ClimateWise

Insuring a sustainable future

Closing the protection gap

ClimateWise Principles Independent Review 2016

@ClimateWise

UNIVERSITY OF CAMBRIDGE
INSTITUTE FOR SUSTAINABILITY LEADERSHIP

ClimateWise

ClimateWise is a growing global network of over 30 leading insurers, reinsurers, brokers and industry service providers with a shared commitment to reduce the impact of climate change on both society and the insurance industry. It is a voluntary initiative, driven by its members and facilitated by the University of Cambridge Institute for Sustainability Leadership (CISL).

All members are independently annually audited on their integration of the six ClimateWise Principles across their business activities. The ClimateWise Principles include leading on climate risk analysis and climate-resilient investment, raising customers' climate awareness, and reducing the member's own carbon footprint.

Through ClimateWise, members also deliver a ranger of far-sighted and innovative Action Research Collaborations (ARCs), which bring together experts from across the insurance industry, partner organisation, regulators and academia.

Participants identify and address gaps in how insurance can best support the transition to a low-carbon, climate-resilient society, and ultimately mitigate the impact of climate change on international insurance markets.

The insight generated by ARCs is of vital importance, not only to the insurance industry and its customers, but to governments and civil society more broadly.

As ClimateWise expands its global membership and leverages the outputs of the ClimateWise Principles and ARCs, it is becoming an increasingly powerful leadership voice for the global insurance sector on climate change.

By joining or partnering with ClimateWise you will help to shape this debate and directly contribute to the successful transition to a low-carbon, carbon-resilient future.

Rewiring the Economy

Rewiring the Economy is Cambridge Institute for Sustainability Leadership's (CISL) ten-year plan to lay the foundations for a sustainable economy.

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

CISL is particularly focused on supporting a just transition to a zero carbon economy and the role the financial system reform can play in that. In that context, CISL is pleased to convene ClimateWise, which exists to be the global insurance industry's leadership group to drive action on climate change risk.

Publication details

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Copies
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December 2016

Executive summary

The Paris Agreement on climate change came into force in November 2016, a clear signal of international commitment to decarbonisation to contain the negative impacts of climate change. That momentum has been maintained over the last year since the negotiations last December.

At the same time, there is a widening of the global protection gap – the divide between economic and insured losses. This is particularly the case in developing countries most vulnerable to climate impacts. The trends of climate change, the transition to a low carbon economy and a growing protection gap will require the insurance industry to evolve and broaden its role in society to manage the impacts of climate change. This will involve influencing authorities to ensure a more enabling environment for insurance, increasing the availability and reliability of technology-enabled data, and, crucially, moving beyond financial risk transfer and ensuring greater collaboration across sectors and markets to increase societal resilience. The low interest rate environment and the structural growth inherent in emerging economies may just be the right incentive for the insurance industry to further venture into those economies and geographies most vulnerable to climate risks. Does the progress made by the ClimateWise members in 2016 show they are ready and well placed to do this?

The 2016 ClimateWise Principles review continues to demonstrate how members are evolving their management of climate risks and developing their roles as key risk managers to societies and economies. Overall, this year saw a continued rise in the average performance score up to 59 per cent from 56 per cent in 2015. Four leading members have now exceeded the 80 per cent mark of high performance, compared with just one member last year.

Unsurprisingly, ClimateWise members have demonstrated that over the last year they have played active roles in leveraging their insight to inform policy making and influence the climate change agenda, in particular before, during and after the Paris climate negotiations. Members show marked improvements in conducting research, improving data quality regarding climate risk, and using the outputs of these activities to inform business decisions and strategy. Members also disclosed how they are increasing their efforts to provide customers with better information, tools and services to help them assess their own exposure to climate risk.

Despite another increase in overall average score about a third of members remain below 50 per cent, still struggling to integrate climate change across their business. There was also a notable decrease in disclosure regarding members' efforts to evaluate the implications of climate change on the performance of their investments. This is a disappointing development given the broader advances made across financial sectors in understanding climate risk in investment portfolios, and the warning in last year's Prudential Regulation Authority (PRA) report that the transition to a low carbon economy may impact insurance companies' investment portfolios.

In this report we highlight some of the developments that will impact the insurance industry in the coming years. We look at the work of the Financial Stability Board's (FSB's) Task Force on Climate-related Financial Disclosures and how the industry will face higher expectations from investors, rating agencies, regulators and other stakeholders as a disclosure provider, but will also benefit as an underwriter and investor from an increase in risk data in the market. We also explore what climate change means for the 'insurer of the future' and how the industry should be looking ahead to review the adequacy of their corporate resources and structure.

> **"ClimateWise has been valuable in helping the industry to consider and disclose its climate-related risks and opportunities – both in its underwriting and investment decisions – as well as in promoting a culture of disclosure and awareness to climate risk in financial markets."**
>
> Mark Carney, Governor of the Bank of England and Chairman of the G20 Financial Stability Board

Overall we are seeing steady progress from the ClimateWise members in managing climate risk across most aspects of the business, but this is still lagging behind the step change witnessed in international political commitment to addressing climate change in the last year. Members must ensure this opportunity – to support clients in understanding and managing risk, to provide solutions for closing the protection gap in vulnerable geographies and to deploy investments which decarbonise and build climate resilience in the economy – is understood by key decision-makers and embedded in thinking across the corporate ecosystem. This is the vision of the ClimateWise Principles and the Paris Agreement has made the Principles more relevant than ever before.

Contents

ClimateWise members 2016

ABI, Allianz, Aon, ArgoGlobal, Aviva, Beazley, Chubb, CII, Direct Line Group, Hiscox, If, Innovation Group, Lloyd's, Marsh, MS Amlin, Navigators, Novae, Prudential, QBE, RenaissanceRe, RMS, RSA, Santam, Swiss Re, Tokio Marine Kiln, Tokio Marine Nichido, Willis, XL Catlin, Zurich

Chairman's foreword

Following the success of last year's Paris climate negotiations, it's yet again been a busy year, not just for ClimateWise and its membership, but for the insurance sector and financial services industry more broadly.

As the focus shifts towards implementation of the Paris Agreement, attention is now on ensuring capital is deployed in such a way as to actually maintain global temperature rise to below the two degree threshold set.

From an insurance perspective, the theme of 2016 has been the climate risk protection gap. This is amidst concerns that society is now more exposed than ever before to climate risks, yet increasingly unable to access adequate insurance cover. This challenges both the insurance industry and society more broadly. However, it also suggests that the industry's traditional approach to risk assessment and management – focusing on improving financial risk transfer rather than enhancing the resilience of the broader economic system – will not stand the test of time.

It's no surprise therefore that the theme of this year's ClimateWise Principles Independent Review is on the climate risk protection gap. The review reflects on the broader context in which the protection gap is emerging, what responses this is eliciting and what research ClimateWise is initiating, via its Societal Resilience Programme. The recent launch of ClimateWise's Investing for Resilience report highlights ways that insurers can more proactively support increased flows of capital into resilience-enhancing investments. Our senior-level ClimateWise Insurance Advisory Council is now also actively commissioning research on how insurers can collaborate with regulators and other parts of the financial system in response to the protection gap.

This independent review finds exciting and tangible evidence of ClimateWise members increasingly supporting the transition to a net zero carbon, climate-resilient economy. It highlights multiple pockets of innovation stretching across insurer's risk assessment, risk management and investment activities. Bringing this all together, the review provides us with a glimpse of what an *insurer of the future* could look like.

I'd like to extend my thanks to all ClimateWise members for their contributions to this year's independent review and their broader ongoing commitment to ClimateWise and the University of Cambridge Institute for Sustainability Leadership's (CISL) work. Moving into 2017, I hope our co-ordinated response to the climate risk protection gap can start to deliver the responses so urgently needed.

Maurice Tulloch, Chairman, ClimateWise and Chairman, Global General Insurance, Aviva

The year of the protection gap

Progress since Paris

It's been a busy year. The last 12 months saw a step change in action on climate change. This was most notable at the policy level with the Paris Agreement[1] being signed at the COP21 climate negotiations in December 2015. Less than a year later, countries representing more than half of the world's emissions have already formally accepted to commit to the Agreement, thereby triggering its entry into force. In parallel to this process, countries have been building on their pledges made at Paris (or 'Intended Nationally Determined Contributions' or INDCs) to develop investment and implementation plans across their economies. Concurrently, the reality that the world's temperature has increased by more than a degree since pre-industrial levels and is well on its way to two degrees, has pushed developed countries to make adaptation finance commitments.

Paris also saw the FSB establish its Task Force on Climate-related Financial Disclosures.[2] Following an ambitious work schedule, in Q1 2017 it will present guidance on how sectors including insurance should disclose the financial implications of climate risk. Three ClimateWise members (Aviva, Swiss Re and Tokio Marine) and PwC are members of the Task Force. This gives the insurance industry a strong voice at the table. The enhanced disclosure requirements likely to follow will be significant for the insurance industry as they are both providers and users of climate risk data. We explore the work of the Task Force further on page 9.

