietary offerings such as the 'Corporate Risk Tools and Technology' solutions that include Global Peril Diagnostic, Property Quantified and Risk Tolerance Quantified.

A few members go further and incentivise positive environmental change in customers through product offerings and services. **Aviva** developed an innovative product offering that rewards customers for environmentally responsible actions, such as reduced premiums for customers who opt to use public transport. Aviva also launched a suite of Defined Contribution pension default solutions that include climate considerations. To increase engagement with pension beneficiaries on this topic, Aviva's Stewardship Fund ran a pilot online platform that allowed 100 pension members transparency over the underlying assets and provided better visibility of company performance on issues that they care about, such as climate change.

Recommended areas for development

Members should consider developing an overarching customer campaign that quantifies the impact of outreach activities, as well as collecting feedback from clients and customers to improve engagement in the future. Only a quarter of members provided partial evidence of quantifying client outreach to inform their client engagement approach on climate change. The remaining members provided no evidence. Quantifying the effectiveness of engagement strategies will help members adjust how they communicate with clients and improve engagement results.

Members should adopt an engagement approach that leverages their own knowledge and insights to build client resilience to climate risk. Members should continue to develop tools to help clients assess climate risk and provide advice on how they can mitigate it. Half of members could provide more evidence of such tools, with a quarter currently providing only partial evidence and another quarter providing no evidence. In addition to descriptions of these tools, it is important for members to provide details of the actions taken by clients following member firms' guidance.



Case study: Aon

Aon has shown a commitment to building the resilience of its clients to the complex risks posed by climate change

Establishing new ways of working

Aon has established cross-industry vertical working groups that facilitate knowledge sharing amongst Aon's employees with the aim of consolidating their client offering. The working groups also provide a channel for engagement with clients as they include regular updates on climate risk and webinars to share current thinking and practice.

Aon piloted this approach for insurance clients and has now broadened this to its financial institution practice. Aon plans to build similar networks for its real estate and energy clients to help increase awareness and improve solutions. Aon also intends to create a client transitional panel by the end of 2020, where it will source client transition needs and aims to innovate products with the insurance industry to meet these needs.

Knowledge sharing and innovative products

Through its Insight Series, Aon published a white paper on climate change that highlighted the insurance protection gap and opportunities for innovative insurance solutions. Aon leveraged this publication by developing an engagement campaign and hosting events in Canada, Japan and Australia for its global multinational clients.

Aon brings external expertise to its clients through partnerships with universities and its broker relationship with The Climate Service. The Climate Service specialises in providing risk analytics to investors and businesses to measure and manage the financial impacts of climate change on business and investments. Aon's annual analytics events provide a forum to introduce these experts to clients and share collaborative research with them.

Aon publishes regular 'Catastrophe Insights', including a weekly catastrophe alert service as well as updates on catastrophic events as they happen around the world. These insights feed into Aon's annual *Weather, Climate & Catastrophe Insight Report*.

Aon has launched innovative products such as Risk Layer that allows clients to access an independent view of risks. Feeding into this is Aon's engagement with over 30 clients in different industries. In this way, Aon is exploring how a data-informed approach to climate risk can reduce volatility and improve operational performance.



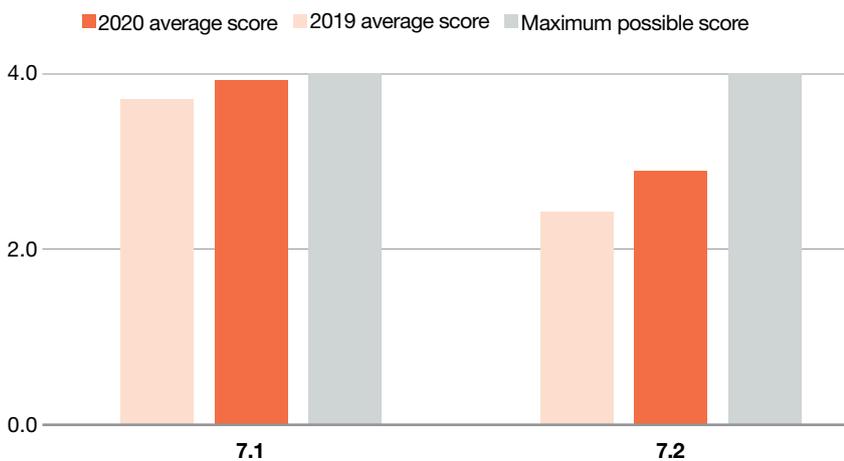
Principle 7: Enhance reporting

The sub-principles

7.1 Submission against the ClimateWise Principles.

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

Principle 7: Group average absolute score by sub-principle



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

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

Principle 7 embeds the commitment to transparency by promoting the public disclosure of climate-related risk, opportunities and action amongst members through the ClimateWise Principles.

