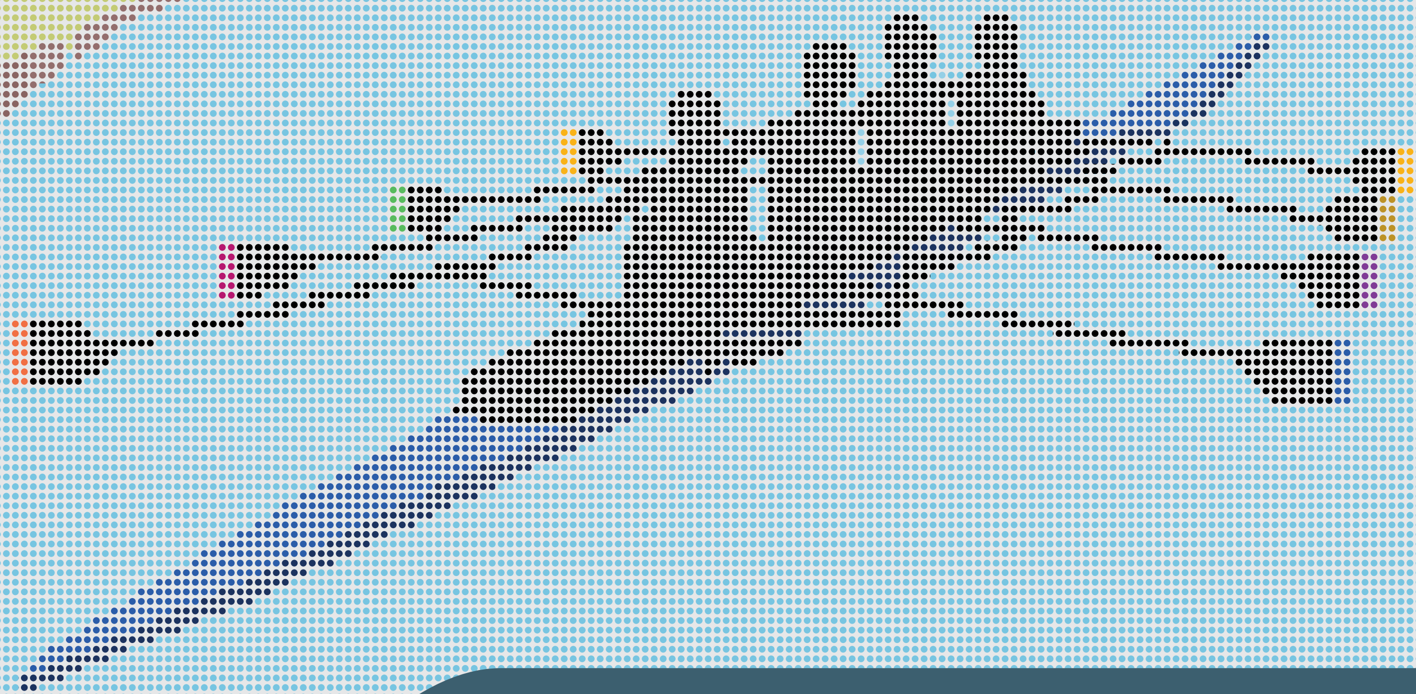
ClimateWise
Insuring a sustainable future



The ClimateWise Principles Independent Review 2021

The insurance industry pulling together

UNIVERSITY OF CAMBRIDGE
INSTITUTE FOR SUSTAINABILITY LEADERSHIP

The University of Cambridge Institute for Sustainability Leadership

The University of Cambridge Institute for Sustainability Leadership partners with business and governments to develop leadership and solutions for a sustainable economy. We aim to achieve Net Zero, protect and restore nature, and build inclusive and resilient societies. 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.

ClimateWise

ClimateWise supports the insurance industry to better communicate, disclose and respond to the risks and opportunities associated with the climate-risk protection gap. This is the growing divide between total economic and insured losses attributed to climate change.

Representing a growing global network of leading insurance industry organisations, ClimateWise helps to align its members' expertise to directly support society as it responds to the risks and opportunities of climate change.

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.

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ClimateWise members 2021

Note: organisations in their first year of membership are not required to produce a ClimateWise Principles report.

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Deloitte.

Foreword

Joining CISL as CEO and Director in 2021 is a great privilege and opportunity. Since 1988, CISL has brought leaders together to set, implement and be accountable for a cutting-edge sustainability agenda. ClimateWise members have played a pivotal role in driving progress within the global insurance industry for the last fifteen years.

This latest ClimateWise Principles Independent Annual Review showcases the ambition of the insurance industry and I am delighted to see continued improvement in member scores. The Review presents the rationale for closer collaboration across the insurance value chain to drive innovative approaches to decarbonisation – an urgent message that particularly resonates after COP26.

The insurance industry has a major responsibility and increasingly well-articulated role within the finance system, as well as in wider society. Across CISL, we see many new ways to strengthen links between the insurance industry, the real economy and policy makers, from closer engagement with our Corporate Leaders Groups to new connections with SMEs and start-ups via our Accelerators hosted at our new headquarters, the Entopia building.

ClimateWise has always led the way for the insurance industry as a whole. Looking forward, we believe that an integrated focus on climate, nature and people is critically needed and will become central to the industry's longevity and sustainability. In 2022, CISL will therefore continue to raise the bar for bolder action and collaboration across industries, building on the excellent work demonstrated by ClimateWise members in this Review.

Clare Shine,
CEO and Director, CISL

Chair's foreword

In 2021 leaders across science, politics, business and finance came together in an unprecedented way at COP26 to collaborate and find solutions to the climate emergency.

The ClimateWise membership has again demonstrated in the Principles Independent Annual Review the insurance industry's ambition and action to provide the products and services for a smooth transition to net zero by 2050. The breadth of membership and the tangible cooperation across the insurance value chain enable clients, as well as government and wider society, to understand their changing risk exposure and the implications for adaptation and transition measures to be taken.

Stepping forward together gives us the best chance to deliver impact at a scale commensurate with the accelerating climate crisis, and our papers on 'Risk Sharing in the Climate Emergency' and 'Climate product innovation within the insurance sector' form part of our efforts across the membership to highlight opportunities to increase ambition.

Through our research and engagement this year, the responsibility and opportunities for the insurance industry to support disaster risk reduction and recovery, as well as the transition to a low carbon economy are clear. We particularly welcome the endeavours of the Sustainable Markets Initiative Insurance Task Force and Net Zero Insurance Alliance in which many ClimateWise members are actively involved.

The continued increase in member scores against the ClimateWise Principles shows our commitment to improvement. I look with great hope and pride to the increased membership and growing activities of the members individually, together and as an industry.

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

Executive summary

With the Intergovernmental Panel on Climate Change's (IPCC) sixth annual assessment report (AR6), published in August 2021, unequivocally stating that climate change is already occurring and that human activity is responsible, the need for action has never been greater.[1] The insurance industry has recognised the key role it must play in supporting the global economy's transition to net zero and building societal resilience to climate change.

The industry is already experiencing the direct consequences of record-setting temperatures and carbon emissions in the atmosphere. Global insured losses from natural catastrophes rose to $81 billion in 2020, up from $63 billion in 2019.[2] The protection gap – the difference between economic losses and insured losses – is widening and reached a record $231 billion in 2020,[3] up from $227 billion in 2019,[4] with three quarters of the world's potential losses from natural disasters remaining underinsured. As the AR6 has outlined, climate change is impacting every region on earth in unprecedented ways, many of which are irreversible over hundreds to thousands of years and require rapid and large-scale reductions in greenhouse gas (GHG) emissions. The insurance industry, reflected in the expanding and increasingly diverse ClimateWise membership, has implemented a wide range of tools, approaches and products and services in its response to this systemic risk.

Climate change considerations are increasingly embedded throughout organisations through robust governance on climate issues, as evidenced by improved scoring against ClimateWise Principle 1. The industry has continued to embed climate change risk into its practices. As the Taskforce on Climate Related Financial Disclosures (TCFD) 2021 *Status Report* notes, the insurance industry has continued to outperform other sectors in disclosure of these risk management processes.[5] The ClimateWise membership – which has been reporting against the ClimateWise Principles for nearly 15 years – has comprehensively integrated climate-related risks into existing risk management procedures, whereas only 39 per cent within the wider insurance industry, as per the TCFD *Status Report*, met the TCFD recommendations for effective disclosure (Principle 7).

The industry is also starting to broaden co-ordination and collaboration across the different players in the value chain, a need highlighted in the ClimateWise whitepaper *Climate product innovation within the insurance sector.*[6] These improvements are reflected in the growth of ClimateWise (12 per cent increase in member numbers over the last year) and the rise in the ClimateWise Principles score for 2020 from 65 per cent to 68 per cent. However, there is still a need for more strategic thinking across the industry and increased use of reliable operational metrics, as evidenced by the lower average increase in scoring against Principle 2 compared to the overall average.

While the impact of COVID-19, lockdowns and remote working may have hindered some members' ability to collaborate with certain sets of stakeholders, the membership continued to demonstrate thought leadership and public engagement in a variety of innovative ways throughout the value chain, for example supporting customers by raising awareness of climate product offerings, strengthening advisory partnerships and deepening customer engagement. The ClimateWise *Climate product innovation within the insurance sector whitepaper*[6] and the Sustainable Markets Initiative (SMI) Insurance Taskforce's *Product Innovation Showcase*[7] highlight the types of products and services that will be needed and are being developed to help facilitate the global transition to net zero and increase climate resilience. The Association of British Insurers (ABI)'s landmark industry Climate Change Roadmap,[8] which sets out targets, best practice and priorities for the sector, and Lloyd's climate action roadmap,[9] which sets out a number of wide-ranging steps to facilitate the net zero transition for multiple industries, are key examples of members thinking systemically from an industry perspective and the enhanced and novel collaboration that the climate emergency requires.

ClimateWise members continued to participate in and lead global industry forums, such as the Insurance Development Forum (IDF) and the Principles for Sustainable Insurance (PSI), as well as set up new ones, such as the Net Zero Insurance Alliance (NZIA), the Glasgow Financial Alliance for Net Zero (GFANZ) and the SMI Insurance Task Force (see box on page 17). Participation and cooperation in these forums was perhaps best demonstrated at the United Nations Conference of the Parties 26th Climate Change Conference (COP26), which saw expanding membership of the NZIA, along with other initiatives and papers, including the University of Cambridge Institute for Sustainability Leadership (CISL)'s *Risk sharing in the Climate Emergency: Financial regulation for a resilient, net zero, just transition*.[10] The year also saw increased standardisation of sustainability frameworks and metrics, culminating in the launch of the International Sustainability Standards Board (ISSB) at COP26. The ISSB will address a key market need for standardised sustainability disclosures, though further work is needed to address standardisation of frameworks for environmental, social and governance (ESG) and climate-related data.

Problems obtaining reliable and accurate data for asset and underwriting portfolios, upskilling workforces and uncertainty over regulatory expectations continue to impede progress toward setting strategy. The lack of standardisation and agreement on tools and frameworks also appears to be a barrier to progress. Other opportunities, such as embracing new risk transfer solutions for green financing and private–public partnerships to help scale risk-transfer capital, remain unexploited for the industry.[6] The 2021 ClimateWise Principles independent review suggests that some firms may still view climate risk from an individual perspective on their balance sheets, focusing on the performance of individual lines of business or secondary perils. Together with government, the industry should be focusing on systemic market risk that could disrupt it and lead to severe protection gaps in some geographies or lines of business.[11] Through a focus on greater collaboration and strategic thinking as an industry, the insurance sector can fulfil its role as 'society's risk manager' to help mitigate climate risk and strengthen societal resilience to climate change.[12]

The insurance value chain

ClimateWise-led collaboration and coordination across the insurance value chain recognises the unique roles different parties must play in adapting to and mitigating climate change.

With IPCC's AR6 calling for immediate, rapid and large-scale reductions in GHG emissions,[1] the need to increase societal resilience and implement effective net zero transition plans has never been greater. Insurance can play a key role in facilitating the required transition by helping promote a better understanding of climate risk, thus increasing resilience amongst its customers and the wider economy. Through de-risking certain activities, insurance can help reduce the costs of capital and drive innovation and investment in the technologies and business models needed to facilitate the net zero transition.[6] However, increased collaboration is required across each part of the value chain to deliver the systemic response required (see Figure 1).

Collaboration is needed to help develop the types of public–private partnership opportunities required to facilitate blended finance approaches and scale risk-transfer capital. Currently, international risk pools linked to climate change have only a regional focus, such as the Caribbean Catastrophe Risk Insurance Facility;[13] there are no such pools with global coverage. Increased collaboration can also help enhance 'engineering' approaches to underwriting, which aim to compensate for a lack of historical data around claims performance for new technologies, building on close relationships between the industry and technology developers, particularly where there is a paucity of historical data. The value chain can also work together to reduce duplication of efforts between industry participants, such as data sharing between brokers and insurers during the product development phase.[6]

As illustrated overleaf, the insurance value chain is distinct in the number of participants, including brokers, insurers, reinsurers, modelers, model vendors, loss adjustors and legal firms. Participants also work externally with a broader set of stakeholders, such as governments and university research departments. These participants all interact to deliver insurance products and risk advisory services to commercial and individual customers, creating potential bottlenecks when it comes to sharing data and risk information. The insurance value chain is finding new ways to collaborate internally and externally, and this is reflected in the diversity of the ClimateWise membership and members' activities. However, further work is needed to increase collaboration and coordination and to equip both customers and society with the tools and knowledge required to address what the Bank of England has described as one of the most "significant and urgent" risks facing us today.[14]

> "Through de-risking certain activities, insurance can help reduce the costs of capital and drive innovation and investment in the technologies and business models needed to facilitate the net zero transition."

The following section outlines how each participant in the value chain has a key role in promoting better climate resilience and risk management. Brokers and (re)insurers, who must work with clients to enhance the tools and services necessary to inform them of their climate risks and opportunities, are increasing their levels of collaboration within the value chain – and with academia – to improve understanding of climate risk. They are using this understanding to drive behavioural changes in their customer base before these risks crystalise, by thinking beyond mere risk transfer and, increasingly, integrating risk engineering solutions into underwriting approaches, as well as promoting the use of sustainable claims and restoration initiatives. Firms are increasingly recognising the need to improve the resilience of their own operations and supply chains. Further, the industry is increasingly sharing these insights in global forums and seeking ongoing dialogue and collaboration with government and the wider financial sector.

The industry can help build resilience by providing tools and services to inform clients of their climate risk and opportunities.

Members throughout the value chain are developing innovative tools and services for their customers to help them assess the physical and transition risks and opportunities they face before these risks crystalise. Brokers are in a unique position to help their clients as they have a holistic understanding of the challenges and risks they face. Brokers can use their networks to identify product opportunities and raise awareness in their client base of potential risk transfer and advisory solutions.[6] Some have responded by developing and launching a variety of tools and risk advisory services to encourage climate awareness and promote resilience. Howden Group has established a climate risk and resilience division to help clients engage with climate issues and has also seed-funded Parhelion, the world's first explicitly sustainability-focused insurer.[16] The SMI Product Innovation Showcase gives further examples of brokers engaging with clients to help them assess their physical and transition risk needs.[8]

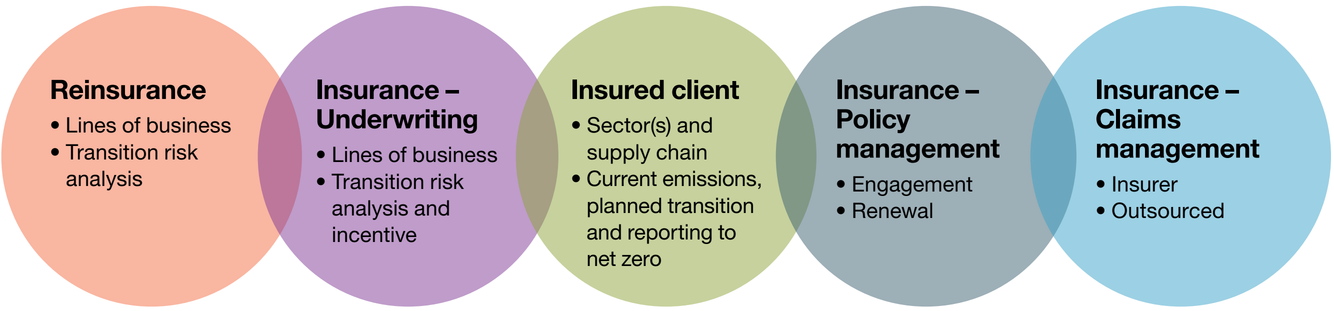


Figure 1. Insurance layers and key aspects of underwriting operations[15]

Brokers are also playing a key role in the transition of the industry as a whole. Willis Towers Watson, for example, deepened its Climate Quantified approach by supporting the launch of the Climate Transition Pathways (CTP) accreditation framework to provide insurers and financial institutions with a consistent approach to assessing firms' transition plans (see case study on page 50). The London and International Insurance Brokers Association (LIIBA) published a paper on the role of brokers in the industry's push towards net zero, focusing on brokers' ability to identify and assess physical, transition and liability risks.[17] While these are encouraging examples of best practice, there is still room for brokers – and other parts of the value chain – to work with other participants to avoid duplication of efforts, particularly in areas of primary research and sharing of risk and customer data. Brokers are well placed to build on their strengths to increase understanding of climate risk and help insurers co-develop products to meet current and evolving demand; however, further action is required from more brokers across the industry for it to realise its potential.

Insurers and reinsurers are able to take a higher-level view and assess the impact across business lines and customer segments at the balance sheet level. Nevertheless, they have also developed tools and services for clients, both individuals and corporates, to help them assess their risks. For example, Aviva has developed its 'Would you be ready?' campaign, which includes an educational tool for small businesses to encourage climate awareness and promote resilience, while QBE's Sustainability Self-Assessment Tool helps businesses assess their ESG risks and opportunities and environmental impact, as well as offering recommendations for corrective action. Other members, such as Swiss Re, have formalised engagement frameworks that encourage firms to actively develop a climate strategy.

Other insurers and reinsurers have recognised the need for greater access to risk data that can be shared across the value chain, a problem that continues to challenge the industry.[18] RenaissanceRe is encouraging the use of open-source modelling tools and exposure data standards, which will give customers and risk managers greater ownership of their risk data and allow them to quantify and manage their climate risk. Icebreaker One's Standard for Environment, Risk and Insurance (SERI) programme is another useful example of attempts to bridge the data gaps between finance and climate change with its goal to create a detailed data governance framework to promote sector-wide data sharing in insurance to aid climate-related product development.[19] Open-source data frameworks and governance to promote data sharing are key tools to promote collaboration.

Increased collaboration within the value chain is key to improving the understanding of climate risk and enabling development of climate-related products and services.

A lack of co-ordination within the value chain remains a key barrier to the growth of climate-related products and services in the financial sector.[6] ClimateWise members throughout the value chain, however, have provided examples of innovative collaboration with third parties to both improve their understanding of climate risk and help deliver these climate tools and services to customers and the broader economy.