ClimateWise members have been active in supporting climate initiatives over the last year – being vocal about the industry's role, committing their companies to pledges of positive action and supporting momentum around the Paris negotiations. At least seven ClimateWise members had representatives in Paris and ten (Allianz, Aviva, Beazley, CII, Hiscox, If P&C, Lloyd's, Santam, Swiss Re and Zurich) signed the Paris Pledge for Action.[3] This was a formal initiative for non-state organisations to show support for COP 21 agreement, managed by the Cambridge Institute for Sustainability Leadership (CISL).

2016 was also the G20's Year of Green Finance. Under proactive leadership from China and the UK, a dedicated Green Finance Study Group, also supported by CISL, produced the G20 Green Finance Synthesis Report[4] with options to enhance the ability of the financial system to mobilise private capital for green investment. Taking over the G20 Leadership in 2017, Germany now has the opportunity to consolidate the progress made on climate change and climate targets.

Progress on decarbonisation

According to PwC's latest analysis in its 2016 Low Carbon Economy Index,[5] 2015 saw a shift in the decarbonisation of the global economy. Carbon intensity fell by a record 2.8 per cent, more than double the annual average since 2000. In addition, some major emerging economies, including China (at 6.4 per cent), showed sharp reductions in carbon intensity.

This progress may be the first signs of the uncoupling of emissions from economic growth. Global emissions were flat in 2015 while GDP grew by a respectable 3.1 per cent. Coal consumption fell by 1.8 per cent, with a switch to lower carbon gas (+1.7 per cent) as well as oil (+1.9 per cent). Wind and solar energy output grew at 17.4 per cent and 32.6 per cent last year, but are still tiny fractions of the whole energy system.

However, the whole global economy needs to decarbonise at 6.5 per cent per annum until 2100 to meet a two degrees scenario. Though a huge step forward, the country targets under the Paris Agreement, at their current level, present a rate of 3 per cent and a three degrees scenario. Therefore country commitments under the Agreement will need to be scaled up over time, underlining the importance of the Agreement's ratchet mechanism.

Progress on climate resilience

The international climate change negotiations that took place in Paris put the spotlight on resilience more than ever before. National climate plans (INDCs) submitted ahead of Paris stressed the importance in helping society adapt to unavoidable levels of climate change. The 7th Global Forum on Urban Resilience and Adaptation[6] took place this summer and welcomed participants from 45 countries, signalling that decision-makers globally are looking for tangible solutions to enhance resilience at the urban level. The newly created Insurance Development Forum (IDF) has launched a Risk & Resilience Working Group to support the creation of a Global Adaptation and Resilience Fund to invest in resilience related technologies, innovation and facilities.

Addressing the protection gap

Despite the marked progress being made at the intergovernmental level, in reality the climate risk protection gap – the growing divide between economic and insured losses – is continuing to widen. It's also beginning to appear across multiple markets, including geographical, sectorial or socio-economical.

Evidence of this protection gap was reinforced in 2015 which saw the highest number of natural catastrophes on record, with over 1,000 causing overall losses of USD 90 billion.[7] Demographic and urbanisation trends are also contributing to an increase and concentration of risk. To date insurance penetration has been outpaced by these trends. This has resulted in the widening of the protection gap.

Highlighting this gap, recent analysis by Swiss Re[8] found that on average only about 30 per cent of catastrophe losses have been covered by insurance in the 10 years prior to 2014. This leaves about 70 per cent (USD 1.3 trillion) carried by individuals, firms and, the 'insurer of last resort', governments.

The picture differs across market types. Insurance coverage in developing countries is typically low and so the level of uninsured value at risk is, at least as a proportion of the economy, far greater. More challenging still for developing countries is that the capacity of the government to respond, absorb recovery costs and support a quick economic rebound is also lower. This in effect transfers the costs to developed countries through ongoing disaster relief and payments.

Addressing the protection gap is an opportunity for both insurers and the societies they underwrite. The insurance industry acknowledges it has a lot to contribute to address the gap (both via risk transfer and mitigation/risk management support). Innovative member action under the ClimateWise Principles is a good indication of what proactive and leading companies can do and what the insurance industry could look like in the future.

ClimateWise sub-principle 3.4 specifically explores related actions by members. This year we have seen improved performance on this sub-principle with examples of action from across the membership. For example:

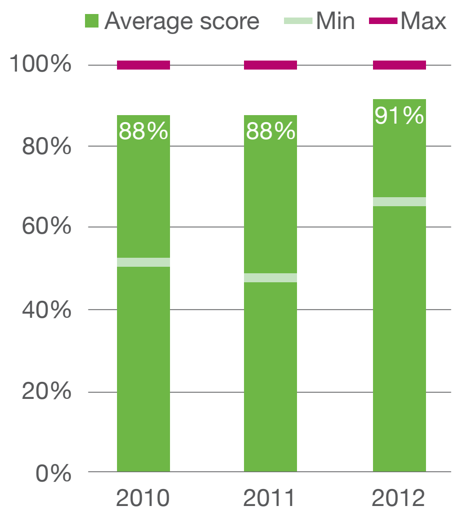
- Eight Lloyd's market syndicates have collaborated to develop new solutions to help developing economies tackle underinsurance and improve their resilience to natural catastrophes.
- At least seven members are engaged in micro insurance initiatives.
- Beazley participated in the Lloyd's Disaster Relief Financing Working Group and is part of the consortium that has announced the provision of USD 400 million of new insurance capacity to help developing countries build climate resilience and tackle underinsurance.
- RMS has carried out research on climate-insurance solutions as a form of climate risk adaptation in emerging markets, considering methods such as micro-insurance and index-linked securities.

We return to this theme in more detail in the Findings chapter.

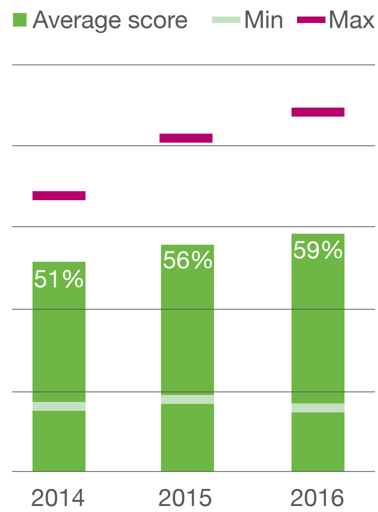
Progress in member performance

Within the context of greater action on climate change it is pleasing to see further progress in the performance of members integrating the ClimateWise Principles across their business. This is reflected in a rise in the average score from 56 to 59 per cent. There have been notable performance increases across Principles 1 (Lead in risk analysis), 2 (Inform public policy making), and 6 (Report and be accountable). Members continue to improve their research and forecasting engagements, and consider opportunities from climate–related technological developments when developing new products. Moreover, members stepped up to engage actively in public policy discussions, embedding the ClimateWise Principles into their company ethos by enhancing Board-level engagement on climate-related issues. However, there was a decrease in evidence of members evaluating the implications of climate change for the performance of investments, highlighting the need for insurers to broaden focus on climate change action beyond the liability side of the business.

Member scores over time (2010–2012)