Around half of all members scored full marks for publicly disclosing their ClimateWise Principles report, a slight increase from the prior year.

This year encouraging progress was made by members in their incorporation of key elements of the ClimateWise Principles into their annual reports, with over three-quarters of all members providing integrated reporting within their annual financial reports. This reflects members' proactive approach to implementing the TCFD recommendations. Common practice in integrating the ClimateWise Principles into annual reporting varies by member with some members integrating elements

of their ClimateWise report into their annual (CSR)/ sustainability reports whilst other members fully publish their ClimateWise Principles report as part of their annual climate-related financial disclosures or TCFD reporting within the annual report.

As in previous years, all members report against the ClimateWise Principles, providing evidence for all applicable sub-principles for the vast majority of members in a timely manner.

There were no requirements to demonstrate planned activities relating to Principle 7.

Key strengths

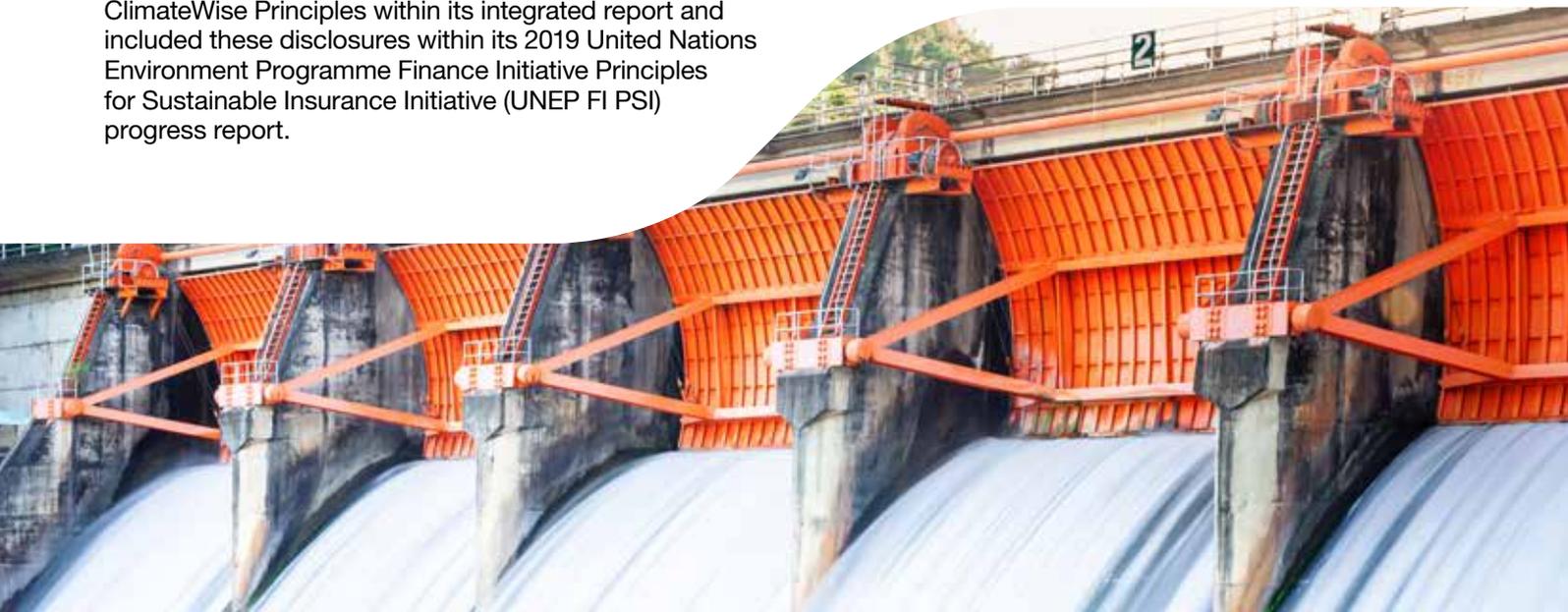
Scoring has significantly improved for Principle 7 this year, with members demonstrating a proactive approach to implementing the TCFD recommendations. This is against the backdrop of increasing calls for mandatory TCFD disclosures and ahead of the expected mandating of TCFD in selected jurisdictions such as the UK and Canada. UN PRI signatories (13 members) are required to report on TCFD-based strategy and governance criteria as of this year.