Interactions with model developers and vendors are a key example of this collaboration. The industry has increasingly recognised the importance of sophisticated catastrophe modelling, given the complexity and interconnectedness of the physical and transitional risk landscape. QBE, for example, has partnered with catastrophe modelers Risk Management Solutions (RMS), AIR Worldwide and Aon to refine catastrophe models and help improve the pricing and reserving of its products. Chubb has also collaborated with catastrophe modelling vendors to better quantify wildfire risk. Aviva has updated its Climate VaR measure, which it developed in conjunction with the UNEP Finance Initiative (UNEP FI) investor pilot project and Carbon Delta and Elseware, a risk management and quantification consultancy, to incorporate a number of MSCI methodology improvements and infrastructure assets, specifically building on the ClimateWise Transition risk framework.[20]

Combining historical data with the latest climate science is key to developing forward-looking, recalibrated models and improving their reliability. This approach was highlighted by the ClimateWise Physical Risk Framework, which provided a guide to investors and lenders to understanding changing physical risks and impacts on their portfolios.[21] The Geneva Association, an international think tank, has also highlighted the importance of leveraging innovations from catastrophe risk modelling when incorporating climate resilience into insurance product offerings.[22] There remain further opportunities for policy makers to promote these initiatives, including sharing publicly funded data with modellers, insurers and the wider finance sector, to help refine the underlying assumptions of catastrophe models.[23] The Lighthill Risk Network, which includes ClimateWise members Aon, MS Amlin, Liberty Specialty Markets, Lloyd's of London and Hiscox, is a good example of a network dedicated to sharing risk knowledge between academia, government and business that others should look to emulate.[24]

On the transition side, companies are increasingly engaging law firms to advise on climate litigation risks, including liability under financial services and corporate reporting disclosure requirements. Here, members have cited the Grantham Institute's *Global trends in climate litigation series* as a particularly useful synthesis of global litigation trends for insurers to draw on.[25] Firms have reviewed policy wordings or engaged with third parties to develop policy wordings and contractual clauses to deliver climate solutions such as those offered by the Chancery Lane Project to promote 'repair over replace' polices in insurance contracts.[26]

Other members have recognised the value in leveraging each other's skills and tools to enhance product offerings. Liberty Specialty Markets' and SCOR's partnership with the CTP accreditation framework to provide insurance capacity following a detailed assessment of their climate transition risks and transition strategy is a key example for others to follow. This partnership shows the role the industry can play in driving behavioural change by providing capacity only for carbon-intensive industries with viable transition plans. Flood Re has used its extensive knowledge of flood risk to engage cedants on developing approaches responding to the Bank of England's Climate Biennial Exploratory Scenarios (CBES), which firms will use to evaluate their exposures under each of three illustrative scenarios. Examples such as these show that firms can reduce duplication of effort and ensure work is carried out more efficiently by those with the requisite skills and knowledge.

The value chain is engaging academia and the wider industry to improve its understanding of climate risk and enable the development of climate-related products and services.

In order to offer climate-related products and services, the value chain is engaging with academia to enhance understanding of climate risk. With a lack of historical data, high risks associated with new technologies, and the fact that changing climatic conditions render past data less reliable for physical risks, close collaboration with technical experts from academia and industry is also needed to improve understanding of climate risk. The industry has built on longstanding relationships with the scientific community by commissioning, funding and disseminating research to inform its understanding of climate risk. RenaissanceRe, for example, held risk mitigation forums with clients and brokers that brought together scientists and policy makers to share research and approaches to climate risk management and mitigation.

Sedgwick and Flood Re commissioned joint research with the University of the West of England on the impact of flooding and the value of flood resilience (see case study on page 46). Allianz continues to run its Climate Risk Research Award for PhD students, and Aon partnered with Columbia University to create a climate change solution for its Impact Forecasting tropical cyclone catastrophe model suite. Chubb has funded research to develop mapping capability for wildfire risk with the University of California Santa Barbara. These and numerous other examples show the increasingly close relationship between insurance and academia as the industry continues to improve on its expertise on climate risk. Here, the industry can take a leadership role in society and bring others into the academic partnerships it has long nurtured. As the Geneva Association has identified, disseminating and sharing research insights with other market participants and the broader economy would serve the industry well.[12] It would create further positive feedback loops by encouraging other participants to share their insights and reduce the burden on resource-constrained participants having to fund research or hire expensive talent individually.[6]

Increased collaboration is helping the value chain to deliver a holistic 'engineering approach' beyond risk transfer to pricing risk.

As well as informing customers about their risk, ClimateWise members and the industry are helping mitigate risk and improve resilience through the products and services they sell by moving towards a risk engineering approach in underwriting considerations. Risk engineering, which involves working with clients to mitigate and manage their property risks, is part of a broader shift within the industry from reimbursing claims to preventing them.[27] Howden Group, for example, has developed a product that provides coverage against the risk of carbon offsets purchased under the California Carbon Cap and Trade Scheme, which should help encourage the smooth functioning and growth of carbon cap and trade markets. This development indicates a key future role for the industry, namely to help facilitate the transition by de-risking climate-friendly activity and helping public policy to achieve its desired goals. Governments and industry should work more closely together when formulating such policies, so that risk sharing is appropriately apportioned between the public and private spheres.[10]

AXA XL's Risk Consulting Services provide more traditional risk engineering services to help clients improve their climate resilience, for example promoting actions such as retrofitting, identifying alternative supply chain solutions and ensuring adequate inventories. Similarly, Chubb incentivises environmentally friendly behaviour and preventative measures with premium credits, while Munich Re also encourages behavioural changes in customers, such as requiring Californian utilities to have programmes which decrease the threat of igniting vegetation. Other examples, including those in the SMI product showcase, actively promote risk engineering for renewable technologies such as offshore wind.[6]

Despite progress, there remain opportunities for the industry to go further to promote climate-friendly behaviour. As firms and industries progress transition plans, the sustainable decommission of carbon-intensive assets will grow in importance. Hiscox's third-party liability coverage, which covers operators and enables them to remove end-of-life assets that could otherwise be environmentally damaging, and Marsh's late life assets decommission insurance, which provides cover ranging from allowing alternative replacement schemes for late life assets to liabilities arising from the decommissioning process itself, are noteworthy examples; however, further action across the industry will be needed.

The industry is helping build resilience by engaging customers and third parties during and after events to 'build back better' and by improving the environmental impact of their operations and supply chains.

The industry is finding innovative ways to collaborate to improve resilience during and after loss events. Some members are increasingly employing parametric solutions and early warning systems when natural weather events occur. AXA Climate (an entity of AXA Group), for example, offers parametric insurance solutions based on satellite and weather data that trigger quick and automatic pay-outs within a few days of a natural catastrophe or an extreme weather event. It has also developed early warning systems using satellite and other weather data to anticipate and initiate contingency planning before a natural catastrophe occurs. Beazley, with support from Lloyd's Disaster Risk Facility (DRF) members AXA XL, Hiscox and RenaissanceRe, has developed a retail parametric wind product, Redicova, for cyclone 3 (+165 MPH wind) and above, to fill a post-cyclone insurance protection gap for Northern Australia. RSA's GeoRisk Response tool provides loss adjustors with mapping information and insights that they can use in the field during a major event. While parametric products are not new, the proliferation of options available to customers demonstrates that the industry is trying to enhance understanding of the various ways in which risk can be transferred by insurance.

As the frequency and intensity of loss events increases due to the rise in global temperature, members are using such events as opportunities to influence customers, loss adjustors and claims handlers to encourage sustainable claims and restoration programmes (as seen in the increase in average scoring against Principle 6). Zurich, for example, developed a Build Back Better Loss Adjuster toolkit which requires loss adjustors to evidence a 'build back better' resilience conversation with flood victims. RSA, QBE and Tokio Marine & Nichido Fire Insurance Co implement a 'repair over replace' philosophy by encouraging sustainable claims solutions and environmentally friendly upgrades. Other members have used these policies to reduce their own operational emissions, reflecting the industry's broader response in recognising and reducing the environmental impact generated by its operations and within its supply chain, as claims servicing can represent a significant source of emissions within the insurer's own supply chains. Aviva has improved the drying process after flood claims to reduce carbon emissions. Sedgwick has similarly reduced the environmental impact of repairs undertaken on site and incorporated sustainable claims guidance on fire and wet peril claims. While sustainable claims management is not new, it has moved from isolated examples of positive action to core pillars of firms' climate and emissions reduction strategies. Firms have stepped up their public communication and execution of these plans and recognised the opportunities to both improve the resilience of their clients and reduce their own emissions. To date, these responses have largely been confined to personal motor and property lines, but firms should seek to expand these to other lines of business.[6]

The industry has recognised the need to increase the level of engagement with its suppliers to reduce its own operational emissions, as seen in the increase in average scoring against Principle 4. A record number of members has introduced or improved sustainable procurement policies and ESG screening criteria for engaging with suppliers. Allianz, for example, introduced a new group procurement policy that includes carbon footprint data. Ecclesiastical's onboarding process requires suppliers to have an environmental policy and for all restoration companies it uses to have ISO 14001 certification. Swiss Re has assessed 95 per cent of its top tier suppliers against ESG criteria and introduced a Vendor Development Programme (VDP) that is aligned to the United Nations Global Compact (see case study on page 32). The ABI published its Environmental Charter this year, which aims to embed environmental decision making into supplier selection. Other members, such as Aviva, Aon and Swiss Re, have gone further and introduced net zero targets for their supply chains.

The insurance value chain is recognising its importance within the wider financial system and society and driving collaboration.

Despite giving greater attention to climate risk mitigation and resilience within the value chain, the insurance industry has increasingly recognised opportunities for greater collaboration with the wider financial sector, policy makers and society. This has resulted in increased interaction with governments, regulators and other participants in the financial system on a local, national and international level.

"As the frequency and intensity of loss events increases due to the rise in global temperature, members are using such events as opportunities to influence customers, loss adjustors and claims handlers to encourage sustainable claims and restoration programmes."

On a local scale, members are working with local governments and municipalities to increase resilience to certain physical risks and engage on transition protection needs. For example, Flood Re's work with Rochdale Borough Council, the North West Regional Flood and Coastal Committee and the National Flood Forum has helped increase understanding of the extent of flood poverty and the obstacles to establishing more resilient homes. Similarly, Santam's Partnership for Risk Resilience plan involved working with various municipality clients by providing them with better information and tools to understand the impacts of climate change. On the national level, members have continued to participate in a variety of regulatory consultations, such as the Financial Conduct Authority (FCA)'s consultation on enhancing TCFD disclosure, regulatory exercises and stress tests, and other industry working groups and initiatives, such as the Climate Financial Risk Forum's working groups.

Other members have commissioned thought leadership pieces and lobbied governments for specific policy changes. Aviva partnered with the Worldwide Fund for Nature (WWF) and published a policy paper with five key recommendations to guide the UK government on how it can leverage the financial sector to catalyse the transition to net zero. Sanlam partnered with 6 Capitals ESG advisory and published research on how TCFD disclosure could assist corporates and investors in South Africa to address climate change by looking at the perspectives of financial institutions, pension fund holders, the government and the Johannesburg Stock Exchange.

These interactions, however, indicate enthusiastic but sporadic engagement with issues that are ultimately systemic in nature and require international co-operation. There was participation in numerous industry forums, such as the IDF and PSI, and the establishment of new forums, such as the NZIA, GFANZ and SMI (see box below). Members also continued participating in existing financial sector climate forums, such as the Net Zero Asset Owner Alliance (NZAOA), showing the insurance industry's unique position on climate risk impacting both sides of the balance sheet. COP26 witnessed a proliferation of announcements and initiatives with policy makers, regulators and NGOs in the UK, EU and internationally, allowing progress across a number of initiatives (see box on page 16). However, there remain opportunities to adopt a more strategic focus to participation and direct attention towards pressing industry needs, such as increases in private–public partnerships to facilitate blended finance approaches to create new, and enhance existing, risk pools.[6] There are still too few initiatives that pool risk on an international scale, and those that do are regionally focused, such as the Caribbean Catastrophe Risk Insurance Facility.[6] While participation in these international forums is encouraging, coordination between groups will be critical to their ability to maximise their individual effectiveness. The industry should view the increased standardisation of sustainability frameworks over the year as a guide on how to maximise its own effectiveness.

The industry has also shown it can collaborate with other participants in the wider financial sector to deliver tools, services and insights to the broader economy. Munich Re's Location Risk Intelligence Platform provides climate risk data to Nasdaq's ESG Data Hub. Aviva's study with Route2, in association with the Make My Money Matter Campaign and the WWF UK, published research on the impact of greening pension funds on climate change, which advised that greening an individual pension is 21 times more effective at cutting an individual's carbon footprint than stopping flying, becoming a vegetarian and moving to a renewable energy provider combined. Such research is insightful, but there are further opportunities for the industry to collaborate with other players in the global economy, particularly to help standardise frameworks and formats for climate-related data. This will help the industry realise its transformational power to deliver risk analysis and insights to a broader set of stakeholders than those with which it has traditionally interacted.

Conclusion

The insurance industry is assuming a pivotal role in improving societal resilience to climate change. ClimateWise members and the industry more widely have improved collaboration along the value chain and increased the sharing of extensive knowledge and expertise on climate change risk with the broader society. They have commissioned and funded scientific research and disseminated the results to work with other members in the chain to help deliver tools and solutions to both assess risk and improve climate resilience. Members have also recognised their important position within the broader financial ecosystem, both for delivering price signals and expertise on climate risk and opportunities and for identifying and promoting mitigation and adaptation measures.

However, with three quarters of the world's potential losses from natural disasters remaining underinsured, significant work remains for the insurance industry to streamline responses and interactions both within the chain and externally. As the muted response from policy makers at COP26 has shown, the world will increasingly turn to the private sector to deliver the solutions and risk management techniques required to mitigate and adapt to a changing climate. The insurance industry, in the words of Mark Carney, is one of the "most significant cultural and economic assets" to help society manage climate risks and will play a critical role to help increase systemic resilience to the worst effects of climate change.[10] If the insurance industry realises its potential, it will fulfil its basic and historic purpose as a public good to ensure that everyone has the means to be protected.

Permanent forums and initiatives are being established to facilitate collaboration between government, business and insurers to enhance global climate resilience. Below are some key initiatives.

ClimateWise
Established in 2007, ClimateWise is a growing global network of 37 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 CISL's Centre for Sustainable Finance, which brings business, government and academia together to identify solutions to critical sustainability challenges.

Insurance Development Forum (IDF)
The IDF is a public–private partnership led by the insurance industry and supported by international organisations. The IDF aims to extend the use of insurance and its related risk management capabilities to build greater resilience and protection to people, communities, businesses and public institutions that are vulnerable to disasters and their associated economic shocks. The IDF was first announced at the United Nations (UN) Conference of the Parties (COP21) Paris Climate summit in 2015 and was officially launched by leaders of the UN, the World Bank and the insurance industry in 2016.

Net Zero Insurance Alliance (NZIA)
Launched in July 2021 and convened by the UN PSI, the NZIA brings together fifteen of the world's leading insurers and reinsurers committing to transitioning their underwriting portfolios to net zero GHG emissions by 2050, measured with Science-based Targets (SBT), consistent with a maximum temperature rise of 1.5°C above pre-industrial levels by 2100. This includes a commitment to measure, report and adjust every five years and publicly report on progress annually. Currently, no consistent set of targets or metrics is subscribed to by all NZIA members – each individual organisation sets and enforces its own.

Sustainable Markets Initiative (SMI)
His Royal Highness The Prince of Wales's Sustainable Markets Initiative Insurance Taskforce was established in 2021. The taskforce is an insurance industry forum dedicated to accelerating the pace of transition by focusing on five specific areas:

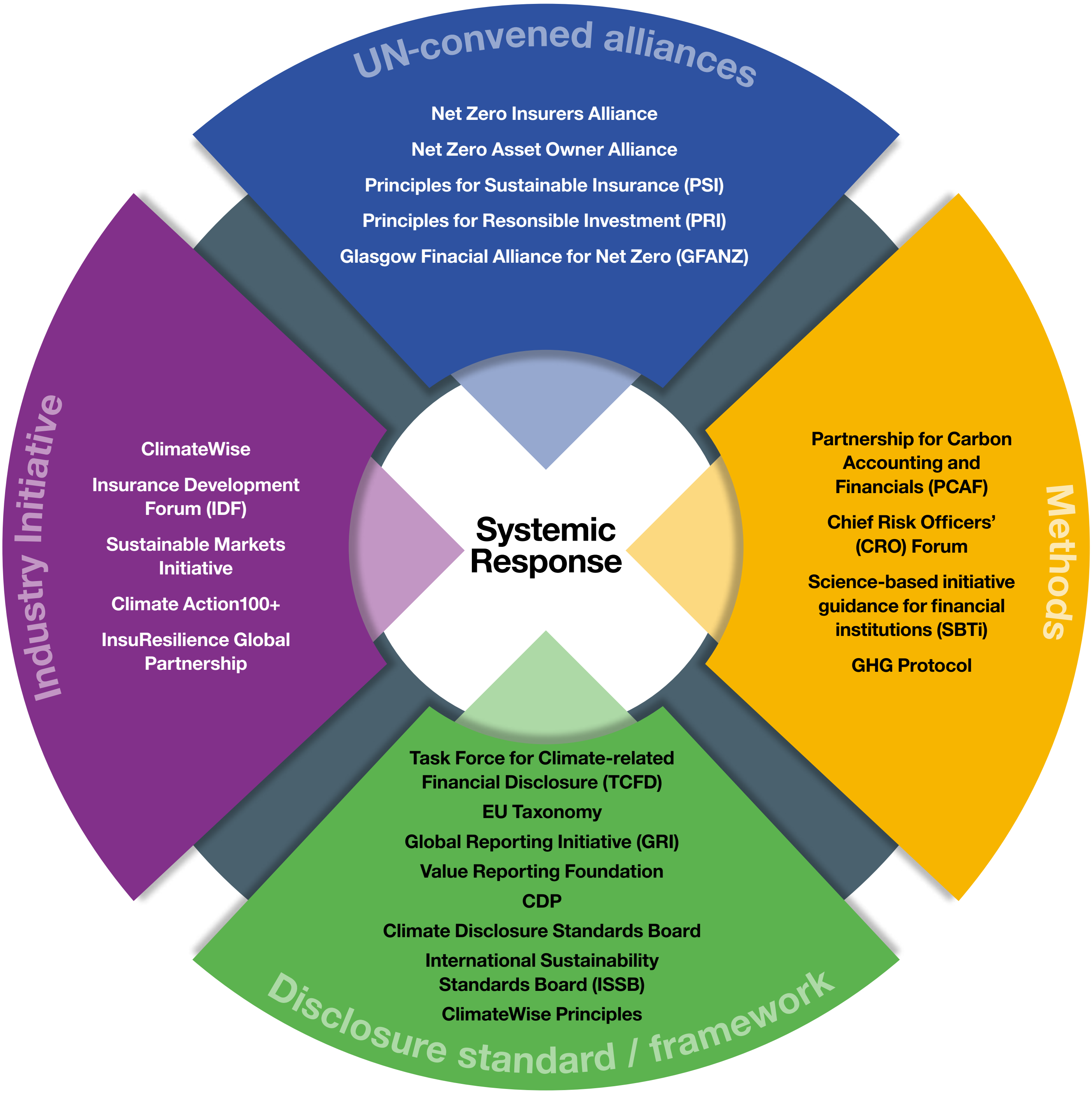
- Encouraging climate product and service innovation
- Implementing sustainable process across supply chains
- Establishing a public–private disaster resilience, response and recovery framework
- Developing a framework for accelerating and scaling sustainable investment
- Defining the industry's ability to enable multi-sector transitions

In October 2021, it published a product innovation showcase outlining numerous examples of insurance products and risk management solutions geared towards a low-carbon transition, ranging from insurance coverage across the hydrogen supply chain and parametric and microinsurance schemes protecting coffee farmers in Nicaragua to cyclones in Australia.