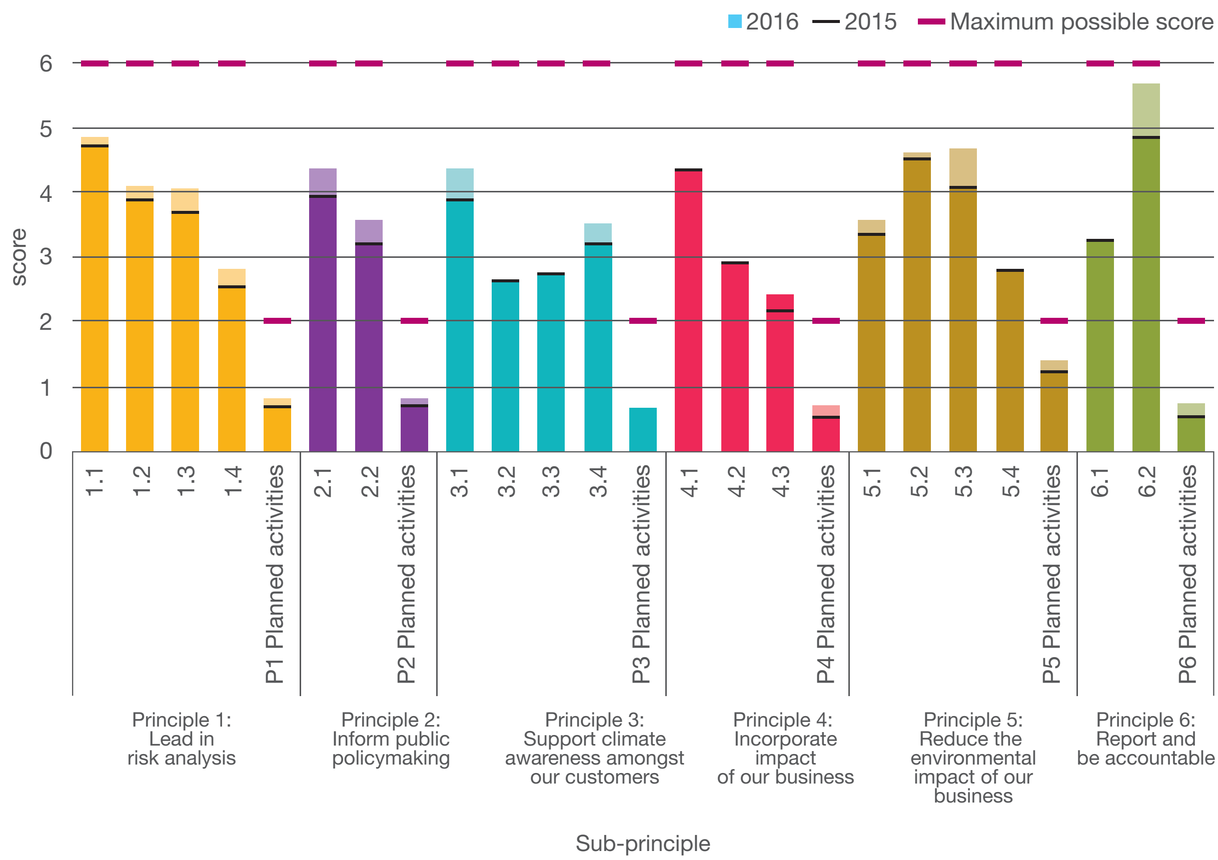


Member scores over time (2014–2016)



Note: The introduction of the revised ClimateWise Principles approach in 2014, following a one-year gap in reporting in 2013, led to a significant decrease in average score across the ClimateWise membership between 2012 and 2014.

Average absolute score by sub-principle 2015 vs 2016



Looking ahead to the insurer of the future

With the increasing risks and opportunities presented by climate change there is a societal need for the insurance industry to play a central role in providing both a financial risk transfer mechanism and proactively supporting society to manage its risk exposure – indeed it goes to the heart of the industry's purpose. To successfully fulfil this role as climate risks continue to rise, the industry needs a clearer understanding on the knowledge, skills, tools and relationships required.

We look ahead to 2030, to a world where climate risks have continued to increase but where the data and technology available to the industry has also significantly advanced. In the graphic below we highlight a few examples of how the insurer of the future may operate.

Insurer of the future

Risk carrying

- **Advanced early warning technologies and new risk transfer/ sharing mechanisms enable the industry to continue to insure against increa singly frequent catastrophes**
- **Insurance coverage is dependent on a greater level of action by clients, eg**
  - Corporate strategies based on the physical and transition scenarios associated with climate change
  - Collaborative local government plans and programmes to enhance climate resilience
- **Near-perfect and available data enables:**
  - Tailored and dynamic products for all
  - Instant pay-outs on event
  - Informed buyers aggregating insurance coverage where risks are common (eg flood-prone areas)

Risk management

- **Insurers engaging earlier in client risk management thinking, in particular for cities and local governments, to:**
  - Educate on local climate changes
  - Use actuarial and modelling capabilities to work with clients to understand and manage climate risks
  - Mitigate the geographic concentration of risk from urbanisation
  - Develop comprehensive risk-management strategies
- **Insurers need to innovate around product design to viably provide coverage to communities where expected loss ratios are high, traditional distribution channels are gone and financial pay-outs are an unsuitable form of compensation**
- **Near-perfect and available data enables:**
  - A changing role from reactive pay-outs to proactive prevention of incidents and losses

Investment

- **Asset liability models that incorporate climate change scenarios considerate of geographic and sector variations**
- **Active asset owners leverage data, models and actuarial capability to inform and challenge investee companies and projects on climate risks**
- **Insurers invest in assets likely to help manage risk on the underwriting side of their business, such as in resilience-enhancing infrastructure**
- **Insurers support other stakeholders within the financial markets to respond to the risks and opportunities associated with climate change, including through greater disclosure on climate risk**

This report returns to the concept of the insurer of the future in the conclusion, looking at innovation currently underway and planned activities across the members.

Looking to the future: The FSB Task Force and financial disclosure

Investors are becoming increasingly aware that the inadequate disclosure of exposure to climate risk could lead to the mispricing of assets and misallocation of capital.

Additionally, investors are also recognising the potential opportunities linked to efforts to mitigate and adapt to climate change, such as renewable energy, cost savings through resource efficiency, and green bonds.

As a result, there is growing demand for climate-related disclosure by companies. This is not just by investors, but also by banks, insurers, debt and equity analysts, proxy advisors, credit rating agencies and investment consultants, to inform commercial decision-making. At the request of the G20, the Financial Stability Board (FSB) established the Task Force on Climate-related Financial Disclosures in December 2015. The Task Force will make recommendations for enhancing climate-related financial disclosures to make them forward looking, more consistent and comparable. This will help companies understand what financial markets want from disclosure to help measure and respond to climate change risks, and encourage firms to align their disclosures with investors' needs. The Task Force will release its recommendations for public consultation in mid-December 2016. The FSB approval is expected in March 2017 before the report is submitted to the G20. These recommendations will contain guidance for companies to significantly improve the climate-related financial information they disclose to their investors and lenders. These disclosures in turn will enable regulators to assess and address any potential financial stability concerns arising from concentrations of carbon-related assets in the financial system.

The Task Force recommendations will differ from existing climate change disclosure frameworks. Firstly, the recommendations are focused on financial information related to climate change and disclosed with financial filings. Consequently, companies will need to consider both how their businesses impact on climate change, and how climate change will impact their businesses, strategy and financial plans. The recommendations will be forward looking, and encourage companies to consider the potential financial impact of different climate scenarios. Finally, the Task Force is a truly global (G20) industry-led initiative.

The introduction of the Task Force recommendations, although voluntary, could revolutionise the nature of climate-related information and the way it is disclosed to financial markets. In the longer term, financial markets will hopefully be able to integrate this information into decisions that enhance global climate resilience.

Insurers are already familiar with the integration of climate-related information into financial decisions and product development. The industry has repeatedly been impacted by climate-related financial losses in the past. However, over the past twenty years, supported by the introduction of regulatory frameworks and industry initiatives, the industry is often able to absorb the impacts of natural catastrophes.

This has been underpinned by improved information, which has enabled insurers to better systematically analyse the risk of extreme events, and integrate this knowledge into capital allocation decisions. It has also driven product innovation linked to heightened risk exposure, including catastrophe bonds and weather derivatives. However, this innovation often occurred following periods of large losses, such as Hurricane Andrew and floods in Thailand in 2011.

"Over time, the adverse effects of climate change could threaten economic resilience and financial stability. Insurers are currently at the forefront. Insurers, including those who are members of ClimateWise have unique risk-management expertise to help address the protection gap among those who are most exposed to climate risk. ClimateWise has been valuable in helping the industry to consider and disclose its climate-related risks and opportunities – both in its underwriting and investment decisions – as well as in promoting a culture of disclosure and awareness to climate risk in financial markets."

Mark Carney, Governor of the Bank of England and Chairman of the G20 Financial Stability Board

Furthermore, there is growing recognition among insurers that their exposure to climate risk can impact the value of their investment portfolios as well as their underwriting portfolios, as highlighted by last year's PRA report on the impact of climate change on the UK insurance sector.[9] This could lead to increased financial exposure and correlating climate-related risks across their balance sheets.

The challenge for the financial system is to start building more systemic resilience to future and longer term natural catastrophes and climate-related events. Climate-related risks and opportunities transfer from companies with direct exposure to investors, lenders and insurers. Provision of climate-related information across this 'financial value chain' is therefore critical in enabling all organisations to understand their exposure and make relevant management decisions.

The insurance sector plays a critical role in facilitating financial stability by enabling the transfer and pooling of risks. With the impending release of the Task Force's Phase II report and disclosure recommendations, the sector can continue to play this role by creating demand for, and provision of, climate-related information. Insurance organisations can 'pull' information from their customers to better understand their own exposure to climate-related risks. They can also 'push' information to investors on how they are evaluating and managing climate-related risks and opportunities across their organisations' value chain.

ClimateWise is already encouraging its members to consider the issues described above. For example, sub-principle 1.4 explores how companies support the development of new technology for tackling climate change, and sub-principle 3.2 looks at how insurers' products and services are helping customers adapt to climate change. Leading insurers, actively participating in initiatives like ClimateWise and already integrating climate change into their strategies, will find themselves on the front foot in respect to implementing the Task Force's recommendations and supporting the transition to a climate-resilient economy.