Members are required to publish their ClimateWise Principles report under sub-principle 7.2 and half of all members did so. **Argo** publicly disclosed its ClimateWise Principles report and incorporated key elements within its annual reporting, scoring full marks under this sub-principle along with **Aviva, Hiscox, Lloyd's, Sanlam, Santam, TMNF** and **Zurich**. **Zurich** publishes its ClimateWise Principles report annually on its UK website that hosts its other environmental reporting and commitments. **Hiscox** publishes a standalone climate report annually that is structured by the seven ClimateWise principles and their respective sub-principles. **Santam** incorporated key elements of the ClimateWise Principles within its integrated report and included these disclosures within its 2019 United Nations Environment Programme Finance Initiative Principles for Sustainable Insurance Initiative (UNEP FI PSI) progress report.

Over three-quarters of members have integrated key elements of ClimateWise reporting directly into their annual reporting, reflecting the growing demand for TCFD-aligned reporting. **Allianz** has done so by integrating a climate strategy section into its annual report and accounts, which also references its TCFD disclosure in its annual sustainability report.

Recommended areas for development

All members should publish their ClimateWise Principles report to encourage appropriate disclosure of climate-related activities and demonstrate their commitment to transparency. A third of members do not make any public disclosure of the ClimateWise Principles report. In addition, members should continue to incorporate the key elements of their ClimateWise Principles report within their annual financial reporting, in line with the TCFD recommendations. A fifth of members do not fully incorporate key elements of ClimateWise reporting into their annual reports.



Appendix 2:

Scoring methodology

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

Evidence has been considered based on the quality and relevance of the activities being conducted. ClimateWise Principles are weighted based on organisational category: Professional Bodies and Associations, Insurers, Brokers, Risk Modellers, Reinsurers and Corporation of Lloyd's. As a result members providing evidence in areas where more weight is assigned achieved higher scores. The scoring process is as follows:

Each level, and planned activity, receives a maximum of 2 points based on:

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

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

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

Members should aim to provide evidence against all of the ClimateWise Principles. However, there is an option for members to self-exempt from sub-principles if required (see *ClimateWise Principles Guidance* document for more details). Exemptions to sub-principles 2.2 and 2.3 were provided to two members and exemptions to sub-principle 7.2 were provided to four separate members reporting for the first time.

The scoring process:

1. Detailed review of ClimateWise submissions

Members submitted their reports and supporting documents to CISL, which were in turn reviewed and scored by the Deloitte independent review team using the methodology described previously. Each initial submission is treated as final.

2. Distribution of initial feedback

An initial feedback form was shared with each member showing their initial score against each of the seven Principles, narrative feedback on their performance and their initial ranking across the membership base.

3. Discussion with members

Following the distribution of the initial feedback, all members were given the opportunity to participate in a call to discuss their initial score and where relevant provide clarifications on submitted evidence. Whether additional clarifying evidence is accepted was based on the independent reviewer's discretion.

4. Reassessment of score

Some member scores were then amended as a result of the clarification discussions and the review of additional evidence provided by the member.

5. Distribution of final feedback and scores

A final feedback form was then shared with each member, including the breakdown of the final score compared with average and prior year membership score, an analysis of key strengths and suggested areas for further development by Principle and sub-principle, and graphs showing performance relative to other members.

Note on scoring for the Corporation of Lloyd's and associated managing agents:

The following organisations have been assessed as part of the Corporation of Lloyd's: Argo International, Beazley Group, Chubb, The Hartford, Lloyd's, MS Amlin, Tokio Marine Kiln, RenaissanceRe Syndicate Management and QBE Insurance Group. A separate scoring methodology was used to aggregate Lloyd's managing agent scores for one overall score for the Corporation of Lloyd's.