The Glasgow Financial Alliance for Net Zero
Launched in April 2021 by Mark Carney, UN Special Envoy for Climate Action and Finance and the UK Prime Minister's Private Finance Advisor for COP26, the GFANZ aims to consolidate net zero finance initiatives into one cross-sector coalition to accelerate the transition to a net zero economy and ensure alignment between initiatives spanning banking, asset management and insurance. Members include over 450 financial firms across 45 countries responsible for assets of over $130 trillion. The NZIA is a member of GFANZ.

UNEP FI Principles for Sustainable Insurance (PSI) Initiative
Launched at the 2012 UN Conference on Sustainable Development, the UNEP FI PSI serves as a global framework for the insurance industry to address ESG risks and opportunities. Over 200 organisations worldwide have adopted the four PSI, including insurers representing more than 25 per cent of world premium volume and $14 trillion in assets under management.

Public forums and public-private partnerships are key for the insurance industry to deliver a systemic response to a systemic risk.



ClimateWise Principles 2021 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 informs 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 24

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

See page 29

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

See page 33

Principle 4
Reduce the environmental impact of our business
4

See page 38

Principle 5
Inform public policy making
5

See page 43

Principle 6
Support climate awareness amongst our customers / clients
6

See page 47

Principle 7
Enhance reporting
7

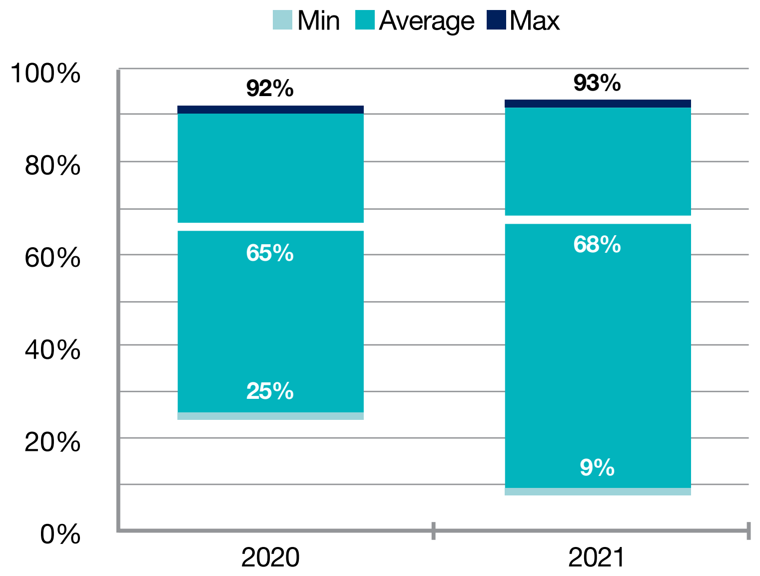
See page 51

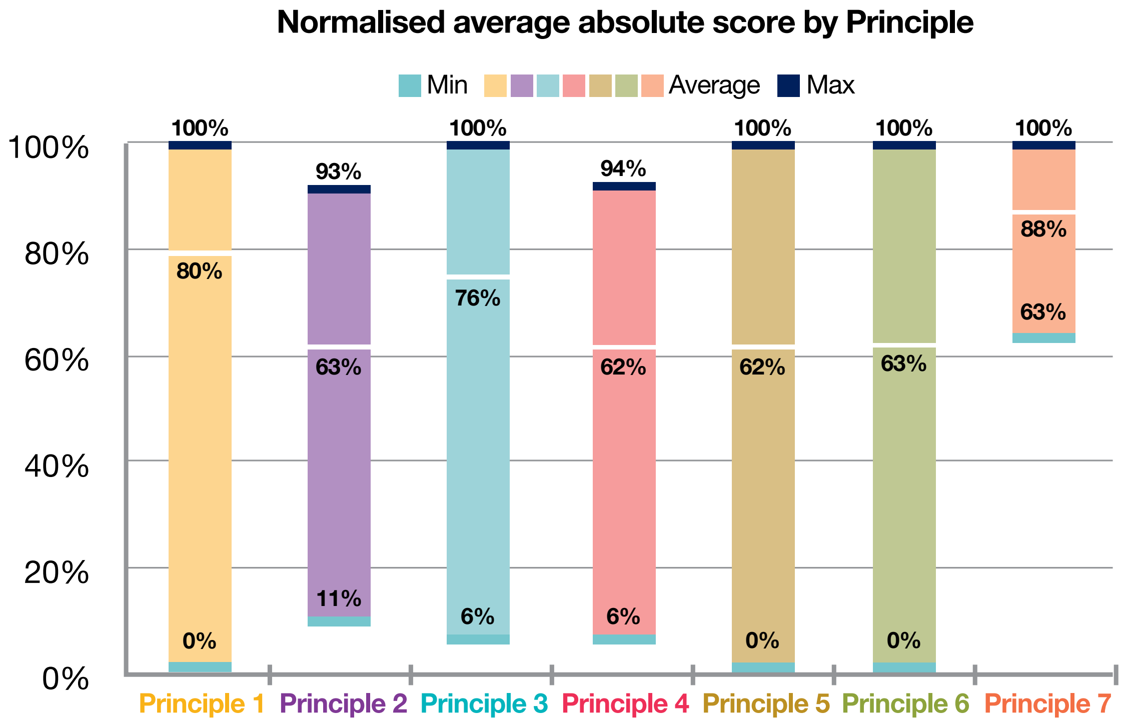
The ClimateWise Principles: member progress

This year, culminating in COP26, was an important year for businesses and individuals alike in regard to taking actions to address climate change and continuing progress towards Paris-aligned emissions targets. The ClimateWise membership, which has grown to nearly 40 members, continued its progress toward meeting the ClimateWise Principles. These now enter their third year of alignment with the TCFD framework, with a year-on-year rise in average scores from 65 per cent to 68 per cent in 2021. ClimateWise members notably continued to embed climate-related considerations into their governance processes and risk management frameworks as well as incorporating climate change considerations into their business strategies. The majority of members are therefore well prepared for the rollout of mandatory TCFD disclosure requirements which is gathering pace across numerous jurisdictions, including the UK.

The following review relates to ClimateWise submissions made by members in early August 2021. In line with ClimateWise guidance, reporting years generally relate to the 2020 calendar year but can follow a member's financial year or similar. Appendix 1 provides a detailed description of members' performance against each of the sub-principles. Appendix 2 provides further detail on scoring methodology. Appendix 3 provides an anonymised member ranking, and Appendix 4 provides the score distribution for the membership.

Member average group scores over time (2020-2021)





Membership performance has improved across all the Principles, except Principle 5, which, despite this being the year of COP26, was partly because some members were unable to maintain the same levels of engagement with policy makers and support new research during the global COVID-19 pandemic. The greatest increase in average scores across the group was for Principle 6, with an increase of 10 per cent, due to the significant progress being made by members toward disclosing new climate change strategies and increasing engagement with clients by developing tools and support for them to assess their own levels of risk.

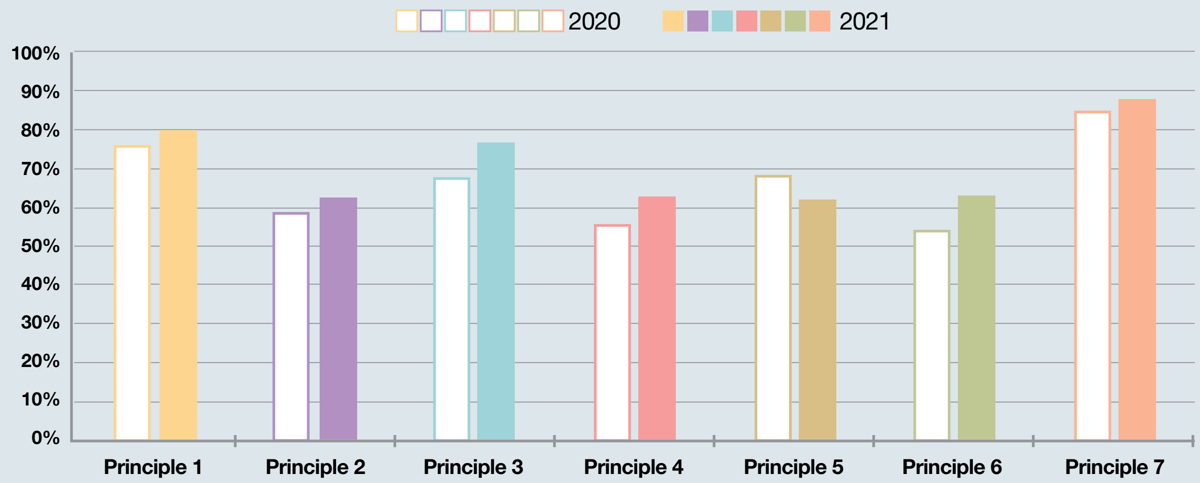
Like last year, members performed most strongly against Principles 1 and 7, showing that a majority have robust governance structures, are willing to disclose against all the ClimateWise Principles and include elements of these in their annual reports.

Principles 3 and 4 also showed significant improvement on last year's score of 8 per cent, demonstrating that members are increasingly embedding the consideration of climate risk into their organisations as well as reducing the environmental impact of their business.

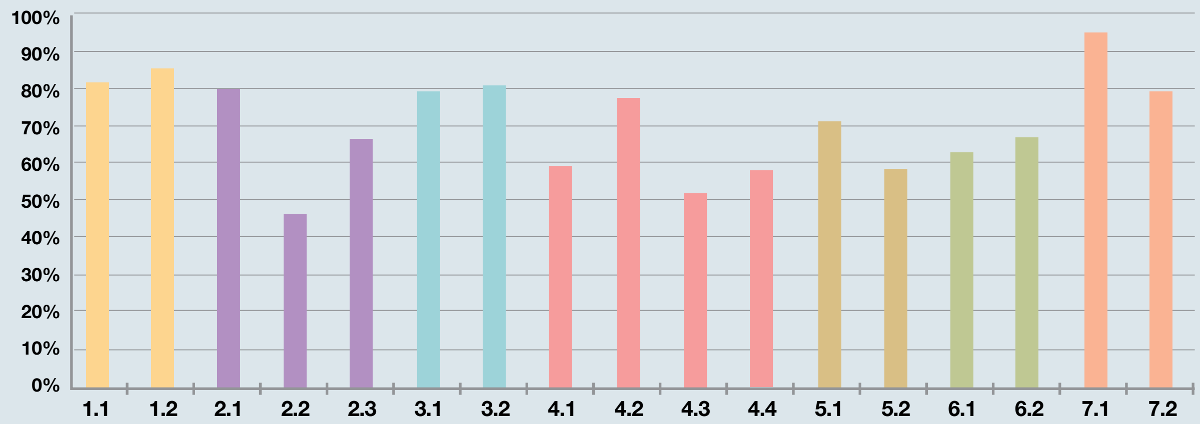
Increases in members' average scores were a result of improvements across the membership, with over 90 per cent scoring above 40 per cent in the current year, compared with 79 per cent in the previous year.

Scoring against demonstrating planned activities varied across each Principle, partly due to changes in the ClimateWise scoring methodology designed to challenge members to fulfil their planned activities: one point was awarded for specific details of progress against planned activities in the previous year, as opposed to forward-looking, planned activity.

Normalised average absolute score by Principle over time (2020-2021)



Normalised group average score by sub-principle



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

Summary

Principle 1

The majority of members have robust governance structures for engagement with, and oversight of, climate-related issues that are integrated into decision-making at board and management level. Delegated board-level committees and sub-committees monitor climate-related risks and opportunities and oversee their impact on business strategy or performance against specific ESG- or climate-related strategies. At management level, members disclosed clear roles and responsibilities and the processes by which management were routinely informed about climate-related issues as well as for reporting such issues to the board or board committees.

Members can continue to improve by evidencing in more detail how the board and management monitors progress against specific plans, goals and targets, including the frequency with which they meet to discuss or are informed about climate-related issues. Members should also disclose any changes made to strategic plans, goals and targets due to continuous monitoring and evaluation of climate risk.

Principle 2

Members continued to incorporate climate-related issues into their underwriting and investment decisions and evaluate the implications for business performance and decision making. The majority of members now identify climate-related risks and opportunities facing their business by sector, geography and business segment over short-, medium- and long-term horizons. In response to regulatory stress tests and scenario analyses, such as the French regulator's pilot (ACPR), which used the Network for Greening the Financial System, and the Bank of England's 2021 CBES exercise, the membership increasingly outlined the processes and outcomes of climate risk scenario analysis. Some members improved their score further by evidencing how scenario analysis was used to understand the resilience of their business strategies. However, there are opportunities for other members to do this.

Performance against Principle 2 remains one of the lowest. In general, members are not providing a sufficiently detailed narrative on performance against climate-related metrics, or how these might change over time. To improve, members could consider disclosing key quantitative or qualitative metrics and outlining performance against these in relation to their strategic decision making. Two thirds of members still do not incorporate climate-related metrics into remuneration policies.

Principle 3

Principle 3 saw the highest year-on-year growth of all the Principles. Over 95 per cent of members, in part driven by regulatory expectations, such as mandatory TCFD reporting in the UK from April 2022 for large firms, now describe the processes for identifying, assessing and prioritising climate-related risks and opportunities and evidence the processes for regularly reviewing these. An increasing number of members have fully integrated climate risk into their enterprise risk management processes and include climate risk in the annual Own Risk and Solvency Assessment (ORSA). Members continued to score well by developing insurance products or partnerships to support innovation on adapting to and mitigating climate-related issues.

To improve, members could disclose their processes of ensuring compliance with current and emerging regulatory and supervisory requirements. Members could also be more specific on how product development and partnerships address their most material climate-related risks and opportunities. Members recognised their role within the industry and broader financial services sector towards improving data quality issues to help inform research and analytics on climate risk; however, this continues to be a barrier to improving climate risk management.

Principle 4

Members continued to reduce the environmental impact of their operations and disclose performance against Scope 1, Scope 2 and Scope 3 GHG emissions and environmental key performance indicators (KPIs). Members are developing and measuring metrics and targets against newly approved or reformulated ESG and climate strategies, including net zero commitments for their operations. Disclosure requirements such as the UK Streamlined Energy and Reporting Regulation are requiring members to enhance emissions disclosures, which has increased scoring for members that did not previously do this. The majority of members have sustainable procurement policies and have evidenced additional engagement with their supply chains, which was not the case in previous years. The membership also made significant improvements in the ways it engaged employees on climate-related issues.

There are opportunities to enhance disclosures by providing GHG emissions against an absolute or baseline intensity target as well as setting targets for non-GHG environmental KPIs, such as water and waste, and tracking performance against these. Members could also disclose the ways in which they are assessing compliance with their sustainable procurement policies and the actions taken to remediate breaches or examples of engagement with suppliers to improve their environmental performance. Members should also seek to disclose how their employee engagement initiatives are aligned to the broader strategy of reducing the environmental impact of their organisation.

Principle 5

The membership demonstrated multiple ways of proactive engagement with external organisations, industry bodies and policy makers on climate-related issues, including hosting conferences and seminars, chairing industry forums and actively lobbying government to help build climate resilience. Many members continued to occupy leadership positions in existing organisations or help establish new ones, such as the NZIA and SMI. Members also continued to conduct and fund climate-related research to improve climate resilience for the clients and communities they support. Research topics included how best to address physical risks and improve climate resilience, such as flood and wildfire risk, and catastrophe modelling.

Although most members cited increased levels of engagement due to COP26, a small proportion was unable to demonstrate the same levels of engagement in attempts to influence public debate throughout the reporting year. While reasons varied, the impact of COVID-19 in limiting resources and opportunities for engagement was a contributory factor and more indicative of a temporary anomaly than a trend towards reduced public engagement. Nevertheless, members could still improve their performance and enhance disclosures by evidencing how the outcomes of research impact their business strategies or have influenced decision making.

Principle 6

An increase in activities to promote climate awareness amongst their customers and clients was observed during the 2021 reporting year, which saw the average score increase from 53 per cent to 63 per cent. With COP26 culminating at the end of the year, many members launched new or revised climate or ESG strategies. Members have introduced new and innovative ways of engaging with customers, making the most of the growth in digital communication and remote working brought about by COVID-19 to host virtual webinars and workshops, thus increasing the reach and level of engagement with customers. Members have also continued to help customers and communities assess their own levels of risk and challenges by providing a wide array of tools and services.

To improve, members should evidence that their engagement is part of a broader strategy or plan to promote climate awareness. Members should also capture details of interaction and feedback from their engagement activities to ensure these are reaching the intended audience and meeting their members' objectives. Doing so will allow them to evidence how their engagement activities have been improved as a result of incorporating feedback. Members should also aim to demonstrate how the tools and services they have provided lead to behavioural changes and are accompanied by appropriate guidance.

Principle 7

ClimateWise Principles reporting was incorporated into 95 per cent of members' annual financial reporting this year. This figure reflects the greater integration of TCFD recommendations against a backdrop of increasing calls to make TCFD disclosures mandatory across numerous jurisdictions.

However, only around half the membership publicly disclosed their ClimateWise Principles report. Members should publish their report to encourage appropriate disclosure of climate-related risks and opportunities and demonstrate a commitment to transparency. ClimateWise Principles reporting is more prescriptive and contains a higher level of detail than that required by the TCFD framework. The principles are also wider in scope, particularly in the areas of public policy engagement and supporting awareness amongst customers and clients.

Appendix 1

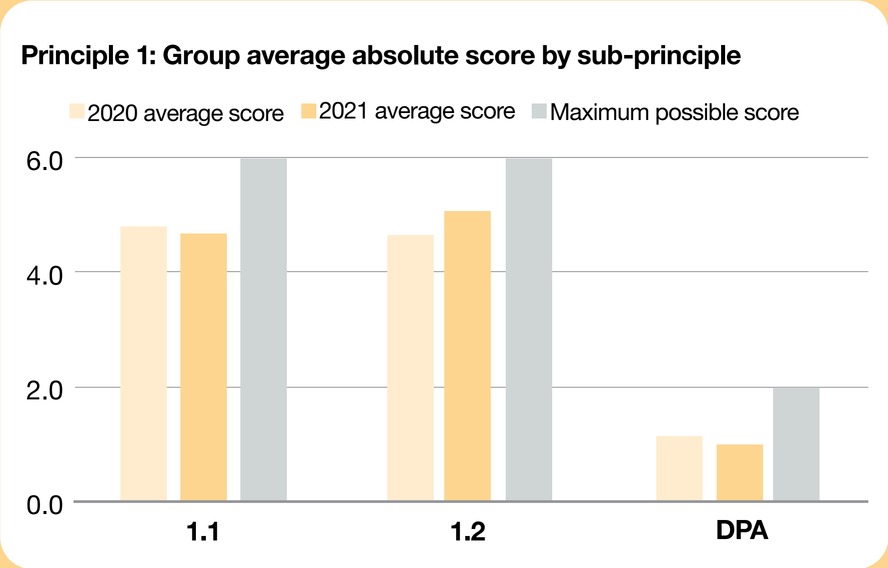
Member evidence against the ClimateWise Principles

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.



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.

'DPA' refers to demonstrating planned activities.

In line with the previous year, Principle 1 continued to be one of highest scoring of the ClimateWise Principles, with the most significant year-on-year improvements made in management's (below board-level) oversight of climate risk and opportunities.