ClimateWise's Societal Resilience Programme

Following the launch of CISL's 2015 overarching Rewiring the Economy[10] framework, and in response to the climate risk protection gap being identified as a strategic priority, ClimateWise launched its Societal Resilience Programme.[11]

The programme actively explores how insurers can move beyond their traditional role as providers of financial risk transfer and more proactively enhance society's resilience to climate change risks. It does this by drawing on the unique research capabilities across the University of Cambridge and CISL's broader academic and research network. The programme focuses on three key areas of intervention.

The first is around global regulation. This builds on a 2015 collaboration between ClimateWise and the UK's Prudential Regulation Authority (PRA) to understand the likely impacts of climate change for the UK insurance industry. ClimateWise hosted a series of roundtables that examined the physical, transition and liability risks impacting the sector. Following publication of the report,[12] a number of ClimateWise Chief Executives met with Mark Carney, the Governor of the Bank of England, where they established a senior-level Insurance Advisory Council. The Council's mandate is to commission Cambridge-led research into solutions that can support regulators and insurers positively respond to the risks and opportunities of climate change.

The second area of intervention is on the broader financial markets. ClimateWise recently published the findings of a year-long study entitled Investing for Resilience.[13] The report provides a comprehensive overview of how insurers can support increased flows of capital into resilience-enhancing investments. It details opportunities across the industry's internal asset management activities. It also examines how insurers can influence other parts of the financial markets and society more broadly as they increase their own investments in resilience. The report concludes that insurers are not the 'natural investors in resilience' many perceive them to be. However it finds they have significant untapped resources to support resilient investments more broadly.

Finally, ClimateWise has been working at the city level around climate risk and resilience. Phase 2 of the Resilient Cities[14] project is mapping where, across the full underwriting and asset management value chain, insurers can support local governments as they respond to enhanced flood risk. ClimateWise also facilitated the City Innovation Platform (CIP),[15] a multi-partner collaboration, led by a group of CISL Senior Associates,[16] to understand how insurers can more proactively support emerging economy cities to deliver resilient, bankable and insurable infrastructure projects. The first CIP was hosted in Dar es Salaam, Tanzania in October 2016. A feedback report is being drafted, in partnership with researchers from the University of Cape Town's African Centre for Cities, and will be published in early 2017.

The Societal Resilience Programme

Cities

Resilience cities seeks to understand which parts of the insurance industry's value chain could support cities to make better infrastructure and development decisions and create commercial opportunities for insurance in the process. The insurance industry has extensive capabilities that can help to enhance climate-risk resilience in its most concentrated and exposed markets (ie cities).

Investment

Investing for resilience explores how the insurance industry can start to manage its invested assets in ways that can also reduce risk on the underwriting side of its business. It actively explores what the commercial opportunities for such strategies might be, what tools and standards are required and where the industry can collaborate, with other stakeholders, to further this agenda.

Regulation

Resilient regulation supports global regulators to fully understand the nature of the physical, transition and liability risks climate change present the insurance industry. It also identifies how the industry can support other parts of the financial system in its response to the zero carbon, climate resilient transition.

ClimateWise Principles

The 2016 ClimateWise Principles review

An annual assessment of the integration of the ClimateWise Principles across member business activities. It highlights the overall progress being made by the ClimateWise community, while giving members individual rankings that allow them to benchmark progress against their peers.

Principle 1
Lead in risk analysis

See page 16

Principle 2
Inform public policy making

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Principle 3
Support climate awareness amongst our customers

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Principle 4
Incorporate climate change into our investment strategies

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Principle 5
Reduce the environmental impact of our business

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Principle 6
Report and be accountable

See page 31

pwc
Independent Reviewers

Summary of findings

Members have generally improved their disclosure, with the average score increasing from 56 per cent in 2015 to 59 per cent this year. This is the second consecutive year that scores have increased since the updated ClimateWise Principles methodology was introduced in 2014. The number of high performers is also increasing, with four members reaching a score of above 80 per cent this year, compared with just one last year. However, about a third of members are still scoring below 50 per cent, as was the case last year.

80%

The number of high performers is also increasing, with four members reaching a score of above 80% this year, compared with just one last year.

It is encouraging to observe that every Principle's score average, and not just the overall score average, has improved slightly compared with 2015. There have been notable performance increases in Principles 1 (Lead in risk analysis), 2 (Inform public policy making), and 6 (Report and be accountable). At the sub-principle level, scores for 5.3 (greenhouse gas emissions) and 6.2 (reporting against ClimateWise Principles) noticeably increased. An unexpected decrease in performance is seen in sub-principle 4.1 (evaluation of climate change for investments) although performance against principle 4 as a whole has increased due to improvements in disclosure regarding communication to beneficiaries and future planned activities.

Lead in risk analysis

In Principle 1, members have demonstrated a range of activities regarding climate change risk analysis and made improvements across all sub-principles compared to last year's review. Research and forecasting remain key strengths amongst the membership, whilst evaluation of risks associated with new technologies continues to improve. The next steps for many members would be to better align research with business strategy and to more actively share research findings.

Inform public policy making

Scoring for Principle 2 has increased across the membership regardless of the business category. This suggests that members are increasingly taking steps to work with policy makers and to engage in public debate. Members continue to speak frequently at conferences, participate in working groups and publish thought leadership and research. In 2015, the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) in Paris provided a key platform for engagement. It is therefore important to maintain momentum from COP21 and for members to build on this high level of engagement going forward.

Support climate awareness amongst our customers

With regard to Principle 3, members have shown marked improvement in informing customers of their climate risk exposure and increasingly using innovative digital methods to do so. Moreover, engagement in markets with low insurance penetration continues to improve, as members transition from providing basic philanthropic support to more substantial, longer term market-based activities. However, member scores suggests that far more work is needed to encourage low carbon, climate-resilient responses amongst customers and improve the sustainability of their claims process.

Incorporate climate change into our investment strategies

In Principle 4, members have improved the ways they communicate their investment strategies to various stakeholders, and are clearer about their planned activities for next year. Nevertheless, they have struggled with demonstrating how they evaluate the implications of the low carbon, climate-resilient transition for their investment performance, as scoring in this sub-principle has decreased after a rise in 2015. While a small number of members demonstrate a sophisticated approach to this issue, many are not currently robustly evaluating how climate risks and opportunities affect their investment portfolios.

Reduce the environmental impact of our business

In Principle 5, members generally demonstrated a good range of impact reduction initiatives and provided excellent levels of disclosure around greenhouse gas emissions. While many members now have integrated supplier assessment processes which consider climate-related criteria, there is still room for improvement around the disclosure on sustainable procurement policies. Members should also aim to further improve employee engagement initiatives.

Report and be accountable

Member performance in Principle 6 regarding the engagement in climate change strategy at Board level has also improved. More members put in place a governance structure around climate change, but still struggle with reporting on the regularity of discussions held at senior level. Members have requested less optional exemptions this year and as such full disclosure of members against all relevant sub-principles has improved.

Conclusion: Towards greater collaboration

The reported activities of ClimateWise members over the last year demonstrate a commitment to play their part in supporting the low carbon, climate-resilient transition. They show year-on-year progress in integrating the risks and opportunities of climate change across their businesses.

In particular, it is positive to see such strong progress across risk analysis, policy engagement, informing customers of climate risk, addressing the protection gap and communicating investment beliefs and emissions disclosure. These are key areas of progress both internally – to enable their businesses to understand and manage climate risk – and also externally – to support customers and other key stakeholders to do the same.

There are key remaining areas where members need to focus efforts in the coming year to help close remaining gaps in performance, in particular encouraging customers to reduce and manage their risk exposure, employee engagement and, most urgently, scaling up engagement in market-based initiatives for closing the protection gap and evaluating the implications for investments. The latter has been a consistent theme over recent years and one that the Bank of England's Prudential Regulation Authority (PRA), in its 2015 report[17] on the impact of climate change on the UK insurance industry, highlighted as needing further attention. One common area of underperformance within the ClimateWise Principles remains the 'planned activities', and there is little evidence members have established a clear, structured and integrated path towards better managing climate risks and opportunities.

One of the changes the FSB Taskforce looks to instil is a greater forward-looking perspective on understanding risk and disclosure, and for greater transparency on this. The improvements in data and information will enable better decision-making by companies, insurers and investors, as well as policy makers and regulators. As Mark Carney recently declared in a speech on the climate change paradox: "the more we invest with foresight; the less we will regret in hindsight".[18]

With respect to climate change risk and opportunity, members must establish their individual view of what the insurer of the future will look like and the path they need to follow to get there. This view should then be increasingly integrated into strategic planning and influence decisions around human resources, management systems, R&D processes and procurement. This is key for the ongoing viability of individual insurers and the broader industry's role as society's risk manager. This is further reinforced in light of the widening protection gap.

In the member submissions we have seen some emerging examples of positive innovation to become a successful insurer in a world transitioning to a low carbon, climate resilient economy.