Appendix 3:

Member ranking

Anonymised	2020 score	2019 score	2020 rank	2019 rank
A	92%	72%	1st	1st
B	89%	60%	2nd	Joint 7th
C	83%	60%	3rd	Joint 7th
D	82%	-	4th	-
E	80%	67%	5th	Joint 3rd
F	78%	62%	Joint 6th	Joint 5th
G	78%	-	Joint 6th	-
H	71%	62%	8th	Joint 5th
I	69%	53%	9th	Joint 9th
J	68%	50%	Joint 10th	13th
K	68%	51%	Joint 10th	12th
L	66%	47%	12th	14th
M	64%	53%	13th	Joint 9th
N	60%	72%	Joint 14th	2nd
O	60%	52%	Joint 14th	11th
P	58%	67%	16th	Joint 3rd
Q	46%	-	17th	-
R	45%	41%	18th	15th
S	43%	38%	19th	16th
T	34%	-	20th	-
U	25%	26%	21st	17th

Appendix 4:

Score distribution

Principle	Sub-principle	Level	Score 0	Score 1	Score 2	
1. Be accountable 1	1.1	Ensure that the organisation's Board is working to incorporate the Principles into business strategy and has oversight of climate risks and opportunities.	Level 1	1	6	13
		Level 2	2	5	13	
		Level 3	2	5	13	
	1.2	Describe management's (below board-level responsibility) role in assessing and managing climate-related issues.	Level 1	1	5	14
			Level 2	1	5	14
			Level 3	5	4	11
	Demonstrating planned activities			4	6	10
2. Incorporate climate-related issues into our strategies and investments 2	2.1	Evaluate the implications of climate change for business performance (including investments) and key stakeholders.	Level 1	2	4	14
			Level 2	1	5	14
			Level 3	0	10	10
			Level 4	3	8	9
	2.2	Measure and disclose the implications of climate-related issues for business performance (including investments) and key stakeholders.	Level 1	2	7	9
			Level 2	8	5	5
			Level 3	9	5	4
			Level 4	10	3	5
			Level 5	8	1	9
	2.3	Incorporate the material outcomes of climate risk scenarios into business (and investment) decision-making.	Level 1	4	5	9
			Level 2	5	6	7
			Level 3	9	1	8
			Level 4	6	3	9
	Demonstrating planned activities			3	9	8
3. Lead in the identification, understanding and management of climate risk 3	3.1	Ensure processes for identifying, assessing and managing climate-related risks and opportunities are integrated within the organisation (including investments).	Level 1	1	3	16
			Level 2	2	10	8
			Level 3	2	2	16
			Level 4	11	3	6
	3.2	Support and undertake research and development to inform current business strategies (including investments) on adapting to and mitigating climate-related issues.	Level 1	0	3	17
			Level 2	3	5	12
			Level 3	5	6	9
	Demonstrating planned activities			8	6	6

Principle	Sub-principle	Level	Score 0	Score 1	Score 2	
4. Reduce the environmental impact of our business	4.1	Encourage our suppliers to improve the environmental sustainability of their products and services, and understand the implications these have on our business.	Level 1	5	5	10
		Level 2	7	9	4	
		Level 3	9	5	6	
	4.2	Disclose our Scope 1, 2 and 3 greenhouse gas emissions using a globally recognised standard.	Level 1	3	10	7
			Level 2	5	3	12
			Level 3	5	2	13
			Level 4	4	4	12
	4.3	Measure and seek to reduce the environmental impacts of the internal operations and physical assets under our control.	Level 1	5	2	13
			Level 2	8	5	7
			Level 3	8	5	7
			Level 4	13	5	2
			Level 5	1	7	12
	4.4	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.	Level 1	4	7	9
			Level 2	6	9	5
			Level 3	10	9	1
	Demonstrating planned activities			4	4	12
5. Inform public policymaking	5.1	Promote and actively engage in public debate on climate-related issues and the need for action. Work with policymakers locally, regionally, nationally and internationally to help them develop and maintain an economy that is resilient to climate risk.	Level 1	0	5	15
		Level 2	3	8	9	
		Level 3	3	4	13	
	5.2	Support and undertake research on climate change to inform our business strategies and help to protect our customers' and stakeholders' interests. Where appropriate, share this research with scientists, society, business, governments and NGOs in order to advance a common interest.	Level 1	4	7	9
			Level 2	4	3	13
			Level 3	7	4	9
	Demonstrating planned activities			5	8	7
6. Support climate awareness amongst our customers/clients	6.1	Communicate our beliefs and strategy on climate-related issues to our customers/clients.	Level 1	0	2	18
			Level 2	7	3	10
			Level 3	14	6	0
	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.	Level 1	8	5	7
			Level 2	4	8	8
			Level 3	4	5	11
Demonstrating planned activities			8	8	4	
7. Enhance reporting	7.1	Submission against the ClimateWise Principles.	Level 1	0	1	19
			Level 2	1	0	19
	7.2	Public disclosure of the ClimateWise Principles as part of our annual reporting.	Level 1	5	3	8
			Level 2	2	1	13

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