Members continue to demonstrate strong board-level oversight of climate risks and opportunities, with 56 per cent of the membership scoring full marks. These scores were achieved by evidencing discussion of climate-related issues at board level or at board-level committee meetings and the processes by and frequency with which the board and committees were informed. Disclosures on how the board monitors and oversees progress against strategic plans, goals and targets could be improved, as the influx of new members saw the proportion of members scoring nil or partial marks increase even though a higher total of members scored full marks. The trend toward strong improvement in members' incorporating climate change into business strategy and planning continues this year, with more than two thirds of the membership scoring full or partial points, up from around 50 per cent last year and with a record number of members scoring maximum points.

For sub-principle 1.2, scores have improved significantly, with 56 per cent of members scoring maximum points by describing below-board-level responsibility in addressing and managing climate-related issues. Evidence of assigning climate-related responsibilities to management and descriptions of organisational structure and how management reports to the board were particularly strong, with 80 per cent of the membership scoring full marks. Evidence of the processes by which management was informed of and reviewed climate-related information was similarly strong, with just over three quarters of the membership scoring full marks. Meanwhile, 68 per cent of the membership described how management monitors the implementation of strategic plans, goals or targets agreed by the board.

There was a decrease in the number of members scoring full points for demonstrating planned activities, with most members scoring partial points and a few scoring no points. This outcome was partly due to changes in the ClimateWise scoring methodology designed to challenge members to fulfil their planned activities.

Key strengths

The membership demonstrated strong, robust governance structures and clearly defined roles and responsibilities at board level to incorporate climate-related issues into business strategy and decision making. The formation and responsibilities varied according to the circumstances and organisational structure of the member. Where there was a regulatory requirement to assign responsibility for identifying and managing financial risks from climate change, such as the Bank of England PRA Supervisory Statement (SS), members often assigned these to the risk function. Other members recognised the need for a more cross-functional approach to climate risk. For example, **Sanlam** has an independent non-executive director who chairs the Social, Ethics and Sustainability (SES) Committee, which provides quarterly feedback to the board, allowing for regular monitoring of performance and progress against climate-related targets for the 2021 reporting period.

QBE enhanced its governance structure in the reporting year by establishing a European Operations Management Board Climate Change Steering Group, chaired by the Chief Underwriting Officer. This Group oversees the work of the Climate Risk Working Group that was set up in 2019 with the responsibility of implementing the board-approved SS 3/19 Roadmap. QBE also developed an Environmental and Social Risk Framework during the period to further enhance its ESG governance, to be fully implemented in January 2022. **Zurich's** board has various committees that support and report to it on all aspects of climate change. These include its Governance Nominations and Sustainability Committee (GNSC), Risk and Investment Committees, Remuneration Risk Committee and Audit Committee.

Members are increasingly incorporating climate change into business strategy at board level, either explicitly into business strategy or by outlining separate ESG or climate strategies. For example, **Munich Re** has demonstrated that climate change is considered in a holistic manner through a range of dedicated roles and committees and described how performance against its new strategy, '2025 Ambition', will be monitored to ensure its net zero targets are met.

There was strong improvement in member responses to sub-principle 1.2. Members continued to evidence oversight at management level of climate-related issues, outlining key responsibilities, committees and descriptions of organisational structure, as well as the processes by which management is routinely informed about climate-related issues.

For example, **Brit** has an ESG Committee, comprising of members from its senior management team, which reports directly to its Executive Committee monthly. Further, there is a cross-departmental Climate Change Risk Working Party with a designated Executive Committee member who has oversight of each of its five identified ESG priorities to ensure climate-related issues are embedded in the firm's operational areas. **Beazley's** joint-nominated Senior Management Function (SMF) holders for identifying and managing the financial risks from climate change risk (the CEO and Risk and Compliance Officer), as required by PRA SS 3/19, provide regular updates to the board on climate-related risks. It also appointed a Head of Responsible Business, who co-ordinates delivery of its new responsible business strategy by collaborating with various business functions, including underwriting, investments and operations.

Santam has a Group Investment Committee and Group Risk Committee that are specifically responsible for integrating climate risk into investment and risk management, respectively. This year, Santam's Group Strategy team provided a TCFD workshop for the board and Executive Committee, following which a resolution was raised for TCFD disclosure across all entities in the Group.

Argo Group's board is supported by the Risk and Capital Committee to meet oversight responsibilities in relation to climate issues. At a management level, the Chief Risk and Sustainability Officer is responsible for implementing sustainability and ESG strategy and is supported by a Sustainability Working Group, responsible for managing climate-related and broader sustainability issues. The Working Group reports directly, to the Enterprise Risk Management Steering Committee and through the Chief Risk Officer to the Risk and Capital Committee.

There was also improvement in the membership in regard to regular monitoring of activities, including progress towards goals and targets. For example, **RSA's** ESG committee monitors progress against the Climate Change Action Plan and provides quarterly updates on ESG risks to the Board Risk Committee, along with updates on progress towards implementing the Climate Change Action Plan. The Chief Risk Officer chairs the ESG committee. **Tokio Marine HCC Group's** Sustainability Committee meets quarterly to discuss all areas within its remit, including climate risk, and receives update from sub-committees such as its Marketplace and Environment Group, Charity Committee and Workplace Group.

Recommended areas for development

To improve performance, members should disclose evidence of how the board monitors and oversees progress against strategic plans, goals and targets, including the frequency with which both the board and management meet and are informed about climate issues. Members should also provide further detail on how this oversight is implemented at management level and show how management monitors and assesses implementation. Some members have cited the need for board members to develop a deeper understanding of ESG and climate issues. Therefore, members could disclose the board and management's skills and credentials as evidence of oversight of climate-related risks and opportunities. **Brit's** submission was a noteworthy example of listing current board member credentials and experience in climate-related issues.

Members should seek to disclose specific actions against previous years' demonstrated planned activities in order to score full marks, in line with the updated ClimateWise scoring methodology.

Case study: Hiscox

Hiscox has a strong and robust governance structure that includes board-level oversight of the Group's ESG strategy and performance. Management has clear roles and responsibilities for managing climate risks and opportunities. This year, Hiscox enhanced its current structure and introduced a Sustainability Steering Committee at the management level to take responsibility for the development and implementation of the Group's ESG strategy, with an initial focus on climate change.

The Group Board is responsible for Hiscox's climate risk management and governance and is responsible for setting the Group's ESG risk strategy and appetite. Climate-related risks are monitored and measured at both a business unit and Group level, helping Hiscox understand its overall climate risk exposure as well as which mitigating actions to take. Climate risk is viewed as a cross-cutting risk with potential to impact each existing risk type rather than a standalone risk.

Board and committee structure

The Group Board meets at least four times a year and appoints several committees to oversee different aspects of the Group's operations (see table below). Each committee is run by a Board member, who reports directly to the Board. The Board receives input on climate issues from across the Group, including from the functional areas of investments, underwriting, exposure management, finance and risk. The Board also held information sharing and training sessions on climate change, which included discussion of Hiscox's current exposure to, and management of, climate change risk.

Business units utilise centralised tools and activities such as capital modelling, catastrophe modelling, risk modelling and investment management to monitor and manage climate-related risks. These, in turn, drive key risk management tools used by the Board, such as stress and scenario testing and emerging risk processes.

Strategic direction defined by the Hiscox ESG framework

Hiscox has been embedding its ESG framework throughout the Group since 2019. Environmental and climate-related matters form a key part of this framework, both in terms of how it underwrites and invests, and in how it operates as a business – from setting annual budgets and business plans to risk assessment and management

ESG Executive Sponsor to drive progress

In 2020, Hiscox appointed James Millard, the Group's Chief Investment Officer, as its new ESG Executive Sponsor. He reports to Aki Hussain, Group Chief Executive Officer and Board and Executive Committee member. James provides regular updates on ESG issues to the Sustainability Steering Committee, the Executive Committee and the Board as part of the established cycle of reporting which takes place at least twice a year.

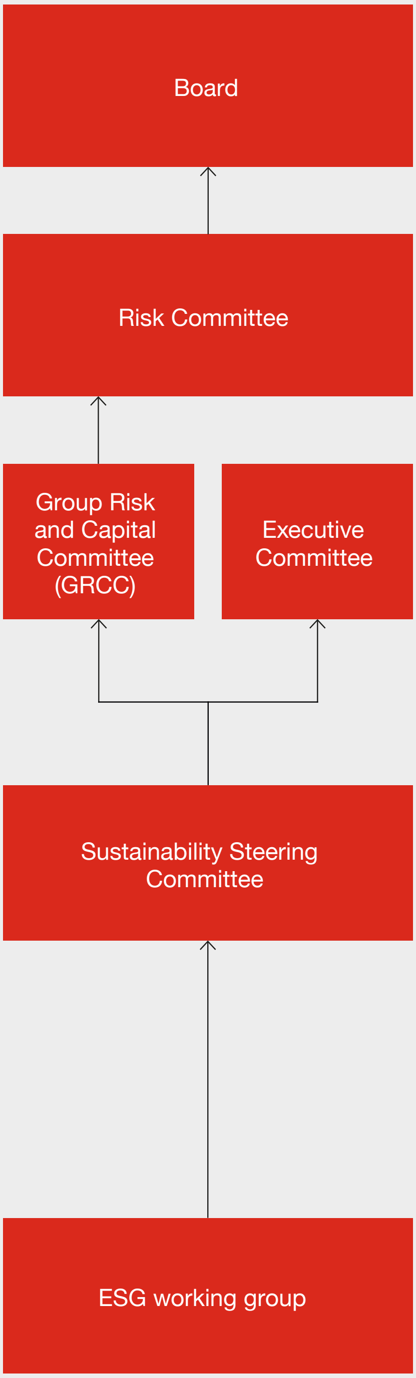
Defining the role of management in climate issues with a new Sustainability Steering Committee

In 2021, Hiscox established a Sustainability Steering Committee that is responsible for executing its ESG strategy across its operations, driving actions and delivery at a Group level and identifying risks and opportunities arising from sustainability issues. This committee ensures senior managers are involved in and accountable for sustainability issues and tracks sustainability performance, at both a business unit and Group level. The Committee is chaired by the Group Chief Executive Officer, and members include the Chief Transformation Officer, UK Chief Executive Officer, Chief Investment Officer, Chief Underwriting Officers from some of its business units, Chief HR Officer, Chief Risk Officer and the Head of Investor Relations. Meetings are held quarterly and attended periodically by representatives from across the Group, such as the ESG working group, property services and procurement.

Hiscox Climate Report

Principle 1
Be accountable

ESG governance structure
How we manage, monitor and escalate ESG integration.



Board
- Oversight of long-term ESG vision, strategy, priorities and performance against agreed metrics and targets.
- Ensures governance and accountability in place with sufficient support.
- ESG discussion at least twice-yearly on strategy, trends, opportunities, vulnerabilities, and emerging issues.

Risk Committee
- Provides oversight of Hiscox's ESG integration.
- Advises Board on ESG strategy, key priorities, risk profile, risk exposures and opportunities.
- Recommends proposals for consideration by the Board as required.

Group Risk and Capital Committee
- Quarterly reporting on ESG matters from Sustainability Steering Committee, supported by ESG working group. Periodic attendance by ESG Executive Sponsor.
- Sets high level Group strategy, priorities and ensures delivery across the Group.

Executive Committee
- Twice-yearly ESG sessions. Sets business unit or function ESG-related strategy, priorities and drives delivery through business units and functions.

Sustainability Steering Committee
- Sub-committee of the GRCC, responsible for execution of the agreed ESG strategy, driving actions and delivery at a Group level.
- Embeds sustainability risks and opportunities, with an initial focus on climate.
- Oversees effective use of resources and tracks Group and entity-level sustainability performance.
- Ensures senior management level involvement and accountability for sustainability issues.
- Group Chief Executive Officer (Chair), Chief Transformation Officer, UK Chief Executive Officer, Chief Investment Officer (and ESG Executive Sponsor), representative business unit Chief Underwriting Officers, Chief Risk Officer, Chief HR Officer and Head of Investor Relations meet quarterly, with periodic attendees from other functions, e.g. ESG working group, HR, procurement, property services.

ESG working group
- Operational body, providing central point of coordination and expertise for ESG-related activity across the Group.
- Manages ESG-related Group reporting, disclosures and communications.
- Meets monthly and provides input and recommendations to management on ESG matters.
- Focuses on ESG-related research, including external monitoring and expectations, to inform future activity.

Figure 2. Hiscox disclosed a clear and transparent governance structure, outlining key committees, working groups, roles and responsibilities.

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

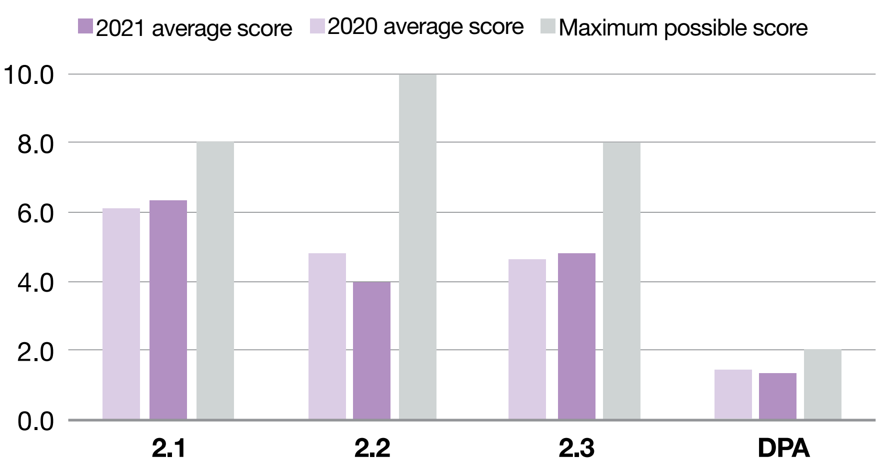
The sub-principles

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.

'DPA' refers to demonstrating planned activities.

This year, members increasingly demonstrated the identification and assessment of climate risks and the incorporation of material climate-related issues into their strategies and investments. Principle 2 saw a slight year-on-year decline, which was largely driven by lower scores from newer members, as existing members performed strongly.

Sub-principle 2.1 showed a slight year-on-year improvement, of 2.9 per cent, with average scores rising to just under 80 per cent. Over 70 per cent of members scored full marks by categorising climate-related risks and opportunities facing their business by type and materiality as well as evidencing their impacts on business, strategy and financial planning. Members are yet to successfully develop strategies to address the implications of climate issues, with just 52 per cent scoring full marks. While the membership demonstrated extensive collaboration efforts and encouraged research, some members are still struggling to evidence leadership positions or specific contributions made within the initiatives they joined.

Members' progress against sub-principle 2.2 remains slow, with only 24 per cent of the membership disclosing the key metrics used to measure and manage priority climate-related risks. Even when disclosures were made, they were often not accompanied by a suitable narrative explaining performance or how performance is planned to change over time. Only 18 per cent of all members fully disclosed management targets, and an increasing but still relatively small number of members described the methodologies used to calculate their metrics and targets in detail. Only a third of members disclosed how these targets are incorporated into remuneration practices.

In sub-principle 2.3, just under three quarters of members scored full or partial marks for describing the process or outcomes of climate risk scenario analyses undertaken, including methodology, timeframes, parameters and key assumptions. Members continued to improve their scores by evidencing how scenario analysis was used to understand the resilience of their business strategy and how the results of the scenario analysis impacted key decision making, with 45 per cent of members scoring full marks. However, there remains a gap in the membership, as 41 per cent still scored no marks. Some 45 per cent of members demonstrated strong collaboration efforts in the knowledge sharing of risk management and modelling expertise.

There was a slight decline in scoring against planned activities as many members did not disclose specific actions taken to achieve the activities planned in the previous year. This was a trend identified throughout the members' submissions, with members failing to disclose in line with updates to the ClimateWise scoring methodology.

Key strengths

Members recognise that it is essential to have processes in place to evaluate the impact of climate change on their business and integrate the results of risk management processes and climate-related issues into their business models and strategies. This is reflected in the strong performance against sub-principle 2.1, which remains the strongest scoring sub-principle within Principle 2.

Members are describing priority-related risks using appropriate terminology and segmentation by sector and geography and class of business, as well as over short-, medium- and long-term horizons. For example, **Ecclesiastical** has demonstrated a strong approach to assessing the implications of climate change across the short, medium and long term. For general insurance, the Group uses stress and scenario testing that includes climate-related scenarios to assess business strategy. Climate-related risks are also assessed as part of the investment decision making process and are monitored across the portfolio.

Zurich undertook a comprehensive analysis of its business performance to understand the implications of climate-related risks on its strategy in line with the TCFD framework. Zurich has outlined the potential impact of climate change across both physical and transition risks on the investment and insurance sides of the business and developed a clear business strategy to target resilience to climate change and decarbonisation. For example, Zurich is targeting net zero GHG emissions from its investment portfolio by 2050.

Tokio Marine Kiln has evaluated each risk category identified within climate risks (Physical, Transition, Reputational, Strategic and Litigation) and assessed the materiality of each risk across the business planning horizon and for the longer term. Tokio Marine Kiln has considered the potential impact of physical and transition risks that are likely to affect the investment portfolio and has approved an investment asset allocation strategy as a result.

Hiscox has improved its score by undertaking a comprehensive analysis of its business performance to understand the implications of climate-related risks on its strategy. The Group has clearly stated what it regards as the potential impact of climate change over different time horizons, and how business planning is accounting for this. This year, in response to these risks, Hiscox updated its ESG exclusions policy with a target to remove exposure to certain fossil fuel assets in its insurance, reinsurance and investment portfolios by 2030.

As evidenced earlier in the section 'The Insurance Value Chain', members are also showing evidence of leadership positions and strong collaboration efforts. For example, this year **Zurich, Aviva, Allianz, Swiss Re, Munich Re** and **AXA XL** showed clear leadership in establishing the NZIA. The NZIA's members have committed to setting science-based targets and publicly reporting on progress annually. **QBE** also showed its leadership position by active participation in the UNEP FI's PSI Initiative. Other ClimateWise members who are actively participating in the UNEP FI's PSI initiative are **Allianz, Aon, AXA XL, Munich Re, Swiss Re** and **Zurich.**

Performance against sub-principle 2.2 declined in the year. This was a result of new members reporting for the first time. However, there were some strong examples of members measuring and disclosing the implications of climate-related issues for business performance. **Munich Re** has begun to evaluate methodologies of target setting and portfolio foot-printing for listed equities, corporates and real estate portfolios. It conducted an initial analysis of its underwriting portfolio in 2020, using the Weighted Average Carbon Intensity (WACI) method approach developed by the CRO Forum. It scrutinises specific industry sectors, such as the thermal coal industry, to meet its commitments to phase out coverage by 2040 and be net zero by 2050. **Aviva** has conducted detailed reviews on climate risk concerning its investments and insurance liabilities. These reviews are informed by the various climate-related metrics Aviva uses, including portfolio warming potential and Climate VaR, along with accompanying narratives explaining year-on-year performance against these metrics. **Flood Re** has developed a list of leading indicators which need to be met in order to achieve its exit strategy, namely to leave the insurance market by 2039, which are monitored through a dashboard system showing the status of each indicator. These include climate change projections, levels of adaptation and UK government spending, observed climate change and the National Adaptation Programme.