- Actors in the insurance industry are collaborating to develop new solutions to help emerging economies tackle underinsurance and improve their resilience to natural catastrophes. They are grasping new opportunities to improve insurance penetration in these economies.
- Others have developed broader advisory services for local authorities, to provide tailored advice for the specific geographic context. They have recognised the need of local government and cities to understand and increase their capacity to respond to the combination of urbanisation and climate trends.
- Forward-looking insurers are exploring asset liability models that incorporate climate change scenarios, and the variations by geography and sector. They are harnessing the development of better climate risk data and innovative risk-transfer tools to ensure the resilience of their own business.

The insurer of the future is one that embeds its vision of climate-related risks and opportunities systemically across its total value chain, rather than through ad hoc initiatives. Currently initiatives appear to be undertaken specifically on climate change by small subsets within member institutions. As we progress towards the future we hope to see the insurance industry truly embed climate risk management in all business activities and decision-making and enable the transition to a low carbon, climate-resilient world.

Appendices

Appendix 1:
Member evidence against the ClimateWise Principles

Principle 1
Lead in risk analysis

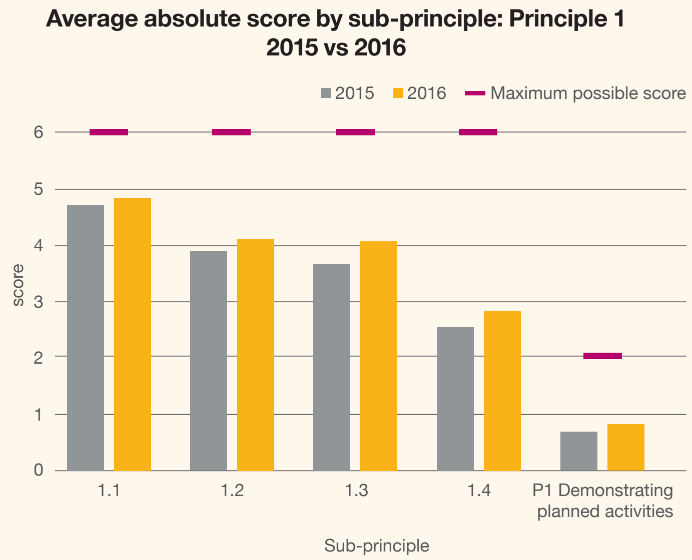
The sub-principles

Research: 1.1 Support and undertake research on climate change to inform our business strategies and help to protect our customers' and other stakeholders' interests. Where appropriate, share this research with scientists, society, business, governments and NGOs in order to advance a common interest.

Forecasting: 1.2 Support national and regional forecasting of future weather and catastrophe patterns affected by changes in the Earth's climate.

Application: 1.3 Use research and improve data quality to inform levels of pricing, capital and reserves to match changing risks.

Innovation: 1.4 Evaluate the risks associated with new technologies for tackling climate change so that new insurance products can be considered in parallel with technological developments.



Conducting risk analysis to inform pricing is fundamental to the insurance sector's ability to transfer and pool climate risk in a commercially viable manner. Climate change means that the risk landscape is evolving rapidly, and it is important that ClimateWise members keep abreast of associated climatic and technological changes. Members demonstrate a range of activities regarding climate change risk analysis and make improvements across all sub-principles compared to last year. Research and forecasting remain key strengths amongst the members, whilst evaluation of risks associated with new technologies continues to improve. The next steps for many members would be to better align their research activities with their business strategies. Some members could also do more to actively share their research findings with a broader audience, which could include governments, businesses, and the general public.

Key strengths and progress achieved

The ClimateWise members demonstrated a diverse range of research initiatives for conducting and sharing research, including a number of collaborative engagements. Catastrophe modelling research is core to the insurance industry and many members align their research to focus on events that are geographically relevant to their own client base. **Tokio Marine,** for example, has a joint research initiative with Nagoya University (Japan) on typhoon and heavy rain simulation. Some members have established research networks dedicated to risk analysis. The **Willis** Research Network (WRN)[19] is the world's largest collaboration between academia and the insurance sector. The WRN carries out a wide range of research projects to improve seasonal forecasting and develop the insurance sector's understanding of hazards. Leading members in this area are going beyond simple online publishing, and are now proactively sharing their research at conferences and events. In November, for example, **RMS** presented on 'Risk and loss exposure in Asia from Drought, Floods and Earthquakes' at the Asian Ministerial Conference on Disaster Risk Reduction. Over the last ClimateWise reporting year, RMS has published over 30 papers and has presented at over 30 conferences. These have included presentations on pricing climate disaster at the United Nations Principles for Responsible Investment Annual Meeting and on disaster risk reduction at the launch of the United Nations Office for Disaster Risk Reduction's Global Assessment Report.[20] Strong risk analysis research is arguably more pertinent to modellers, such as RMS, than any other business category within ClimateWise and it is encouraging to see it performing so strongly in this sub-principle.

Members are using forecasting to inform their own pricing, but also to support local and national planning. **Allianz** continues to engage in 'Remote sensing-based Information and Insurance for Crops in Emerging economies' (RIICE)[21] in South-East Asia. This programme uses satellite imaging to assess crop growth, and local governments are informed when low yields are forecast. Initiatives like these provide important information to governments and businesses, and can prompt preparatory responses, such as identifying alternative food sources, if low yields are forecast. **Aon**'s Impact Forecasting initiative provides a less typical example of forecasting, and focuses on the outcomes of catastrophic events. This initiative provides updates throughout the year on natural catastrophes and develops models which can be used to estimate the financial implications of catastrophic events. This Impact Forecasting programme considers probabilistic and scenario models for 10 perils in over 60 territories.

Research in the insurance sector must be grounded in reliable data. It is therefore important that members continue to assess ways to improve data quality. **Swiss Re** has a dedicated Emerging Risk unit, which allows it to identify new areas where further data collection is required. This unit leads Swiss Re's group-wide Systematic Observation of Notions Associated with Risk (SONAR) framework, which identifies and evaluates new risks so that they can be factored into decision-making. Geoengineering – deliberate modification of the Earth's natural systems in order to counteract climate change – was one risk considered in Swiss Re's 2016 SONAR report. The report examined the threats posed by geoengineering and considered its potential for creating new liability claims. **Argo Group** identifies priority areas for data improvement by carrying out stress and scenario testing on material climate risks as part of its catastrophe and economic capital modelling processes. A number of organisations demonstrated that they are working to improve their data collection on natural catastrophes, and some are using innovative methods. Santam, for example, is using geographic information system (GIS) data to improve its understanding of flood and drought exposure. This GIS data is used for underwriting purposes, but also for innovative initiatives, such as for co-ordinating the distribution of **Santam**'s weather warning SMS messages to policyholders.

New technologies which address climate change continue to emerge. Members have demonstrated that they are improving their assessment of the risks associated with these technologies and are improving the products and services that they provide. Members including **Tokio Marine Kiln**, **Allianz**, **Hiscox**, and **Marsh** continue to provide insurance products and services in the renewable energy sector. The **Navigators Group** are actively engaging with major European, Japanese and American wind turbine manufacturers in order to keep abreast of technological advances. This allows the Navigators Group to better understand the risks in question and to more effectively tailor insurance products and coverage. Members have also begun to explore how technology can be used to address climate change from within the insurance sector. A report by **Lloyd**'s considers how drones can be used as a low carbon method of data collection facilitating monitoring, photography, and filming. This can in turn lead to improved environmental modelling.

In the 2015 ClimateWise report, it was recommended that members improve their disclosure of planned risk analysis activities and engage more in analysis of technologies which address climate change risks. The evidence provided above demonstrates that there has been steady improvement in both of these areas. A number of members have committed to further research programmes, and members are increasingly providing insurance products for renewable technologies and low carbon transportation.

Recommended areas for development

There are still two main areas for further improvement with regards to research strategy. Firstly, members do not explain how their research efforts are aligned with their business strategy. In some cases, this may be an issue of disclosure, ie the research is aligned to a member's strategy and has had an impact on the business, but the member has not disclosed this in its reporting. Nonetheless, it is crucial that members prioritise their research efforts in line with their overall business strategies to focus on improving priority products and services. Secondly, some members could do more to share and publicise their research with customers, peers and policy makers. Most members demonstrated some form of research initiative. Actively sharing findings at events and through popular media channels can help to educate both customers and the wider insurance sector.

Additionally, some members are yet to engage in the assessment of risks associated with new technologies to support climate change, or are yet to take actions which support the development of these technologies. This market is likely to grow and it is important that members demonstrate how they are exploiting the opportunities offered by climate change.

Case study Tokio Marine Kiln: Oasis Loss Modelling Framework

The Oasis Loss Modelling Framework (Oasis)[22] is an innovative new addition to the catastrophe modelling market. It aims to generate an open marketplace for models and data, improving access to catastrophe risk assessment tools.

The Oasis project has a deliberate focus on perils and regions that are less well covered by other proprietary models. As such, the project could be used to support insurance products in markets with low insurance penetration, and ultimately reduce the protection gap.