Members continued to score well against sub-principle 2.3, with a majority conducting scenario analyses and assessing the strategic implications of these. For example, **Flood Re** has analysed climate-related risks in the short, medium and long term and adapted its strategy accordingly. Its widened focus on vulnerability and financial inclusion follows its scenario analysis, which points to insurance becoming more expensive, or less available, in the future as a result of climate change.

Aviva considered four different scenarios as part of its Climate VaR modelling, as well as taking part in the Bank of England's 2021 CBES exercise. **AXA Group** contributed to the Banque de France and Autorité de Contrôle Prudentiel et de Resolution (ACPR) scenario analysis pilot that developed an analytical framework covering physical and transition risks and including forward-looking data based on Network for Greening the Financial System (NGFS) scenarios. AXA Group applied this framework to selected risks, and initial quantitative impacts were limited, suggesting that future exposures will determine the increase in future P&C claims rather than the hazard itself. AXA Group concluded that it would manage this risk by adapting its underwriting, pricing or reinsurance strategy.

QBE conducted a transition risk scenario using the NGFS Orderly and Disorderly scenarios (REMIND model) and the Inevitable Policy Response Forecast Policy Scenario. This analysis allowed QBE to determine its underwriting and corporate credit exposure to the highest-emitting sectors.

Members that performed well against sub-principles 2.1 and 2.2, by evaluating and measuring the implications of climate-related issues on business strategy, also performed well against sub-principle 2.3, further emphasising the complementary nature of the sub-principles. Sub-principle 2.3 encourages members to collaborate and share knowledge of risk management and modelling expertise, and members have continued to score well in this area. **Aviva's** approach to scenario analysis is a good example of collaboration, having been informed by strong collaboration with the UNEP FI investor pilot project as well as MSCI. This collaboration allowed Aviva to track progress against its UN-convened NZAOA target (see box on page 16). **Munich Re** participated in numerous industry groups sharing knowledge of risk management and modelling, including IDF's Steering Committee and Risk Modelling Steering Group, the Geneva Association's working group 'Extreme Events and Climate Risks (EE+CR)' and the UNEP FI PSI working group on TCFD Implementation.

Recommended areas for development

Members should disclose more quantitative and qualitative metrics and targets around climate-related risks and opportunities and outline how they plan to manage and prioritise these over time. Members should seek to develop a narrative around progress against selected metrics to allow for trend and variance analysis against historical data. The majority of members do not yet incorporate climate-related metrics into remuneration policies.

Disclosure of climate-related opportunities remains weak, and very few members provide quantification of opportunities. The TCFD recommendations outline the need to disclose physical and transition risks and opportunities presented by climate change on both sides of the balance sheet; therefore, members should prioritise this in future disclosures. In part driven by regulatory exercises, including the Bank of England's 2021 CBES, the majority of members now undertake some scenario analysis and stress testing. However, many members are still not evidencing how the results of these activities are impacting key decision making and strategies or their impact on the resilience of their organisations.

Case study: Swiss Re

Swiss Re has developed its own metrics and targets to measure climate-related issues for business performance

Swiss Re is moving into a leadership position in regard to incorporating climate-related issues into its strategies and investments. It has developed its own cutting-edge climate risk metrics and plays a key role in global industry forums to promote efforts for better climate disclosure and research.

Paris-aligned underwriting portfolio & weighted average carbon intensity

Swiss Re has started to develop a carbon risk steering mechanism to help align its underwriting portfolio with the Paris Agreement and decarbonise and reach net zero by 2050.

In 2020, for the first time, Swiss Re applied a carbon foot-printing methodology it had co-developed with the CRO Forum to underwriting in its direct and facultative liability portfolios. Based on this methodology, it estimated the WACI of its direct insurance portfolios at 120 tonnes of CO2 equivalent per million USD of revenue (120 tonnes CO2e/USDm revenue). It will gradually expand the scope of this metric. Once fully implemented, this will help it steer the overall carbon footprint embedded in its re/insurance businesses.

This is an example of leading practice globally in a year that saw the industry make significant strides towards addressing the issues posed by calculating the carbon footprint of an underwriting portfolio. Progress includes the establishment of the NZIA, a group of fifteen of the world's leading insurers committed to transition their underwriting portfolios to net zero by 2050, of which Swiss Re was a founding member.

Investment metrics and targets

Through its dedicated climate strategy, Swiss Re is working to achieve a net-zero emissions investment portfolio by 2050 by setting intermediate targets every five years and regularly reporting on progress. In accordance with the Net Zero Asset Owners Alliance Target Setting Protocol, Swiss Re set targets for the years 2020 to 2025. For its corporate bond, listed equity and real estate sub-portfolio targets, it set the base year at the end of 2018, reflecting previous portfolio actions.

In line with TCFD guidelines, Swiss Re monitors the carbon footprint of its corporate bond and listed equity portfolios on an ongoing basis. For the carbon footprints of these portfolios, it uses the WACI metric, which defines the portfolio carbon intensity based on relative investment share. It also monitors any coal-related activities in its private equity investments.

Incorporation of sustainability-related KPIs in variable compensation

In 2020, Swiss Re introduced a number of sustainability-related KPIs and targets for the Group as well as for each business unit and Group function. They are aligned to Swiss Re's Group Sustainability Strategy and take into account the company's sustainability ambitions and identified risks. Targets are grouped around several sustainability-related themes, such as sustainability-related indices, climate change, sustainable business and stakeholder engagement.

Performance against those targets is considered as part of the process to determine the Group annual bonus pool. Thereby, sustainability-related performance impacts compensation for all employees, including the Group Executive Committee.

Targets for public engagement

Swiss Re has adopted a strategic approach in its efforts to increase public engagement on climate-related risks and opportunities. It has set out clear targets for engagement with different industry participants and identified how they relate back to its key short-, medium- and long-term strategic goals, including building climate risk resilience in heavily exposed regions.

Reflecting its efforts to help expand re/insurance protection by working with public-sector clients, Swiss Re made a commitment to the UN to advise up to 50 sovereigns and sub-sovereign territories on climate risk resilience.

In addition, Swiss Re and a number of industry peers (including ClimateWise members Allianz, AXA XL, Aon, Munich Re, RenaissanceRe, Santam and Willis Towers Watson) have endorsed the joint Tripartite Agreement between the IDF, the UN Development Programme, and the German government, in which they commit to increasing insurance protection in climate-exposed countries.

Industry members collectively committed to offer up to $5 billion of risk capacity for climate risk insurance to contribute to the G7 InsuResilience target of protecting 500 million individuals against climate risk by 2025. In 2020, the Tripartite partners formed 13 country teams; three more are in the exploration phase. Swiss Re contributed to the projects alongside ten other industry members.

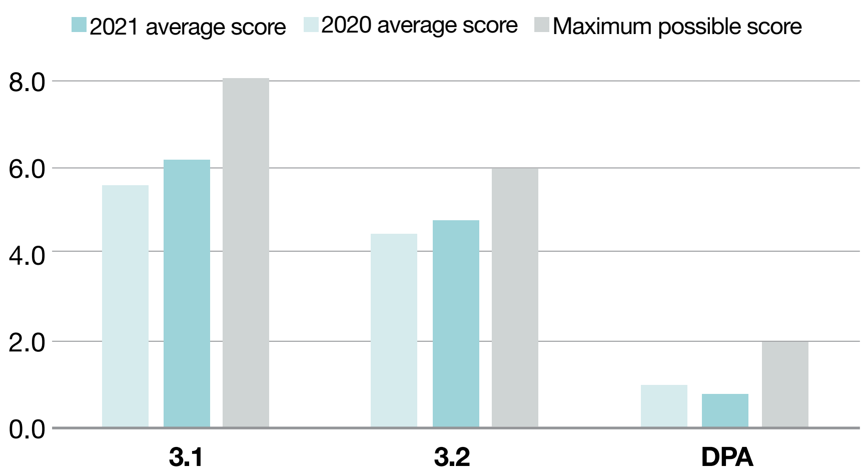
Principle 3: **Lead in the identification, understanding and management of climate risk**

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.

'DPA' refers to demonstrating planned activities.

The identification, understanding and management of climate risk continues to be a core strength and competency for the membership and broader industry. This year, notable progress was made by members ensuring the processes for identifying, assessing and managing risk and opportunities were integrated throughout the whole firm.

In sub-principle 3.1, almost all members describe the processes for identifying, assessing and prioritising climate-related risks and opportunities, with 84 per cent scoring full marks. Three fifths of members explain the processes for management and regular review of climate-related risks, and just over three quarters evidence how these practices are integrated within their overall risk management framework. While it would be expected that most members do this, disappointingly, only 56 per cent explain their processes for ensuring compliance with current and emerging regulatory requirements. Such compliance will be particularly important in forthcoming years as the pace of regulatory change quickens.

Sub-principle 3.2 continues to be one of the top five highest scoring sub-principles as members build on longstanding practices and demonstrate research and development activities directed towards adapting to and mitigating climate-related issues. All members, including new ones, demonstrated evidence of new product development or collaboration to support innovation for climate mitigation or adaptation, with 92 per cent scoring full marks.

Members continued to recognise data quality as a key area for development to improve analysis of climate risk. Members struggled to articulate how new product development and partnerships to address climate change aligned with their most material climate-related risks and opportunities.

Most members did not provide substantial evidence of planned activities to address gaps or progress against planned activities in prior years. However, as this is the first year in which this new scoring methodology has been used, members are likely to improve scoring in subsequent years. The number of members scoring demonstrating planned activity marks remains low in Principle 3, with only five members scoring full marks.

Key strengths

Members continue to perform strongly against this Principle. Most members have provided detailed descriptions for the identification, understanding and management of climate-related risks and opportunities and described how these are integrated throughout the organisation. Their descriptions include detailed processes for regularly reviewing climate-related risks and evidence of integration of these processes into existing risk management frameworks. Increasing numbers of members also disclosed the integration of climate-related risks within the ORSA process. For PRA firms, this is, in part, due to ensuring compliance with SS 3/19, which requires that climate risk be considered as a financial risk and integrated into firms' risk management frameworks by the end of 2021.

For example, **Brit** considered climate change as a high priority risk and addressed it within its Enterprise Risk Management processes. In 2020, it conducted a detailed assessment of the financial risk of climate change which identified climate change as a key risk in investments, credit risk and operations. Brit has put mitigating actions in place, such as including climate change considerations in investment manager selection processes and quarterly monitoring of credit exposure to reinsurers. Brit will also perform a deeper assessment of liability claims to develop a framework to identify and measure such claims in 2022.

Argo Group also integrated climate change issues into existing enterprise risk processes and associated strategic decisions. For example, its Sustainability Working Group contributes a section to the Emerging Risk Report for the Enterprise Risk Management Committee and the Risk and Capital Committee once every six months, providing an up-to-date view of climate and sustainability risk. The underlying monitoring and analysis of risk is carried out by the Sustainability Working Group, which meets every six weeks. **Sanlam** has also clearly integrated climate risks and opportunities into its existing enterprise risk management structure. For example, the Group risk function uses the ORSA process to consider Sanlam's risk profile, approved risk appetite and business strategy, including climate risk.

Allianz adapts its internal processes, policies and investment strategies in line with identified climate-related risks and opportunities. The Climate Integration team in Global Sustainability works alongside the ESG Task Force to identify, measure and integrate climate-related considerations into business processes. The nature and materiality of climate-related issues are reviewed in regular materiality assessments that are supported by frequent conversations with NGOs, policymakers, regulators and academia to monitor developments.

For sub-principle 3.2, most members showed they were actively supporting and undertaking research and development for products to inform current business strategies. **Hiscox**, for example, has conducted research and development work that focuses on enhancing climate peril modelling to improve existing insurance products and creating new ones such as Flood Plus. Through this research, and its use of different data sources, the group is contributing to improving the quality of the data upon which assessment of risk and opportunity is based. This year, Hiscox's research and actuarial teams performed a new statistical analysis of flood losses to improve its understanding and pricing of flood risk in the US, demonstrating Hiscox's role in improving data quality for climate analysis and leading to an improved score this year.

Tokio Marine & Nichido Fire Co continues to lead several research and development initiatives that focus primarily on new insurance products for clean energy technologies and new investment funds to help finance their deployment. Tokio Marine & Nichido Fire Co has also contributed to improving the quality of the data upon which assessment of risk and opportunity is based. For example, the Group has commissioned a research project to value the ecosystem services from its mangrove plantations.

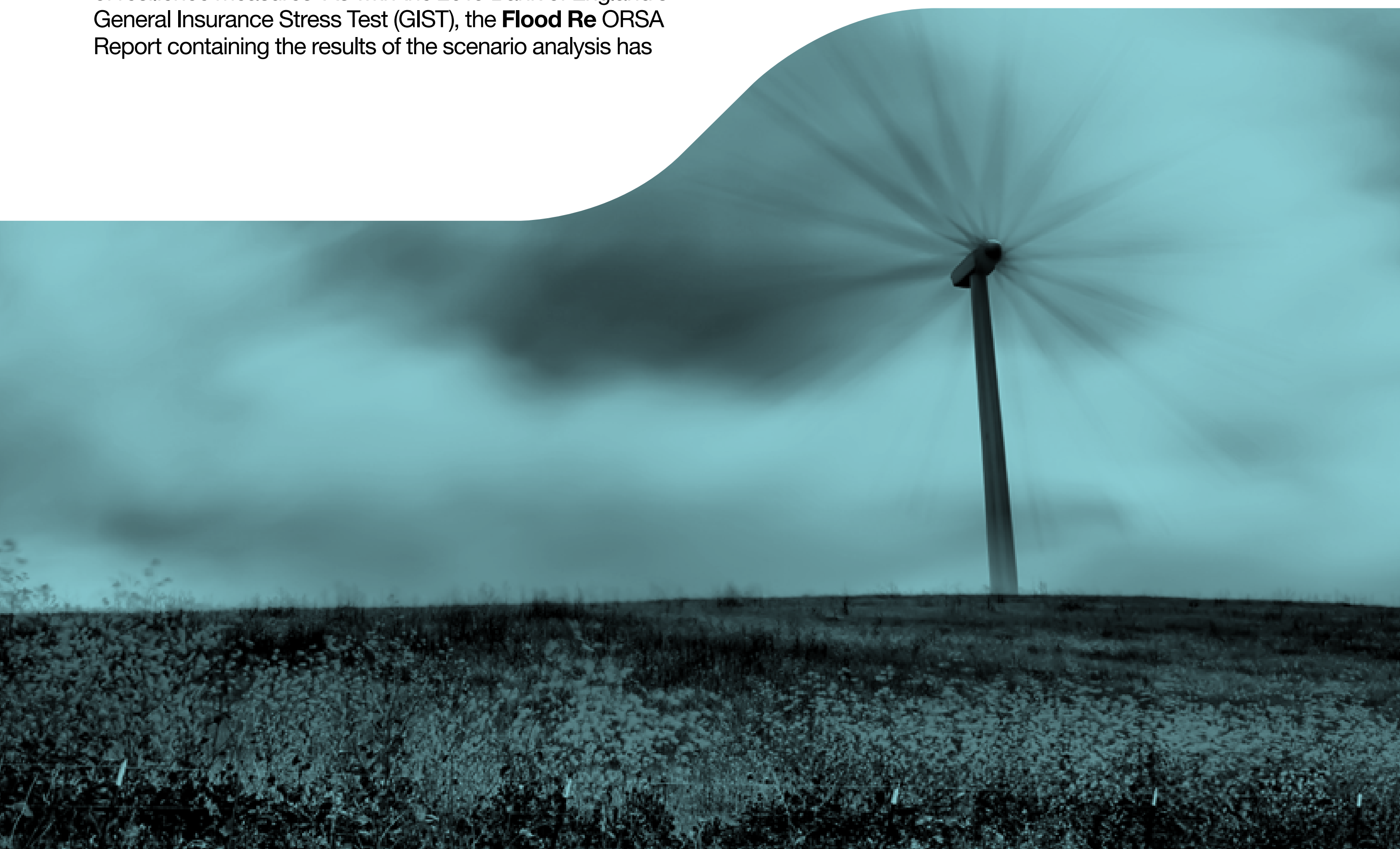
Willis Tower Watson demonstrated a comprehensive list of innovative product offerings that mitigate climate change for its customers/clients, including Catastrophe Analytics, Climate Resilience Finance, Disaster Risk Financing and Global Ecosystem Resilience Facility. Additionally, Willis Towers Watson has attained external partnerships, including Wharton's Initiatives for Global Environmental Leadership, Global Innovation Lab for Climate Finance and Centre for Risk Studies at the University of Cambridge's Judge Business School.

Flood Re's Transition Team commissioned research that analysed over 700 insurance claims for flooding over six years to understand the key factors that influence the cost and duration of flood damage claims. The work aims to establish an evidence-based approach to broader take-up of resilience measures. As with the 2019 Bank of England's General Insurance Stress Test (GIST), the **Flood Re** ORSA Report containing the results of the scenario analysis has been shared with a range of stakeholders, including the PRA and rating agencies. A summary of the ORSA stress and scenario testing is included in Flood Re's Solvency and Financial Conditions Reports and has been made publicly available.

Recommended areas for development

Principle 3 remains one of the highest scoring principles, reflecting the membership's ability to identify and manage climate-related risk. Members could improve performance against sub-principle 3.1 by disclosing evidence of how processes for managing and reviewing climate-related risks inform key decision making, including investment decisions. Members could also outline how they evidence compliance with current and emerging regulatory requirements.

For sub-principle 3.2, members have clearly demonstrated strong partnerships to support innovation and product development for climate mitigation and adaptation issues. However, greater efforts could be made to improve data quality issues to inform the research and analytics of climate-related issues, which have been outlined in previous reports and continue to be a problem that impacts the industry. Members could also outline how their partnerships and products are being prioritised or used to address the most material issues or opportunities that they face. Over 90 per cent of the membership supported research and development, but only 56 percent of the membership successfully demonstrated that these actions were prioritised in relation to material climate risks and opportunities.



Case study: ABI

The ABI's Climate Roadmap offers an industry perspective through an in-depth assessment of climate risk for its membership

As a trade association, the ABI is successful in addressing the risks and opportunities presented by climate change when its members are successful. As such, its processes for identifying, assessing and managing climate-related risks and opportunities are focused on analysing the impact of climate change on its members, which are insurers and long-term saving providers operating in the UK. The ABI Board's decision to make climate change a top priority within its 2021 Business Plan reflects the body's dedication to understanding and supporting its members' exposure to climate-related risk.

In July 2021, the ABI published its first 'Climate Change Roadmap', which is an in-depth assessment of where the ABI's membership is most impacted by and, in turn, can have the most impact on climate risk. The Roadmap primarily addresses the insurance sector's role in supporting the delivery of the UK's Net Zero strategy and meeting its carbon budgets.

The Roadmap recognises the need for the insurance industry to play a key role in financing the green infrastructure and energy transformation as well as help develop nature-based solutions required for net zero transition. It also highlights how firms can promote resilience and risk management to reduce the impact of the physical risks posed by climate change and the ability to engage with savers, customers and businesses to manage the transition risks that come with decarbonising the economy.

Even in a 1.5°C scenario, the ABI recognises that there will be significant changes to the environment that will affect societal wellbeing and investment performance. The Roadmap emphasises that the sector's contribution to managing risk and ensuring society adapts to these changes is vital.