The Oasis is a not-for-profit organisation owned by its members from across the insurance industry. The Executive Board includes Directors from Lloyd's, Swiss Re, and Tokio Marine Kiln.

Tokio Marine Kiln has played a core role in developing Oasis, including contribution to datasets, modelling architecture and functionality. In particular, it has been instrumental in evaluating the US windstorm catastrophe model for Oasis and details on the new user interface 'Flamingo'.

Since 2012, the Oasis LMF has expanded to over 40 insurance members and over 100 associate members. Governments, corporations, and even individuals could benefit from this project. Oasis will continue to seek to promote innovation, technological advances, and equitable access to models.

Case study Lloyd's City Risk Index: 2015-2025

In 2015, Lloyds, in association with the University of Cambridge, launched a new study, the City Risk Index.

This presented the first-ever analysis of economic output at risk (GDP@Risk) in 301 major cities from 18 manmade and natural threats over a 10-year period.[23]

The Index found that that a total of USD 4.6trn of the 301 cities' projected GDP is at risk, representing a substantial drag on global economic growth. While the majority of GDP@Risk is associated with natural threats such as earthquakes and floods, manmade threats such as cyber-attack and market crash pose an increasing threat. Almost three-quarters of total GDP@Risk is associated with emerging economies, with many at risk from a single category of natural catastrophe. This vulnerability is exacerbated by the insurance gap that exists in many of these countries.

The Index indicates where the risk of economic losses associated with both manmade and natural threats could be mitigated by investment in risk-management measures. As such, the findings emphasise the importance of having resilient infrastructure, robust institutions and comprehensive insurance solutions at the heart of climate risk adaptation strategies.

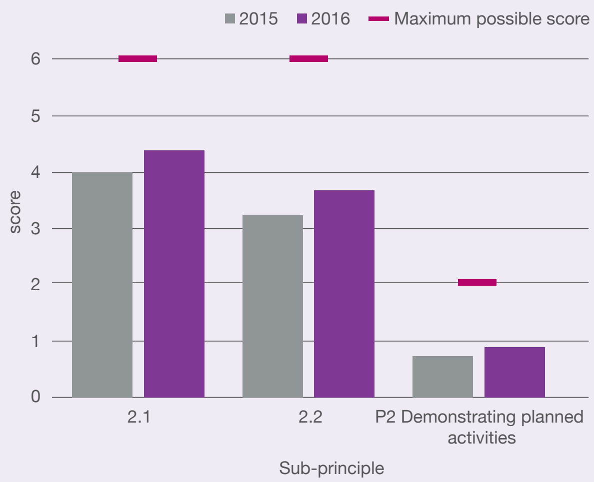
Principle 2
Inform public policy making

The sub-principles

Research: 2.1 Work with policy makers nationally and internationally to help them develop and maintain an economy that is resilient to climate risk. This should include supporting the implementation of emissions reductions targets and, where applicable, supporting government action that seeks to enhance the resilience and reduce the environmental impact of infrastructure and communities.

Stakeholder Engagement: 2.2 Promote and actively engage in public debate on climate change and the need for action.

Average absolute score by sub-principle: Principle 2 2015 vs 2016



The insurance industry holds critical knowledge of how increasing climate-related natural disasters will impact society financially. ClimateWise members harness this knowledge to inform policy making through engagement with government, other stakeholders and the public more generally. They continue to use the same types of channels for engagement as in previous years, namely speaking at conferences, participating in working groups and publishing thought leadership and research. The 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) in Paris, where negotiations for an international binding agreement on climate change took place, was the key platform for engagement. Scoring for this Principle has increased across members regardless of business categories, suggesting that members are increasingly taking steps to work with policy makers and engage in public debate. As the momentum from COP21 potentially subsides, members should ensure they maintain and build on this high level of engagement going forward.

Key strengths and progress achieved

Members have increased their performance across this Principle, demonstrating a historically high level of engagement with policy makers over the past year. COP21 was an instrumental event around which members could structure their engagement, and as a result the engagement in the run-up to COP21 has been impressive. Given their role as convenors, professional associations have been key in aggregating messages from the insurance industry ahead of the event. The **Association of British Insurers (ABI)** co-ordinated a messaging strategy, and produced case studies and a video featuring a number of member CEOs highlighting the importance of tackling climate change and of COP21 in particular. The video was hosted prominently on the UK Government's COP21 newsfeed. The **Chartered Institute of Insurance (CII)** published a report titled "'The Last Generation'.[24] The report discusses the issues surrounding the COP21 negotiations and the implications for insurance and financial services. Engagement was also high amongst many other members. Last year, **Lloyd**'s hosted a dinner where Mark Carney and the Lloyd's Chairman both made speeches on the role of the insurance industry in helping to address climate change. **Swiss Re** shared its knowledge on key platforms such as the World Economic Forum, B20, G20 and G8 in the run-up to COP21. Amongst members, **Allianz, Aviva, Beazley, CII, Hiscox, If P&C, Lloyd's, Santam, Swiss Re** and **Zurich** signed the Paris Pledge for Action, a formal initiative for non-state organisations to show support for the COP21 agreement.

Members have also prioritised engagement on other climate-related topics depending on what was considered material to their business. Noting the heightened risk that food supply chains pose to the insurance industry, **Lloyd**'s published a report titled 'Food System Shock'.[25] Its Head of Exposure Management and Reinsurance presented the findings of the report to the UK Committee on Climate Change's Adaptation Sub-Committee. Similarly, **Santam** has focused on disaster risk reduction as a priority engagement theme. It has participated in the United Nations Principles for Sustainable Insurance Global Resilience Project and its report on findings from an on-the-ground research project in a vulnerable zone of South Africa.[26]

RenaissanceRe has focused on barriers hindering more effective collaboration with policy makers. It participates in the Risk Modelling and Mapping Project (RMMP), a sub-group of the IDF. The RMMP's aim is to identify barriers to collaboration between governments, intergovernmental organisations, academia and the insurance industry in the context of addressing underinsurance. It is co-chaired by RenaissanceRe's Chief Risk Officer and Senior Vice President, Ian Branagan.

Recommended areas for development

Despite a slight improvement in the past year, members still generally struggle to explain how they prioritise their areas of engagement. Members should seek to better articulate how priorities are set and how they align these with the wider business agenda, including material risks and opportunities. Members could also improve their disclosure regarding the specific and individual role they play within initiatives. Doing so would help to provide more tangible evidence that members are actively engaging on the climate change agenda.

Finally, maintaining momentum following COP21 will be key for the insurance industry to play its role in the post-Paris policy agenda. COP21 was a defining event that set the course for addressing climate change over the next decade and beyond. However, the insurance industry's most important role is now to enable both the implementation of the Paris agreement and support society respond to the protection gap. The insurance industry should continue to demonstrate its willingness and leadership in supporting both areas through more specific and targeted engagement initiatives.

Case study RMS: Support for Solvency II

RMS's dedicated regulatory affairs team for Europe offers support to European insurance regulators and rating agencies in relation to Solvency II. This is Europe's new regulatory framework for the insurance industry that came into force at the beginning of 2016.

This advisory work includes responding to questions about potential impact and uncertainty around climate change across the different perils modelled.

RMS continues to develop and support relationships with regulatory agencies across Europe and deliver expert education on the use of RMS' current and upcoming catastrophe modelling suite. This includes the potential impact of climate uncertainty on its core modelling products. Through regular engagement with regulators, RMS aims to enhance catastrophe model knowledge understanding, and help facilitate regulator and client interactions.

RMS understands the need for increased transparency and detailed justification around the use of catastrophe models. The modeller provides a comprehensive suite of Solvency II-focused documentation which is available to both regulators (via a non-disclosure agreement) and clients to help them fulfil their Solvency II requirements. This material aims to provide a very detailed level of understanding of catastrophe models, and covers various themes including methodological approaches, assumptions, validation, limitations, sources of uncertainty, options and settings, data, and model change.

In addition, RMS develops research projects and functionalities, such as specific views that can be turned on or off to provide more transparency around key assumptions in their models. This provides firms with more flexibility to better understand model uncertainty, and directly assess the potential impact on their underwriting portfolios. One example is windstorm clustering, considered by some of the European regulators to have a significant potential impact for an insurer's balance sheet.

RMS also engages in Solvency II related support activities, like hosting client seminars and the RMS annual Exceedance conference. It also delivers education on key topics via the RMS Blog and quarterly newsletter.

Case study Willis: The Insurance Development Forum

The Insurance Development Forum (IDF) was created last year to optimise and extend the use of insurance and its related risk management capabilities to build greater resilience and protection for people, communities, businesses and public institutions that are vulnerable to climate, disaster and wider risks and associated economic shocks.

Willis Towers Watson contributed to its creation, and one year on, continues to be a driving force in the initiative. Willis Towers Watson's CEO John Haley sits on the IDF Steering Committee, chaired by Stephen Catlin, XL Catlin and co-chaired by the Helen Clark, UN Development Program (UNDP) Administrator and Joaquim Levy, World Bank Group, Chief Financial Officer. Rowan Douglas, CEO of the Capital, Science and Policy Practice of Willis Towers Watson, who has been central to the formation of the IDF, was appointed Chair of the IDF Implementation Committee.

In its first phase, the IDF has four key pillars, each supported by a working group:

1. **Understanding Risk:** support a better understanding of hazards and the exposure and vulnerability of people and assets so that governments, communities, and individuals can make informed decisions on resilience, insurance, investment and wider policies and interventions.
2. **Risk & Insurance Regulation, Legislation and Policy:** promote supportive and inclusive insurance regulation, and integrate quantitative and standardized climate and natural hazard risk disclosure into mainstream financial and accounting systems.
3. **Risk Sharing, Transfer & Response:** support the delivery of the G7 InsuResilience Climate Risk Insurance Target and facilitate availability of climate and natural hazard risk sharing facilities in most regions.
4. **Risk & Resilience:** support the creation of a Global Adaptation and Resilience Fund to invest in resilience related technologies, innovation and facilities.

Principle 3
Support climate awareness amongst our customers

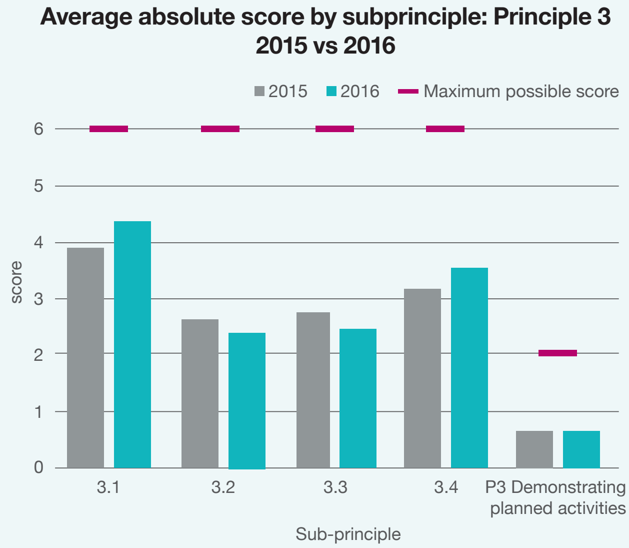
The sub-principles

Advice: 3.1 Inform our customers of climate risk and provide support and tools so that they can assess their own levels of risk.

Products: 3.2 Encourage our customers to adapt to climate change and reduce their greenhouse gas emissions through insurance products and services.

Claims: 3.3 Seek to increase the proportion of non-life claims that are settled in a sustainable manner.

Market Penetration: 3.4 Through our products and services assist markets with low insurance penetration to understand and respond to climate change.



Insurance organisations have an opportunity, and arguably a societal role to encourage low carbon and climate-resilient behaviour amongst their clients. This can be achieved through a combination of education and incentives. Overall, members have shown marked improvement in both sub-principles 3.1 and 3.4, building on the improvements made in 2015. Members are increasingly turning to innovative digital methods to support client assessment of their climate risk exposure. Moreover, engagement in markets with low insurance penetration continues to improve. Members are beginning to transition from basic philanthropic engagements, to longer term market-based engagements with clear commercial opportunities. However, a fall in member scores for 3.2 and 3.3 suggests that more work is needed to encourage greenhouse gas reductions and climate resilience amongst customers and improve the sustainability of the claims value chain.

Key strengths and progress achieved

Members achieved an average score of 4.4 out of 6 on sub-principle 3.1, demonstrating that they provide their customers with useful information, tools and services to help them assess their climate risk exposure. **Willis** and **Swiss Re** both organise face-to-face discussions with clients around climate change. This allows them to assess potential client behavioural changes which could reduce risk exposure. Many members provide their customers with guides on climate risk mitigation. In addition, **Zurich** offers strategic consultancy services to local authorities, to provide them with tailored advice relating to their specific geographies. It is important that members keep up to date with the latest communication trends. This year has seen an increase in the use of digital tools and applications by members to improve their communication with customers, as demonstrated in Box 1.

There was a notable variation in the comprehensiveness of member products and services designed to help customers adapt to climate risks and reduce greenhouse gas emissions. **Allianz** offers 'Green Solutions'. These are products and services designed to help its customers become more climate resilient and less carbon intensive. Green Solutions provides a leading example of how members are tackling some of the climate change challenges across their businesses. Allianz's products and services range from renewable energy loans to crop insurance. Members are continuing to develop new products and services to meet new demands. **Aviva** provides discounted insurance for hybrid and electric cars. Emerald Africa, a subsidiary of the **Santam** Group, now offers a green building extension. This allows customers to repair damaged buildings to a 5-star certificated standard in accordance with the Green Building Council of South Africa (GBCSA). **CHUBB** offers crisis management services for serious environmental incidences. This includes access to critical services in the aftermath of an extreme weather event to help improve the resilience of businesses.

Increasing the sustainability of the claims process is often a win-win strategy, benefiting both society and – often financially – ClimateWise members. There are two common ways members have improved the sustainability of their claims value chain. The first is by encouraging paperless claims policies and the second is by favouring damage repair over replacement. **QBE** saw a 38 per cent increase in the number of private e-customers during 2015, while **Aviva** achieved a 35 per cent reduction in carbon emissions per carpet claim by encouraging restoration over replacement. Innovative approaches are also emerging. Drone technology is now being used by one of **Zurich**'s loss adjustors, removing the need for the transportation of scaffolding and/or elevated platforms to and from survey sites.

ClimateWise members engage in a range of initiatives which help markets with low insurance penetration to understand and respond to climate change. This area of work has also provided the opportunity for collaboration. Eight **Lloyd**'s market syndicates, for example, have worked together to develop new solutions to help developing economies tackle underinsurance and improve their resilience to natural catastrophes. There have also been inter-sectoral collaborations. **Aviva** has recently launched a three-year partnership with the British Red Cross to support vulnerable communities prepare for and respond to disasters and extreme weather events. Beyond philanthropic initiatives, members also demonstrated engagement in market-based initiatives with clear commercial benefits. **Beazley** participates in Lloyd's Disaster Relief Financing Working Group and are part of the consortium that has announced the provision of USD 400 million of new natural catastrophe insurance capacity in developing markets. This was an opportunity for Beazley to develop a working relationship with Oxfam. Micro-insurance products continue to be the most common form of engagement with low insurance penetration markets. **Allianz**, **XL Catlin**, **Swiss Re**, **Willis**, **RMS**, and **Tokio Marine** are all engaged in micro-insurance initiatives.

Recommended areas for development

No member scored full marks for sub-principle 3.2 or sub-principle 3.3 and the average score for both was less than 3. This suggests that members could do more to encourage carbon reductions amongst their customers and to improve the sustainability of claims processes. The fall in both these scores since last year's ClimateWise report indicates that these are areas where focus is needed.

The success of insurance products and services designed to encourage greenhouse gas reductions amongst customers depend on their ability to trigger behavioural changes. In future, members could use activities such as research projects or roundtable engagements with clients to garner a better understanding of what is likely to influence customers to adopt more climate-friendly practices. This could allow ClimateWise members to develop climate-related products across all aspects of their business.

Members could also improve disclosure of their emissions avoided and revenues generated from sustainable initiatives. Those which do quantify this information are able to monitor the demand for these services, prioritise the most successful approaches, and demonstrate their positive impact on society.

Box 1: Digital trends in customer communications

Aviva - Home Checker app: Aviva's Home Checker app was launched to the public this year. The app is aimed at people who are considering moving house or want to know more about the area they live in. By entering a postcode, users are able to access information on risks, such as flooding and subsidence.	**If P&C** – VisAdaptTM: VisAdaptTM is a user-friendly web-based visualisation tool for home owners and community planners. The tool provides information on how users can adapt their property to a changing climate, considering climate scenarios over the next 40-60 years. VisAdaptTM currently has approximately 16,000 users.
Swiss Re - CatNet®: Swiss Re provides natural hazard information for its clients through a tool called CatNet®. This tool combines natural hazard information with Google Maps and satellite imagery. CatNet® users are able to access information on natural hazard exposure for any location worldwide.	**Aviva**/Red Cross - Emergency Response app: Aviva has provided sponsorship for Red Cross' Emergency Response app. The app provides severe weather warnings at a local level, and advice on how to deal with a range of emergencies. This was put to practical use by many customers in the flooded areas of Cumbria and Yorkshire in 2015.

Case study Santam: Agriculture training

Close to 800 emerging farmers from villages and rural towns across South Africa were recently empowered to successfully convert their subsistence farming into commercial farming.

From November 2015 to August 2016, the farmers received face-to-face training driven by Santam. The training focused on financial education, the insurance industry and the important risks facing farmers, as well as access to finance and budgeting. Partnerships were formed with three service providers to deliver the training.