The Roadmap sets new GHG emissions targets, including a focus on short-term actions firms should take before 2025, within the current tenure of the ABI's board, and examples for asset-class based investment innovation and calls for a revolution in delivering new green products and services. It outlines what the ABI believes is "the most demanding and far-reaching carbon reduction plan of any insurance and long-term savings sector in the world". The Roadmap represents an industry-led perspective that considers the impact of climate change on the entire insurance industry, as opposed to individual firms' balance sheets – a theme highlighted elsewhere in this report. The Roadmap is structured around four thematic pillars: Meeting Net Zero by 2050; Unleashing Investment Capacity; Sustainable Operations; and Helping Society Adapt (see overleaf).

ABI's Climate Change Roadmap - Four Thematic Pillars

1 MEETING NET ZERO BY 2050

- This Pillar focusses on the sector's **'financed emissions'** across its investment and underwriting portfolios – it underlines the importance of having a clear **2025 milestone, an interim 2030 target of 50% reductions** and reporting transparently as firms on their progress towards **a final 2050 Net Zero goal.**
- This Pillar sets out **best practice** on achieving this for 2025, 2030 and 2050 – and then explains how the ABI and its members will work with each of the key recognised external frameworks to achieve this.
- Given the key role of **responsible stewardship** in making progress on 'financed emissions', this Pillar also defines some high-level principles for what responsible stewardship and engagement looks like.

2 UNLEASHING INVESTMENT CAPACITY

- This Pillar explores the role the UK Insurance and Long-term Savings sector can play in meeting the c£2.7trn investment in infrastructure and energy transformation required to meet the UK's Net Zero targets (as set in the Carbon Budget) and the Paris Climate Change goals.
- An analysis conducted by Boston Consulting Group has shown that through their investment capacity, **ABI members could support up to one-third of this investment (c£0.9trn)** from within the c£2trn of the sector's new business & reinvestment flows over 2021-35, equating to c£60bn of investment each year.
- **Unlocking the full investment capacity will require an ambitious approach from the Government**, including regulatory reform and action to tailor the structure of investment demand to meet the investment priorities of our sector.
- Working with Boston Consulting Group, ABI members have identified the main barriers that currently exist towards maximising these opportunities and this pillar then considers how these could be overcome through a range of potential levers where industry, government and regulators could collaborate.

3 SUSTAINABLE INDUSTRY OPERATIONS

- With 310,000 people employed across the UK sector, managing £46m in claim payments every day and responsible for £6.9bn in pension withdrawals each year, there is considerable scope to decarbonise the Insurance and Long-term Savings sector's day-to-day operations and in-turn drive change across the wide range of customers and businesses we work with.
- This Pillar sets out how the sector aims to **reach Net Zero in directly controlled operations by 2025**, including the carbon footprint of office operations, engagement with other local businesses, adapting to changing work patterns and utilising credible carbon offsetting mechanisms where needed.
- It also sets out how the ABI will facilitate co-operation between members to ensure the supply chain is accounted for within the 2030 target to reduce the sector's overall emissions by 50% and procurement, through supplier onboarding, sustainable sourcing, activity-based initiatives and a 'circular economy' approach to the use of products and services.

4 HELPING SOCIETY ADAPT

- As a sector that **contributes £32bn to the UK economy each year** and has multiple interactions and touchpoints with households and businesses across the UK, our sector can incentivise and support change well beyond the immediate scope of our own financed emissions and operations.
- This Pillar looks at how the sector can **facilitate sustainable decision making** through both innovation in our own offerings to customers and through collaborative work with our stakeholders.
- It identifies **five priority areas** where the ABI will work with its members to develop practical solutions that can help society adapt and ensure that our sector is contributing effectively to the economy-wide changes needed in response to Climate Change.

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 GHG emissions using a globally recognised standard.

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

4.4 Engage our employees in our commitment to address climate change, helping them to play their role in meeting this commitment in the workplace and encouraging them to make climate-informed choices outside work.

Principle 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.

‘DPA’ refers to demonstrating planned activities.

Members continued to improve the environmental performance of their operations, with strong GHG emissions reporting against globally recognised standards and increased engagement with suppliers to improve the environmental sustainability of their supply chains. Opportunities remain for further quantification of non-GHG environmental impacts of member operations and associated targets. The membership greatly increased engagement with employees, but it could provide more evidence of a comprehensive programme to sustain this.

In sub-principle 4.1, over three quarters of members have sustainable procurement policies, and a higher proportion of members scored full marks by evidencing work to assess compliance and corrective action with those policies. However, members still struggle to describe how they are taking a leading role in engagement to improve sustainability of products and services they use.

In sub-principle 4.2, most members (76 per cent) are disclosing their Scope 1, Scope 2 and Scope 3 GHG emissions against recognisable international standards, up from 37 per cent in the previous year. This increase is, in part, driven by increases in regulatory disclosure requirements, such as the UK government's Streamlined Energy and Carbon Reporting (SECR) policy, which has forced some members to measure and disclose certain emissions for the first time. There are opportunities for further disclosure of financed emissions as well as for disclosing emissions against an absolute or baseline intensity target. This practice will allow firms to provide a performance trend or accompanying narrative against GHG emissions disclosure, with just over half of members doing this successfully.

There was a marginal decline in average performance against sub-principle 4.3, largely driven by newer members not disclosing the environmental impacts of their operations. Existing members improved their average score by just under five per cent. Overall, members still struggle to evidence non-GHG environmental targets over the short, medium and long term and track progress against these targets, with only 16 per cent scoring full marks. Many members also disclosed the difficulties of tracking meaningful environmental impacts when office buildings were shut and the workforce was working remotely for large periods of the year due to the COVID-19 pandemic. The membership greatly increased the number of environmental impact reduction projects, with nearly three quarters scoring full marks.

Principle 4.4 was the most improved sub-principle across all Principles in 2021, with the average score rising from 46 per cent to 55 per cent. This rise reflects the increased level of engagement activities members are conducting with their employees on environmental topics. However, members could improve scoring further by measuring the uptake and impact of activities conducted.

Key strengths

The majority of ClimateWise members have implemented environmental procurement policies and engaged with selected suppliers in their supply chain to improve the environmental sustainability of the products they purchase. Some are requiring suppliers to align with sustainability standards such as the UN Global Compact (including **Munich Re** and **Swiss Re**); others, such as **Allianz**, are also developing bespoke in-house procurement standards that include carbon footprint data. Allianz's carbon footprint data requirement is integrated in the screening progress alongside questions related to environmental management.

This year, **Liberty Specialty Markets** introduced a new Responsible Procurement Policy as part of its Responsible Business Strategy, overseen by the ESG Council. An example of this new policy in action has been the change of corporate merchandise provider to a B-Corp certified company that is helping Liberty Specialty Markets target sustainable options for product materials and packaging.

RSA encourages its suppliers to make sustainable choices through a supplier roadmap that targets four key areas, including 'repair over replace' and 'operational efficiency'. RSA also has a tool for monitoring supply chain compliance with its Supplier Code of Conduct policy, which includes 30 environment-related questions. From this, it can use various metrics to track the environmental performance of its supply chain, such as the number of companies that measure their carbon footprint and have plans to reduce it.

Sub-principle 4.2 remains the highest scoring sub-principle within Principle 4, as most members continued to disclose Scope 1, Scope 2 and Scope 3 GHG emissions against globally recognised standards.

Over half of the membership gave an explanatory narrative with their disclosures and disclosed an absolute or intensity target against a baseline, with historic data to allow for variance analysis. **Santam**, for example, provided a comprehensive breakdown of its Scope 1, 2 and 3 GHG emissions, including six Scope 3 categories and two different carbon intensity metrics. Santam also provided a clear description of the reporting boundaries for emissions reporting and the methodology used. **Beazley** has improved its score by disclosing Scope 1, 2 and 3 GHG emissions against a baseline, with emissions targets for 2022 and 2023, based on an intensity metric per fixed-term employee (FTE). Beazley also introduced operational emissions reduction targets as a result of the Responsible Business Strategy it implemented during the year. **Hiscox** reported Scope 1, 2 and 3 emissions from

2014 to 2020 with an accompanying explanatory narrative to help readers understand the cause of these annual changes in GHG performance. Hiscox's current emission reduction targets expired in 2020, and the Group is now in the process of developing new targets in alignment with the Science Based Targets Initiative (SBTi). **Allianz** disclosed the methodology behind its emissions metrics and targets, including the addition this year of its methodology for investment portfolio emissions. Allianz has also disclosed both its short- and long-term targets for reducing investment portfolio emissions, along with a narrative on the progress made each year.

Over half of ClimateWise members disclosed non-GHG environmental metrics and targets in line with sub-principle 4.3. **Sanlam** provided detailed disclosures of its environmental impact, with an accompanying explanatory narrative and a description of the methodology used. The company reported data for electricity usage, water usage, waste recycled, paper consumption and business travel. **MS Amlin** has several environmental KPIs, including paper usage, waste, water consumption, energy and employee commuting. To demonstrate the progress toward the environmental KPIs, the group has drafted short-, medium- and long-term targets in line with these metrics and provided an indication of the progress against each of the targets. In addition, MS Amlin provided a trend analysis to compare its performance with the previous year's reporting. For example, waste production decreased because most of the company's offices were shut due to COVID-19. **The Hartford** disclosed several key environmental data points, including water use, energy use, renewable energy use, waste, use of all-electric (EV) and hybrid vehicles and the elimination of Styrofoam. Each KPI was supported by a narrative highlighting the performance in comparison with the previous year as well as targets for improvement.

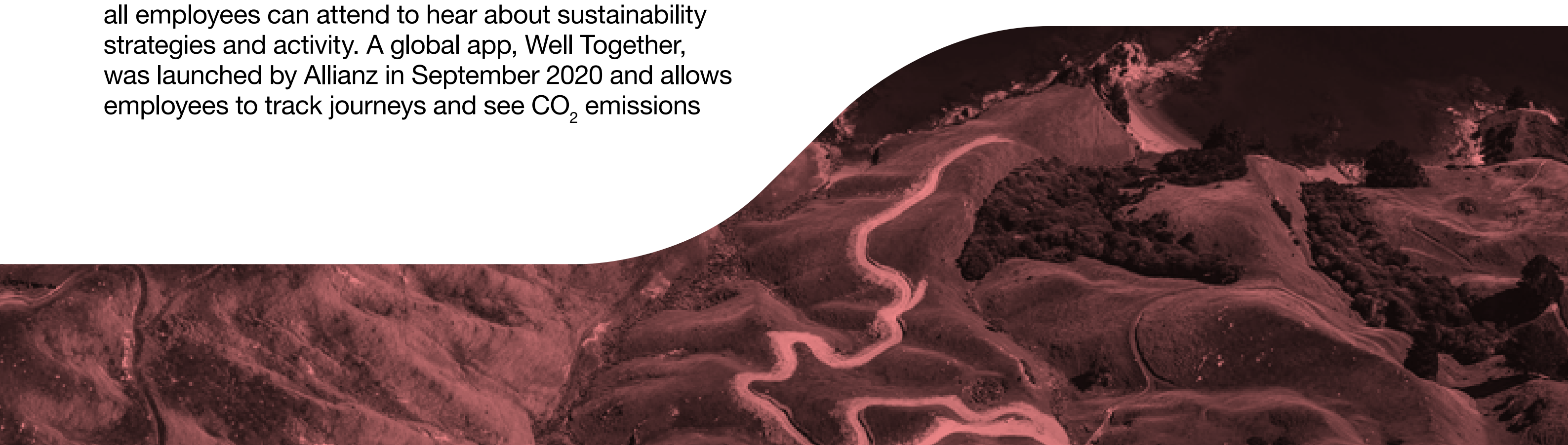
The increased level of engagement with employees among the membership saw the average score for sub-principle 4.4 increase by 9 percentage points, the highest for any sub-principle this year. There were numerous examples of members engaging with employees to address climate change in innovative ways. **Aviva** ran an internal weekly climate change update to inform employees about climate change developments for the sector and globally. Aviva also put on 'Snapbriefs' for staff: 30-minute calls about what Aviva is doing about climate change and the public policy space. **Allianz** runs a group-wide annual Sustainability Forum which all employees can attend to hear about sustainability strategies and activity. A global app, Well Together, was launched by Allianz in September 2020 and allows employees to track journeys and see CO_2 emissions and savings. Trees are then planted to offset emissions, encouraging positive choices amongst employees. **Aon** actively engaged employees in its commitment to address climate change. The company posts educational campaigns and encourages employees to leverage technology to reduce emissions and waste. **Howden Group** holds an all-employee virtual conference with sustainability as a key item on the agenda. Following on from this, in 2021 Howden Group launched its 'Sustainability' virtual event series to help engage and educate employees worldwide.

Recommended areas for development

Despite a higher proportion of members than ever having an environmental or sustainable procurement policy, opportunities remain, as many members still do not adequately disclose the work and services undertaken to assess compliance with these policies or any corrective action taken. To improve scoring, members could disclose how they have engaged their suppliers to improve their environmental impacts. **Swiss Re's** VDP is a good example and aims to raise minimum standards in the supply chain. Members could also describe how they have a taken a leading role in engaging others throughout the value chain to improve the sustainability of products and services. Despite evidence of engagement there is still room for improvement, as reflected in the scoring for sub-principle 4.1.

Members could also evidence more non-GHG targets to manage climate-related risks and opportunities for internal operations and physical assets under their control, along with variance analysis regarding performance against targets. While over half of the membership scored full marks for disclosing other important environmental KPIs, less than a third scored partial or full marks for describing the methodologies used to calculate their metrics and targets. Many members will have to do this in the future, in line with the EU taxonomy and other regulatory pressures on credible net zero transition plans.

Members greatly increased their engagement activities throughout the year. However, just under half the membership still did not adequately evidence a continued programme of engagement aligned to the material impacts of their organisations or quantify the uptake and impact of activities conducted.



Case study: AXA XL

AXA XL has set clear targets and implemented a carbon emissions reduction strategy to help reduce its environmental impact

Sustainable procurement

AXA XL has implemented an ESG risk assessment process for its suppliers based on five criteria: environmental, social, impact on products and services, suppliers' supply chain and business integrity. Suppliers in the highest ESG risk categories are invited to share scores provided by a sustainability ratings service. Suppliers and vendors are encouraged to undergo an assessment with this service, and low-scoring suppliers and vendors will be engaged to address gaps.

AXA XL also requires its vendors to include a 'corporate responsibility clause', which is mandatory in its contracts. This clause provides for compliance with a number of international and national laws, including those related to environmental protection, as well as asking vendors to adhere to certain values and principles designed to ensure they do business in a socially responsible manner.

Measuring and reducing the environmental impacts of operations

AXA XL's parent, AXA Group, collects environmental data using a reporting tool filled out by the network of 300 environmental managers from AXA Group sites, with more than 50 FTEs and data centres owned by the Group. AXA Group monitors its environmental footprint reduction towards its targets. The reporting procedure is updated annually, and contributors are trained each year. In 2020, environmental data was collected for 84 per cent of total FTEs, and the remaining 16 per cent was extrapolated.

As its 2020 objectives are coming to an end, AXA XL has developed new environmental objectives for 2025, based on the approach promoted by the SBTi, using a 2019 baseline.
These SBTi emissions reductions target include:

- 25 per cent reduction in AXA's CO2 emissions (in absolute terms t.CO2 eq.), broken down into the following CO2 emissions reduction sub-targets:
  -20 per cent from AXA's vehicle fleet emissions
  -35 per cent from AXA's power consumption linked to building and data centres
  -18 per cent from AXA's business travel emissions
- Source 100 per cent of AXA's electricity consumed (office sites and AXA-owned data centres) from renewable energy sources by 2025, in line with its 'RE100' commitment (RE100 is a coalition of companies pledging to buy 100 per cent of their electricity from renewable sources)
- Reduce unsorted waste by FTE by 10 per cent
- Reduce water consumption by FTE by 10 per cent

Carbon Management Strategy

- AXA XL committed to its first Carbon Management Strategy in September 2020. The strategy, which aligns to AXA Group's goals and the objectives of the Paris Agreement, outlines AXA XL's commitment and roadmap to decarbonise its operations in order to reach the goal of limiting global warming to below 1.5°C. Three areas were identified as key to AXA XL: energy consumption, movement of people (travel and vehicle fleet), and resources consumed (see infographic below). The strategy establishes sub-targets for the main impact areas including absolute GHG emission reduction targets (25 per cent reduction) and intensity of resource consumption. The 2025 targets for these areas are shown below:
- Energy consumption
  - Reduce scope 1 & 2 power emissions by 38 per cent
  - Reduce data centre power emissions by 40 per cent
- Business travel
  - Reduce business travel emissions by 25 per cent
  - Reduce car fleet emissions by 19 per cent
- Resource consumption
  - Reduce paper use (per kg) by 20 per cent per FTE
  - Reduce water consumption (per m3) by 11 per cent per FTE
  - Reduce waste production (per kg) by 10 per cent per FTE

Employee engagement

As part of this strategy, AXA XL launched a Green Contribution programme that charges its employees a fee, on top of their flight costs, related to the amount of carbon their flight generates, to emphasise the environmental impact of the flight and discourage unnecessary travel. This contribution will fund initiatives across the business that reduce its environmental impact, as well as funding the offsetting of scope 3 travel emissions.

2025 GOALS

Big little steps: How we're reducing AXA XL's carbon footprint

AXA XL is committed to creating a more resilient future for all, including reducing our direct impact on the environment: From the energy we use and the movement of our people to the resources we consume.

Actions so far:

- Using our Green Contribution charge (US$100 per tonne of CO_2 emissions for business flights) to support internal initiatives to reduce our environmental footprint and to fund our carbon offsetting.
- Activating our colleague-led Green Committees to promote environmental awareness and "green behaviors" we can all adopt in our daily lives.

Additional initiatives:

- Offsetting our air travel emissions – currently the biggest contributor to our carbon footprint —through carbon credits that support the preservation of 15,500 acres of tropical rainforest in Belize.
- Planting one tree for every day of colleague volunteering in partnership with The Nature Conservancy's Plant A Billion Trees initiative.

1. The energy we use

38 %

reduction in the energy we use to light, heat and cool our buildings

40 %

reduction in carbon emissions from the centers that store our data

2. The movement of our people

25 %

reduction in carbon emissions from our business air travel and hotel stays

19 %

reduction in carbon emissions from business car travel

3. The resources we consume

11%

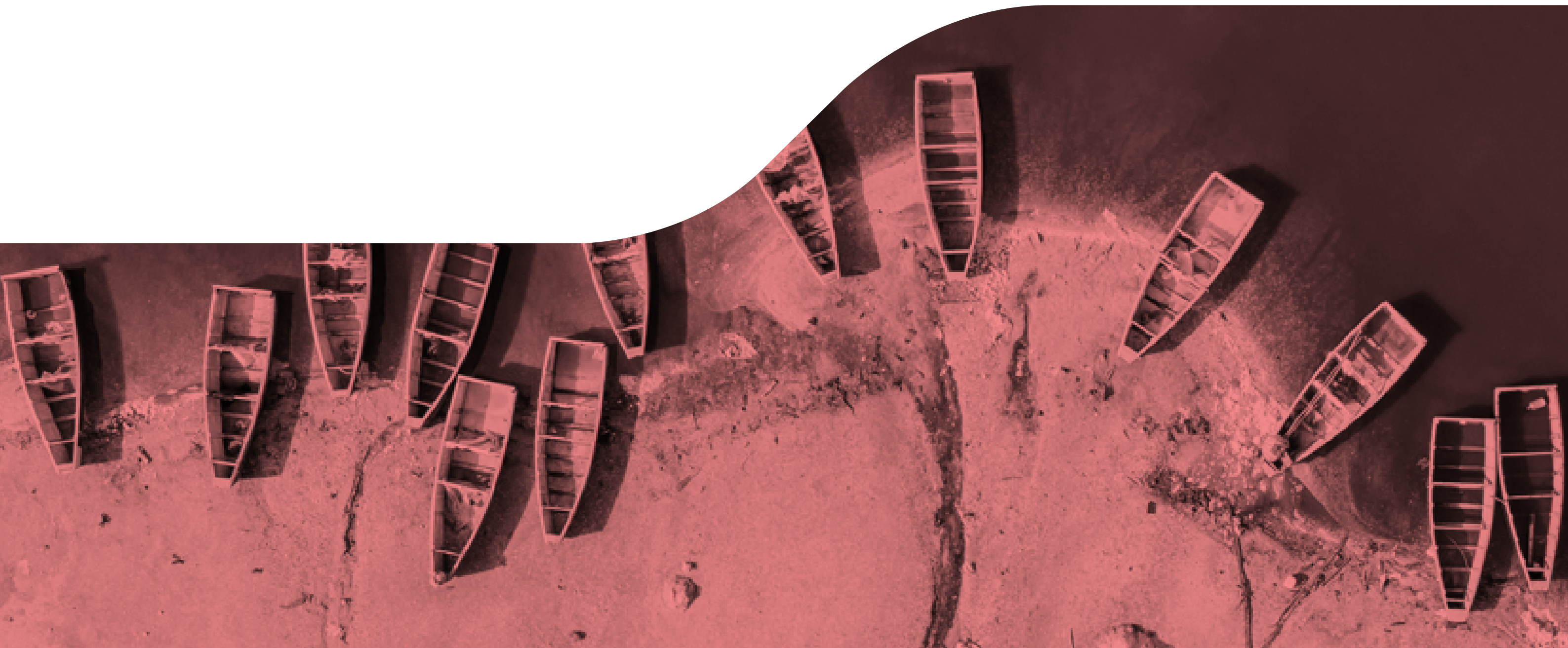
reduction in water use per colleague

20 %

reduction in paper use per colleague

10 %

reduction in waste production per colleague



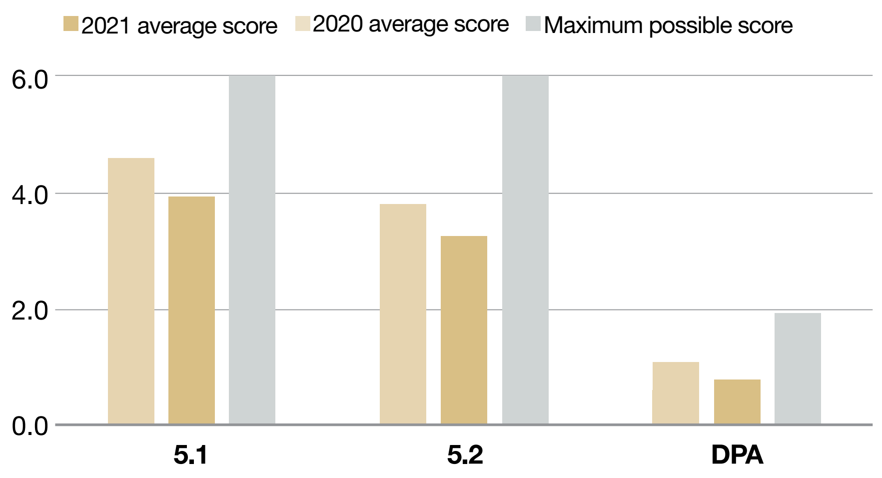
Principle 5: **Inform public policymaking**

The sub-principles

5.1 Promote and actively engage in public debate on climate-related issues and the need for action. Work with policy makers 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.

'DPA' refers to demonstrating planned activities.

Most members continued to promote and actively engage in public debate on climate-related issues. Members continued to occupy leadership positions and supported, undertook or actively shared research on climate change during the year. That said, a minority of members struggled to replicate the success of previous years, in part because COVID-19 restricted opportunities for engagement, which brought down average scores.

In sub-principle 5.1, almost all members outlined engagement activities on public policy on climate mitigation and adaptation. A similar proportion to last year scored full marks for demonstrating alignment of activities to climate-related issues and leadership positions, with the highest recorded number of members scoring full marks. However, a small proportion of the membership, just over 15 per cent, were unable to demonstrate the same levels of engagement throughout the year to influence public debate. While reasons varied, according to geography, jurisdiction and individual circumstances, the limiting impact of COVID-19 on opportunities and resources for engagement was present throughout. Their combined average raw score decline of 3 marks (43 per cent) was enough to see the overall membership average score decline by just under 10 percentage points. The rest of the membership performed strongly, with an average increase of 14 per cent across sub-principle 5.1.

For sub-principle 5.2, just under half of the membership described in detail research that they supported or undertook during the year. The majority of members scored partial or full marks for undertaking research or actively promoting knowledge sharing within the industry and engaging others. However, fewer members evidenced how the outcomes of research influenced their business strategies and the common interest. As with sub-principle 5.1, the performance of a small subset of the membership (with an average decline of 33 per cent) brought down the overall sub-principle average by 8.5 percentage points. The average percentage increase for the rest of the membership was 21 per cent, showing that most members continue to support and undertake research.

Key strengths

In the run-up to COP26, there were numerous examples of members working with policymakers locally, regionally, nationally and internationally and demonstrating strong engagement with public policy on climate adaptation and mitigation strategies. **Aviva's** participation in industry initiatives, such as through the GFANZ, PRA and FCA's Climate Financial Risk Forum, where the CEO chairs the scenario analysis working group, was a strong example of its commitment to sharing knowledge to advance a common interest.

Munich Re demonstrated proactive engagement with a centralised lobbying approach overseen by the Group Lobbying Committee. Climate change was one of its focus areas and was evidenced by the CEO's public call for carbon to have a meaningful price and his involvement in the COP26 meeting later that year.

The **ABI** has also shown evidence of a leadership position through its contribution to the Insurance Europe and Global Federation of Insurance Associations (GFIA)'s responses to the International Association of Insurance (IAIS)'s application paper on the supervision of climate-related risks in the insurance sectors well as by encouraging the UK government to support the International Financial Reporting Standards (IFRS) Foundation's plans for an ISSB in response to the Financial Reporting Council's discussion paper.

RSA has demonstrated its involvement in the public debate on climate-related issues with policymakers, including its contribution to the PRA/FCA's Climate Financial Risk Forum working groups. In particular, RSA engaged regularly with another ClimateWise member, **Flood Re**, to support the expansion of Flood Re's scope to cover small businesses. This engagement included contributing to the Department for Environment, Food and Rural Affairs (DEFRA)'s 2020 Flood Re review. RSA has also demonstrated an open and collaborative approach to its engagements. For instance, RSA shared the results from the scenario analysis it conducted in the previous year with the PRAs and the **ABI** in order to specifically improve how the insurance industry assesses the prolonged rainfall predicted under climate change. RSA showed that its engagement activities clearly aligned with its two strategic priorities: to accelerate the low carbon transition and improve resilience to extreme weather.

Willis Tower Watson continued to demonstrate active involvement in the public debate on climate-related issues with policymakers. For example, Willis Tower Watson's senior leadership held a position on the Steering Committee of the IDF, the ClimateWise Managing Committee and the Reviewing Committee of the Climate Finance Lab. Other examples include its presentations to the UCL Climate Policy Commission Climate Action Unit, participation on expert panels on flood risk for the Royal Society and climate scenario planning as part of City Week, moderating a panel at The Economist Climate Risk Panel and responding to the UK government consultation on addressing climate change risks and opportunities for trustees of larger occupational pension schemes. Willis Tower Watson increased its scoring against this sub-principle by demonstrating that it has prioritised engagement – such as its World Economic Forum partnership – with climate-related issues. It did this by disclosing a roadmap that set out key climate events in the run-up to COP26 and key engagement opportunities.

In line with Principle 5.2, members conducted or commissioned research to support their clients and communities to adapt to climate change. **AXA XL** continued its involvement with the Ocean Risk and Resilience Action Alliance (ORRAA), following its launch in 2019. ORRAA's objective is to direct investment into vulnerable coastal communities to build resilience. A significant achievement in 2020 was attracting CAD$2.5 million of seed funding from the Government of Canada to support nine projects, including the scoping of Blue Carbon Resilience Credits in the Bahamas. In 2020, AXA XL continued its funding of research in climate and weather-related risks including a feasibility study for a mangrove insurance product as well as research focused on how drought risk can be better managed.

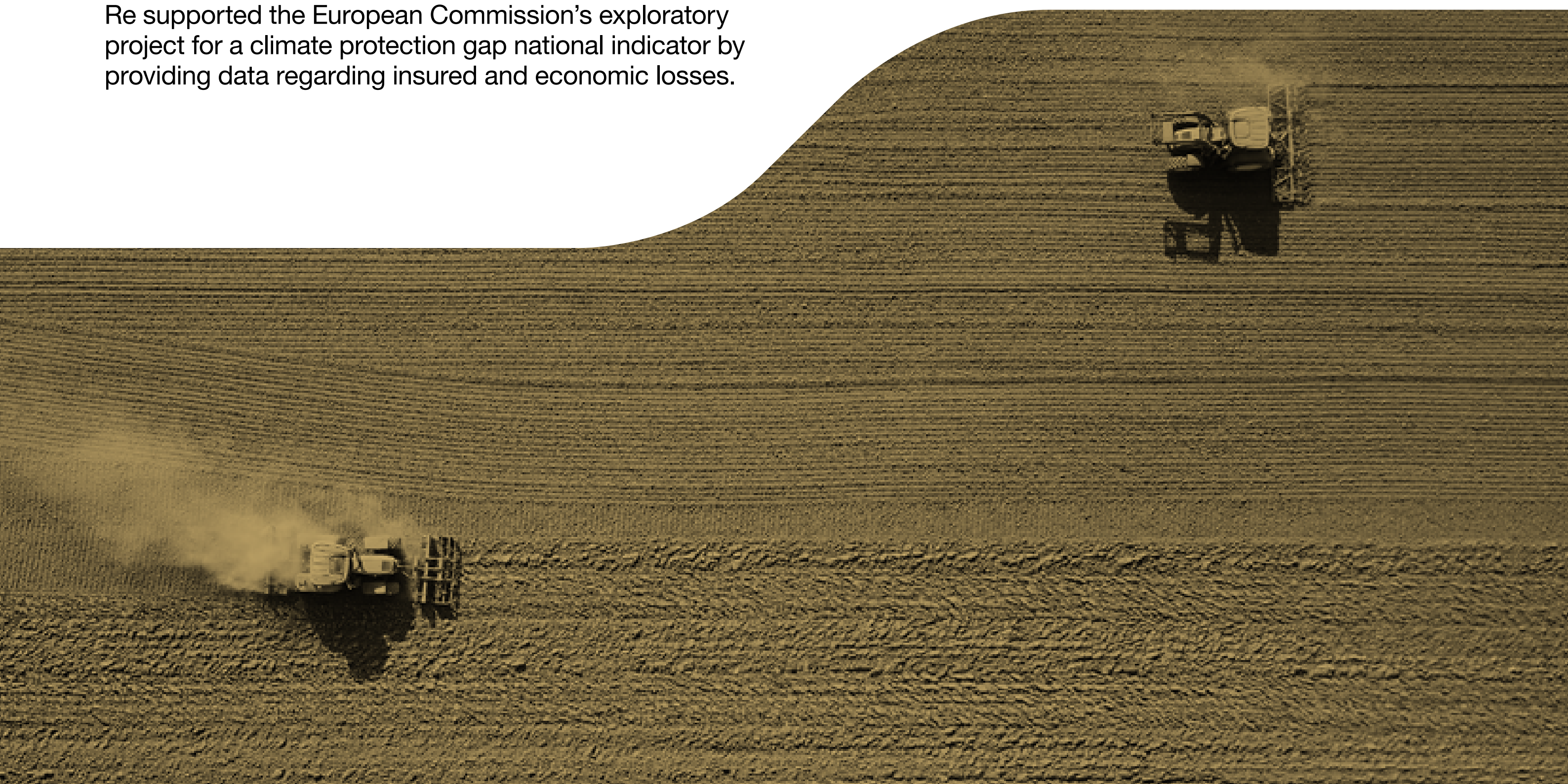
The **Swiss Re** Institute frequently co-ordinates, conducts and publishes risk research with academic and research institutions to drive better decisions and innovation in the re/insurance industry. The Swiss Re Institute publishes its annual *Sonar Report*, which highlights emerging risks, including those associated with climate change. This is distributed in an open-source manner and is designed to create dialogue within the industry. Swiss Re also provides data to various stakeholders to aid research, such as contributing to European Insurance and Occupational Pensions Authority (EIOPA)'s study on the natural catastrophe protection gap, and has shared climate-related data with governments and policymakers to support regulatory initiatives. As an example, Swiss Re supported the European Commission's exploratory project for a climate protection gap national indicator by providing data regarding insured and economic losses.

QBE has been active in supporting the Climate Measurement Standards Initiative (CMSI), which has developed standards for assessing climate physical risk projections of damage to property in Australia. The CMSI delivered a report with recommendations on disclosure and a report by the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Bureau of Meteorology and University of New South Wales on the expected impact of climate change on cyclones, storms, floods, sea-level rise and bushfires in Australia. The conclusions from this work have been referenced within QBE's internal assessments of exposure and modelling.

Recommended areas for development

Most members list participation of many membership bodies and engagement activities, but many stop short of detailing specific involvement on committees or other specific contributions made to influence policy. Members should consider demonstrating the prioritisation of policy engagement initiatives, with less than a third scoring full marks here, as well as evidence of a leadership position within the groups and initiatives they have joined.

Fewer research projects were initiated across the membership in the reporting year, in part, and for a minority, due to restricted access to resources and other short-term priorities for their organisations caused by the global pandemic. Even in these circumstances, however, members still struggled to demonstrate how the outputs have been used to inform business strategies or help them address key climate-related risks. Whilst there were good examples of engagement across the value chain, particularly in areas of flood resilience, there is opportunity for improvement across the membership to proactively engage each other to share the results of research.



Case study: Sedgwick

Sedgwick's engagement with academia, policymakers and other ClimateWise members on building flood resilience in the UK

Throughout 2021, Sedgwick has shown how the loss adjusting industry can engage with academia and policy makers and drive research around flood resilience, which is designed to minimise the impact of flooding. As claims handlers, Sedgwick is materially impacted by the damage caused by increases in instances of natural weather events, such as flooding, storms and subsidence, all of which are physical risks and damages posed by climate change.

Leading research into enhancing the evidence base for property flood resilience

ClimateWise member Sedgwick, alongside Flood Re and working in partnership with the University of the West of England, examined the impact of flooding and the value of flood resilience. Research published by Flood Re, based on a sample of 702 home insurance claims for flooding from two insurers over the years 2013–2019, highlights the costs and benefits of flood resilience.

Key findings include:

- Low-cost recoverable packages (designed to limit damage once water enters a home, such as resilient plaster and floors) could be appropriate for a large proportion of flooded homes. Packages that do not protect kitchens, windows and doors can be effective as these were not replaced in the majority of sampled claims.
- Damage from deep and prolonged flooding can cost nine times as much to repair as shallow, shorter-duration flooding. Therefore, higher-cost measures may be cost-beneficial for severely flooded homes.
- A combination of recoverable and resistant measures can be considered for homes subject to deep and prolonged flooding because limiting water depth and duration (where possible) can avoid the high cost of future floods as well as reducing return-to-home time.
- Where necessary, installing a resilient kitchen may be beneficial where a kitchen is being replaced after flooding, because kitchens cost more than previously thought, and families are more likely to be relocated if their kitchen needs replacing.

Sedgwick has also developed a separate research project with Leeds University to analyse the current level of flood resilience for small and medium-sized enterprises (SME) and form a framework to both improve their flood resilience and evidence their value to key stakeholders in the value chain, such as insurers, brokers and lenders. This work responded to the need to provide a wider understanding of the situation of SMEs and flooding. The market failure of imperfect information about SMEs and flooding has been highlighted as a barrier to advance SMEs' flood resilience agenda.

Key findings include:

- Before, during and after a flood incident, SMEs reported that the most used support was that provided by the government.
- SMEs in areas at flood risk continue reporting difficulties with insurance, which calls for greater interaction to be facilitated between SMEs and the insurance sector.

It is crucial to know the total extent of the economic losses of flooding for SMEs in order to prevent those damages going unaccounted for and to direct investments where they are most needed.

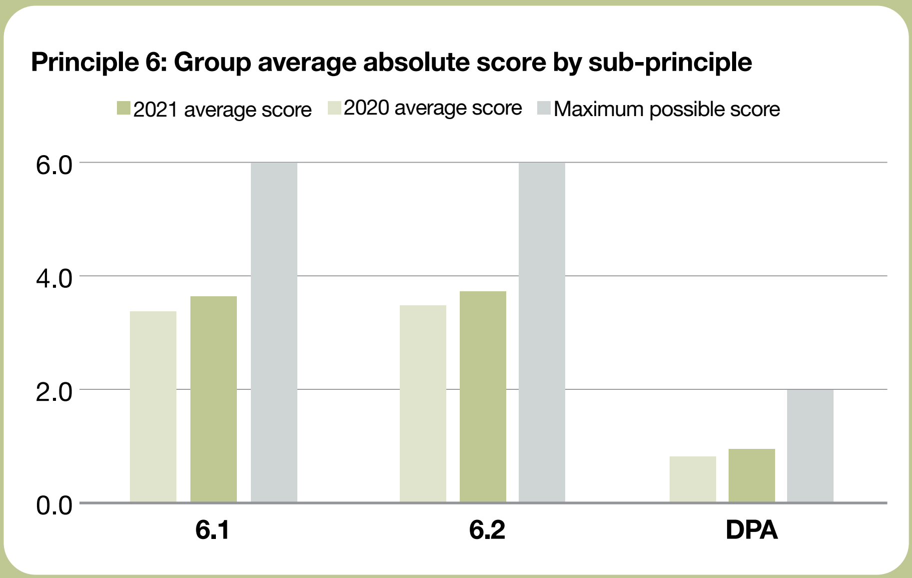
Sedgwick has used this research to promote the impact of flood resilience to customers and share with DEFRA and the Environment Agency's Property Flood Resilience Round Table. It has also used the research to develop its service offerings and upskill its workforce to help deliver advice and flood-resilient repairs to customers.

› 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 and/or clients.

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



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.

'DPA' refers to demonstrating planned activities.

Members continue to demonstrate an increasingly proactive approach to communicating beliefs and strategy on climate-related issues to customers and clients. Members have also helped customers and communities assess their own levels of risk and challenges by providing a wide array of tools and services.

Sub-principle 6.1 saw strong improvement, with over three quarters of members successfully communicating the organisation's beliefs and strategy to customers and clients. Many members published new or revised climate or ESG strategies and policies, which helped them to communicate these to customers and clients. Over two thirds of members provided evidence of client engagement plans on climate change, but many members still struggle to provide quantitative disclosures of engagement activities or evidence of feedback mechanisms, with just over a quarter scoring full marks.

For Principle 6.2, there was strong growth in the number of members evidencing areas of behavioural change needed to mitigate climate risks for their customers and clients, with over half of the membership scoring full marks, up from 35 per cent in the prior year. This rise shows that members are broadening their thinking beyond immediate risks to themselves to the role climate change is having on other participants in the value chain (as outlined above). Greater numbers of members are providing evidence of engagement to promote resilience through knowledge sharing, with over half the members scoring full marks and only one failing to score any marks. However, there continues to be a disparity between high-performing members which provide further evidence of tools and services for customers and clients to assess their own exposure to climate risk and other members which have not provided any and thus scored no marks. High-performing members helped provide transition risk tools as opposed to traditional ones focused on weather-related perils.

Members performed well by demonstrating planned activities for forthcoming years and disclosing progress against the previous year's activities.

Key strengths

The influence of COP26 at the end of 2021 was felt by the membership, with many members renewing or redoubling their efforts to engage customers and clients on climate-related strategies and risks they face. Many members developed or refreshed their ESG and climate strategies, which allowed them to communicate these to customers and clients.

While many instances of engagement are covered elsewhere in this report, there are notable examples of members communicating their beliefs and strategy in a variety of innovative ways.

Argo Group, for example, ran a strong campaign of engagement with customers and clients to improve their knowledge and awareness of climate change issues; moreover, its climate risk management position was described on its corporate responsibility webpage and in its ESG report. This year, Argo Group launched a new quarterly ESG newsletter which highlights its climate change plans. Notably, Argo Group has also started to quantify the degree of outreach achieved through its newsletter, which led to an increase in its performance against this sub-principle.

RSA published its Climate Change and Low Carbon Policy, clearly setting out its stance on climate change and how it will impact the insurance industry through changing weather patterns and increased frequency and severity of events. RSA also promoted campaigns, and shared tools and advice that encourage personal and commercial customers to adapt to climate change and reduce their energy use and associated GHG emissions, such as their 'repair over waste' campaign on waste reduction and sustainable claims handling.

Swiss Re made a significant improvement in its scoring under Principle 6 by providing evidence of its communications with clients through external websites and reports. In particular, the company disclosed its Engagement Framework, which includes targets for external managers' engagement activities to encourage alignment with the 1.5°C target and disclosure of ESG metrics. Swiss Re measures the impact of these engagements in addition to the percentage of investees reached. The results for 2020 show that between 20 per cent and 30 per cent of companies had implemented measures requested via this engagement.

Members also developed tools and services to inform members of their climate exposures, scoring well against sub-principle 6.2. **Allianz** created an impact assessment tool that clients can use to assess their own environmental impact and supplemented this by providing additional ESG consultancy services, which provide further assessment of clients' ESG practices. Allianz also provides other resources for companies, such as advice on how to improve businesses' resilience to extreme weather.

Beazley identified two clear methods to inform clients about climate-related risk: use of modelling outputs to determine the potential impacts and thus promote behaviour change; and use of ESG metrics and question sets as part of the underwriting process. Beazley shared knowledge with its clients through knowledge sharing sessions and identified the need for clients to adopt net zero targets underpinned by initiatives such as the SBTi.

Aon ran educational campaigns for thought leadership on climate and published documents online that focus on both the risk and opportunities in managing climate risk. These included the *Annual Weather, Climate & Catastrophe Insight Report, 2020 Annual Report How the Energy Transition Can Help Tackle Climate Change and Why Every Business Should Be Thinking About Climate Change Risks.*

RenaissanceRe held 14 Mitigation Forums bringing clients and brokers together with scientists and public policymakers. The result of the forums was the sharing of research and approaches to management and mitigation of the changing risk from natural disasters due to climate change. One other noteworthy case was **Lloyd's** Africa partnership with global humanitarian and development organisation Mercy Corps to raise awareness of the benefits of insurance for smallholder farmers in East Africa.

Recommended areas for development

Members should increase the quantitative analysis of their outreach activities and customer campaigns and collect feedback to help prioritise and target levels of engagement in the future. Over half the members did not provide any evidence of quantification of such engagement, or evidence that their campaigns had reached their target audience or had the desired effect. This increase will help those members which still struggle to provide strong evidence of robust engagement plans for their activities, and assist to overcome members lack of a strategic approach to their engagement activities beyond informing customers about newly agreed ESG and climate strategies. This reflects a broader theme within submissions that members are developing strategies but not yet thinking strategically about their broader place within the value chain and the impact of climate change on the insurance industry.

High-performing members continue to develop tools and services for customers and clients to help them assess their risk. However, around one third of members provided no such evidence. Members should also provide details of the actions clients have taken in response to members' guidance and the impact this has had on their communication activities and strategies.

Case study: Willis Towers Watson

Willis Towers Watson has developed a cutting-edge accreditation framework to help clients evaluate the implications of climate change transition risk and move to a low-carbon economy.

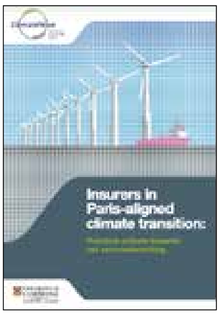
The Climate Transition Pathway (CTP) is an accreditation framework created by Willis Towers Watson and independent third-party groups including Volans, a consultancy, and the Climate Bonds Initiative (CBI).

Headed by a CTP governance committee, it provides insurance companies and financial institutions with a consistent approach to identifying which organisations have robust transition plans aligned to the Paris Agreement and supports their role as stewards in the transition to a low-carbon economy.

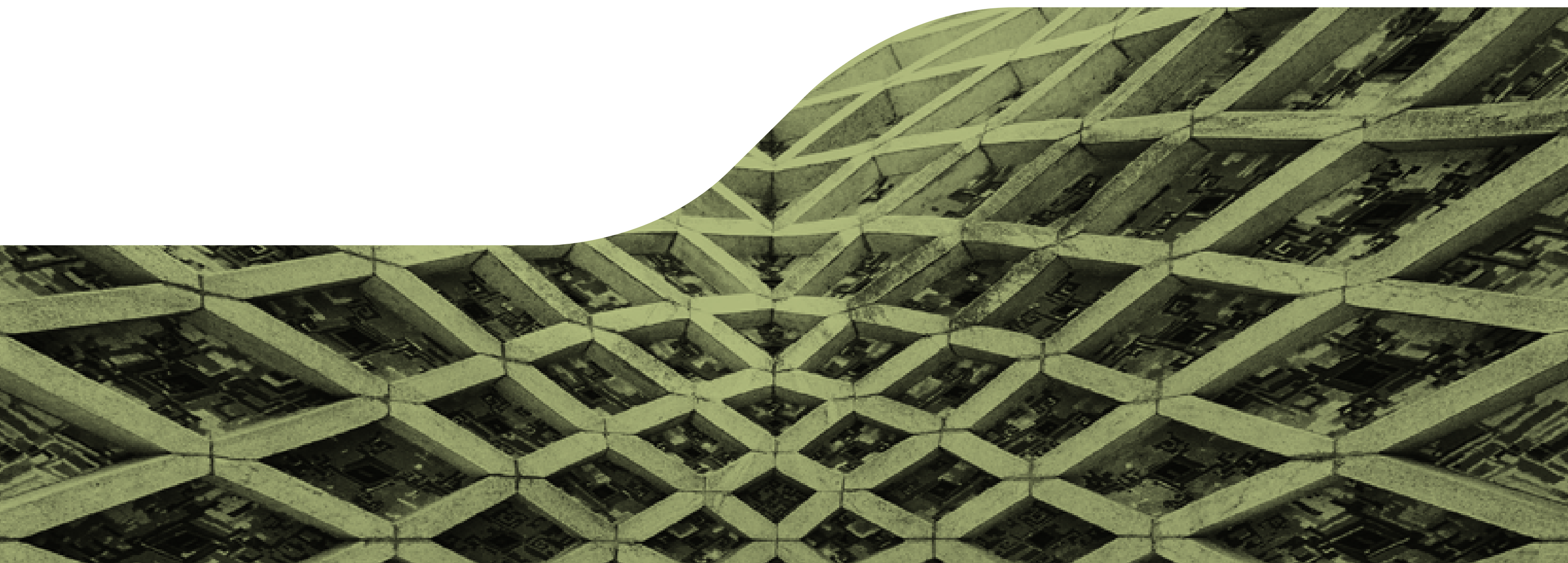
The governance committee members are tasked with creating industry-specific solutions to support the implementation of the CTP framework. They will utilise the Assessment for Low Carbon Transition (ACT) methodology and map outputs to a robust accreditation model to review business commitments to principles aligned to the Paris Agreement and science-based targets consistent with reducing global emissions to help companies move to a net-zero carbon environment. Businesses meeting these principles and achieving accreditation will have the opportunity to access insurance capacity and capital to support their orderly transition and help them meet their low-carbon commitments.

Businesses benefit from an independently assured accreditation of their transition's alignment to the Paris Agreement, helping them to stand out from those making more unsubstantiated claims. Insurance and capital markets can then have the confidence to allocate capacity/capital, knowing that a rigorous assessment of a company's alignment to the Paris Agreement, and its ability to deliver this plan, has taken place.

Willis Towers Watson has partnered with another ClimateWise member, Liberty Specialty Markets, which has aligned capacity to support the CTP solution, showing cooperation within the insurance value chain to support climate awareness among customers and clients. Other insurers aligning capacity include Arch and SCOR, with Fidelis recognising the accreditation.



Further details can be found in the recent ClimateWise research report, *Insurers in Paris-aligned climate transition: Practical actions towards net zero underwriting*, in which CTP is discussed in detail.

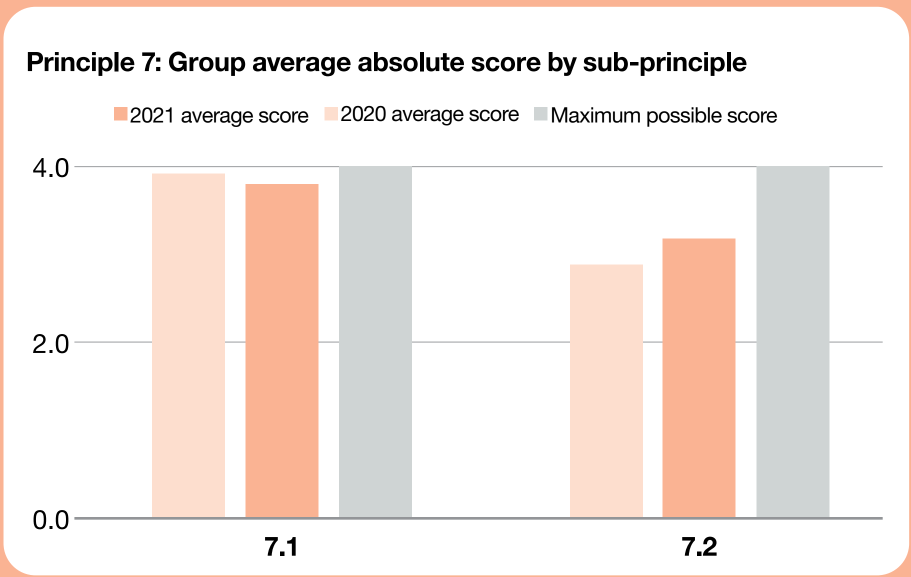


Principle 7: **Enhance reporting**

The sub-principles

7.1 Submission against the ClimateWise Principles.

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



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

Just under 85 per cent of the membership scored full marks against sub-principle 7.1, showing that the vast majority of members are reporting against all the ClimateWise sub-principles and submitting their report on time.

Over half the members scored full marks against sub-principle 7.2 for publicly disclosing their ClimateWise Principles report, in line with the prior year.

With reference to key elements of ClimateWise Principles, 91 per cent of the membership are evidencing incorporation of these elements within their own annual reporting. This practice reflects members' proactive engagement with the TCFD recommendations, which are set to become mandatory over the next few years in many of the members' jurisdictions.

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

Key strengths

Scoring improved against Principle 7, with members demonstrating a proactive approach to implementing the TCFD recommendations. This improvement is, in part, driven by increasing calls for mandatory TCFD disclosure, with the UK government publishing a roadmap for mandatory disclosure for all regulated firms by 2025.[28]

Tokio Marine & Nichido Fire Co publicly discloses its ClimateWise report and incorporates key elements within annual reporting, scoring full marks. Other members, including **Sanlam, Munich Re, Flood Re, Hiscox, Santam** and **Zurich**, have encouraged appropriate disclosure of climate-related activities, the primary objective of the TCFD, by publicly disclosing their ClimateWise Principles report.

Aviva and **The Hartford** both published their own standalone climate-related financial disclosure report aligned to TCFD principles. **Hiscox** also publishes a standalone climate report, structured by the seven ClimateWise principles, as its main method for communicating information on climate-related risk opportunities to stakeholders.

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.

Just over a third of members do not make any public disclosure of the ClimateWise Principles report or a TCFD-aligned sustainability or climate 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.

Appendix 2:

Scoring methodology

The 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 relevancy by organisational category: Professional Bodies and Associations, Insurers, Brokers, Risk Modelers, Reinsurers, Corporation of Lloyd's and Loss Adjustors. The scoring process is as follows.

Each level, and planned activity, receives a maximum of 2 points, as below:

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. Hence, some sub-principles contain more levels than others, as noted in the figures presented in Appendix 1 for each Principle.

Scores are totalled at a Principle level and weighted accordingly, based on member organisational type, to provide an overall percentage score. As a result, members providing evidence in areas where more weight is assigned achieved higher scores.

Members should aim to provide evidence against all of the ClimateWise Principles. However, there is an option for members to request exemption from sub-principles if appropriate. Exemptions to sub-principles 2.2 and 2.3 were provided to three members, and exemptions to sub-principle 7.2 were provided to three different members reporting for the first time.

The Principles independent review process is outlined to the right.

The scoring process:

1. Detailed review of ClimateWise submissions
Members submitted their reports and supporting documents to CISL; thereafter, the documentation was reviewed and scored by the Deloitte independent review team, using the methodology described above. Each submission was treated as final.

2. Distribution of initial feedback
An initial feedback form was shared with each member which gave 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, an optional clarification call was offered to certain members by the independent reviewer. This was where there was a material decline in a member's total or individual Principle scores, and where relevant, to provide clarifications on submitted evidence. Whether additional clarifying evidence was 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 overall and where possible by member type. A final insight call with the independent reviewer was then offered to all members to discuss final feedback and insights from the review.

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: Beazley Group, The Hartford, Lloyd's marketplace, 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.

Note on threats to independence
In line with auditing standards on threats to independence, for those members for which the independent reviewer was also their audit provider, written feedback and the insight calls were distributed and conducted, respectively, by the ClimateWise secretariat.

Appendix 3:

Member ranking

Anonymised member	Score 2021	Rank 2021	Score 2020	Rank 2020	Score 2019	Rank 2019
A	93%	1st	92%	1st	72%	1st
B	90%	Joint 2nd	89%	2nd	60%	Joint 7th
C	90%	Joint 2nd	82%	4th		N/A
D	87%	4th	83%	3rd	60%	Joint 7th
E	86%	5th	60%	Joint 14th	72%	2nd
F	85%	6th	80%	5th	67%	Joint 3rd
G	83%	Joint 7th	78%	Joint 6th		N/A
H	83%	Joint 7th	78%	Joint 6th	62%	Joint 5th
I	82%	9th	71%	8th	61%	Joint 5th
J	79%	10th	64%	13th	53%	Joint 9th
K	72%	11th	66%	12th	47%	14th
L	68%	12th	68%	Joint 10th	50%	13th
M	61%	Joint 13th	43%	19th		N/A
N	61%	Joint 13th	47%	N/A	44%	N/A
O	58%	15th		N/A		N/A
P	57%	Joint 16th	46%	17th		N/A
Q	57%	Joint 16th	69%	9th	53%	Joint 9th
R	56%	17th	34%	20th		N/A
S	55%	18th	38%	N/A	17%	N/A
T	52%	20th	45%	18th	41%	15th
U	44%	21st		N/A		N/A
V	41%	Joint 22nd	60%	Joint 14th	52%	11th
W	41%	Joint 22nd	58%	16th	68%	Joint 3rd
X	36%	24th		N/A		N/A
Y	9%	25th	25%	21st	25%	17th

Appendix 4:

Score distribution

Principle	Sub-principle		Level	Score 0	Score 1	Score 2
1 Be accountable	1.1	Ensure that the organisation's Board is working to incorporate the Principles into business strategy and has oversight of climate risks and opportunities.	Level 1	1	10	14
			Level 2	3	8	14
			Level 3	2	6	17
	1.2	Describe management's (below board-level responsibility) role in assessing and managing climate-related issues.	Level 1	1	4	20
			Level 2	1	5	19
			Level 3	4	4	17
	Demonstrating planned activities			5	12	8
2 Incorporate climate-related issues into our strategies and investments	2.1	Evaluate the implications of climate change for business performance (including investments) and key stakeholders.	Level 1	2	5	18
			Level 2	3	3	19
			Level 3	1	11	13
			Level 4	7	6	12
	2.2	Measure and disclose the implications of climate-related issues for business performance (including investments) and key stakeholders.	Level 1	6	10	6
			Level 2	13	5	4
			Level 3	9	9	4
			Level 4	11	4	7
			Level 5	12	2	8
	2.3	Incorporate the material outcomes of climate risk scenarios into business (and investment) decision making.	Level 1	4	7	11
			Level 2	4	8	10
			Level 3	9	3	10
			Level 4	7	5	10
	Demonstrating planned activities			4	13	8
3 Lead in the identification, understanding and management of climate risk	3.1	Ensure processes for identifying, assessing and managing climate-related risks and opportunities are integrated within the organisation (including investments).	Level 1	1	3	21
			Level 2	2	8	15
			Level 3	3	3	19
			Level 4	8	3	14
	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	2	23
			Level 2	4	5	16
			Level 3	4	7	14
	Demonstrating planned activities			10	11	4

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	17
			Level 2	9	8	5
			Level 3	11	8	6
	4.2	Disclose our Scope 1, 2 and 3 GHG emissions using a globally recognised standard.	Level 1	1	5	19
			Level 2	8	4	13
			Level 3	5	6	14
			Level 4	3	7	15
	4.3	Measure and seek to reduce the environmental impacts of the internal operations and physical assets under our control.	Level 1	3	9	13
			Level 2	11	7	7
			Level 3	13	8	4
			Level 4	18	5	2
			Level 5	2	5	18
	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	1	7	17
			Level 2	6	11	8
			Level 3	13	11	1
	Demonstrating planned activities			3	10	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 policy makers locally, regionally, nationally and internationally to help them develop and maintain an economy that is resilient to climate risk.	Level 1	1	4	20
			Level 2	9	7	9
			Level 3	7	3	15
	5.2	Support and undertake research on climate change to inform our business strategies and help to protect our customers' and stakeholders' interest. Where appropriate, share this research with scientists, society, business, governments and NGOs in order to advance a common interest.	Level 1	4	9	12
			Level 2	7	6	12
			Level 3	12	5	8
	Demonstrating planned activities			11	7	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	1	3	21
			Level 2	8	8	9
			Level 3	14	4	7
	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	4	13
			Level 2	1	10	14
			Level 3	9	5	11
	Demonstrating planned activities			9	11	5
7 **Enhance reporting**	7.1	Submission against the ClimateWise Principles.	Level 1	0	4	21
			Level 2	0	0	25
	7.2	Public disclosure of the ClimateWise Principles as part of our annual reporting.	Level 1	7	1	14
			Level 2	1	1	20

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