"The training has really assisted me in managing my small farming enterprise," says William Mmakola, an emerging farmer from the Tsimanyane Village in Limpopo and a member of the Willpot Young Farmers Co-op. "The practical lessons I learnt are now helping me to set and manage my business plans and do financial projections. I have already drawn up a worksheet to manage the turnover earned from the cultivation of fresh produce," he says.

Santam recognises agriculture is key to the future health of the South African economy, and thus embarked on this training campaign, the first of its kind in the industry. "Santam is committed to assisting emerging farmers, as they are vital to the long-term sustainability of the agriculture sector. We have for more than 85 years supported farmers and have a deep understanding of the challenges and risks they face. We are therefore ideally placed to offer assistance, sharing our knowledge and expertise in building risk resilience," says Gerhard Diedericks, head of Santam Agriculture.

Santam's emerging farmer training programme forms part of a broader consumer education strategy initiated by the insurer aimed at community upliftment and promoting access to financial services. It is done in support of the Government's drive to combat the challenges of poverty, unemployment and inequality but also understanding that emerging markets have specific needs.

Case study Swiss Re - CatNet®

Swiss Re provides free natural hazard information for its clients through CatNet®.

A browser-based tool, CatNet® allows users to assess the risk of individual locations or entire portfolios by combining hazard, loss, exposure and insurance information with selected background maps and satellite imagery. This makes CatNet® a valuable tool in preparing local, regional and cross-regional risk profiles. The company offers regular training sessions to ensure clients can benefit from CatNet® and be more prepared for natural hazards.

As an example, global buildings materials company Lafarge-Holcim is a user of the CatNet® tool. Lafarge-Holcim operates a cement plant in the Swiss Rhine valley. The plant is located adjacent to the river, and while it is protected by a levee, it is still exposed to high flood risk. Lafarge-Holcim uses CatNet® to quickly detect heightened risk of flooding and put in place emergency plans. This helps avoid losses as well as environmental damage.

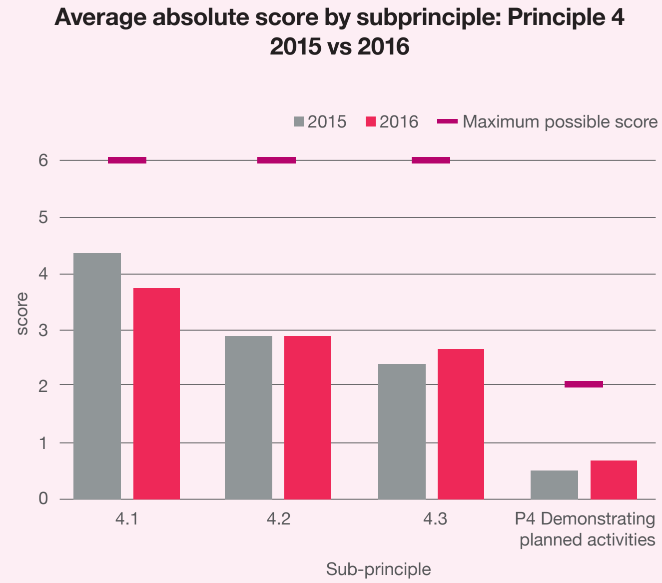
Principle 4
Incorporate climate change into our investment strategies

The sub-principles

Evaluate: 4.1 Evaluate the implications of climate change for investment performance and shareholder value.

Incorporate: 4.2 Incorporate the material outcomes of climate risk evaluations into investment decision-making.

Engage: 4.3 Communicate our investment beliefs and strategy on climate change to clients and beneficiaries.



The insurance industry is increasingly aware of the need to manage assets responsibly and to avoid exposure to climate risk on the investment side of its business. Insurer commitment to responsible investment will also contribute to the deployment of capital towards the decarbonisation and increased resilience of the economy. This year, members have improved how they communicate investment beliefs to their stakeholders, and are clearer about their planned activity for next year. Nevertheless, they have struggled with demonstrating how they evaluate the implications of climate change for investment performance, as scoring in this principle has decreased after the encouraging increases seen last year.

Key strengths and progress achieved

The last couple of years have been busy in terms of responsible investment initiatives with the launch of the Montreal Carbon Pledge[27] in September 2015 and of the Portfolio Decarbonisation Coalition[28] which now oversees the decarbonisation of USD 600 billion of assets under management. The insurance industry engages with these, with for example **Aviva** Investors having signed the Montreal Carbon Pledge under which it intends to measure the carbon footprint of its portfolio. Other companies have made individual commitments, such as **Direct Line** who has committed to only mandating external asset managers who demonstrate a strong commitment to using their market leverage to support social, environmental and ethical objectives and expect them, at a minimum, to be signatories to the UN Principles of Responsible Investment.

There has been progress amongst members on how they communicate their investment approach to clients and beneficiaries. **Willis** has a dedicated team of experts across all asset classes who apply valuation expertise on ESG matters, including climate risk. **Aviva** provides details of metrics such as the percentage of its portfolio being managed responsibly. However, many members still report on their communications strategy on sustainability or climate change more broadly, rather than on their approach to responsible investment. Some members communicate their knowledge on specific sectors, for example **Prudential's** investment division, M&G, sits on the UNEP Finance Initiative and the Institutional Investors Group on Climate Change Property Working Groups and has contributed to publications on the theme of sustainable real estate.

Members have improved their disclosure regarding the activities they plan for this principle in the coming year. For example, **Allianz** clearly sets out four areas of commitment related to climate change, with three of these focused on investment: transparency across its entire investment portfolio; no new investments in coal; and doubling its investment in renewable energy in the medium term. **Lloyd**'s is planning to raise awareness of responsible investment within the Lloyd's market in conjunction with its broader Corporate Social Responsibility (CSR) initiatives, and aims to organise an Investment Forum event to do this.

Recommended areas for development

Estimates show that 60-80 per cent of coal, oil and gas reserves of publicly listed companies may have to be written off if the world is to meet the two degree target in the recently ratified Paris Agreement. This has considerable implications for carbon-heavy investment portfolios. Many other industries, including manufacturing, agriculture and forestry face severe climate-related risks that may directly affect their profitability. Nevertheless, member performance in evaluating the impacts of climate change for investments fluctuates through the years and has been very varied across the membership this year, signalling differing sophistication of members' approaches to this issue. It would be key to see greater long-term commitment to this going forward, in particular a narrative on the identification of priority risks and opportunities across the investment portfolio.

Members should improve the communication of their investment strategy on climate change to clients and wider beneficiaries. This is particularly the case for insurers and re-insurers. While this principle is of importance to members as they rely on investment income to pay claims, they are lagging behind members from other business categories with respect to their communication to stakeholders. To improve this, we expect members to be clearer about the scope of the investments they manage responsibly. Members should articulate whether their approach covers all of the company's investments or only a portion. When assets are managed externally, members are still expected to have oversight of their external asset manager's approach to climate change. They can do this by adopting a responsible investment policy that external asset managers are required to abide by, asking external managers to report annually on their approach to climate change and prescribing the metrics external managers are required to report on. Ensuring the internal investment team is well educated on the impact of climate change on investment portfolios will also make it easier for members to appropriately monitor external asset manager performance in this area.

Case study Zurich: Communicating with stakeholders

With regard to its own investments, Zurich sees its beneficiaries to be the collective of its shareholders as well as its policyholders.

As such, Zurich seeks to communicate its approach to a broad audience. Information on its responsible investment strategy is communicated through various channels, including its annual report, its transparency report for Principles for Responsible Investment (PRI) and its responsible investment White Paper. This enables the insurer to reach different types of audiences, and in each channel the information is tailored for the target audience.

Zurich seeks to communicate and inform on its responsible investment activities as comprehensively and transparently as possible. It is transparent about what is covered by its approach: its responsible investment approach is focused on the management of the Group's reserve and surplus assets. Zurich does not, with very few exceptions, manage investments for third parties.

Zurich also publishes metrics on its responsible investment efforts. This includes the percentage of its external asset managers who are PRI signatories and the amount of its impact investments

Case study Allianz: Phasing out coal

Aware of the two degree target set by the Paris climate negotiations, Oliver Bäte, CEO of Allianz SE, announced that Allianz will stop financing coal-based business models. Allianz no longer invests in companies that derive more than 30 per cent of their revenue from coal mining or generate over 30 per cent of their energy from coal.

By March 2016, equities amounting to 225 million euros had been sold and bonds amounting to 3.9 billion euros will expire.

Allianz wants to enable the transition to the low carbon economy, which is incompatible with investing in coal. Therefore the divestment is being done across the group. The move was aimed at supporting the climate negotiations and to serve as a signal to the insurance sector and financial markets more broadly. The decision was linked to both the increasing risks associated with stranded assets (a future fall in value if fossil fuels are left in the ground) and the fact that coal is a major contributor not just to climate change but also to air and water pollution. It will help Allianz mitigate the climate risk in its investment portfolio, but will also contribute to much-needed climate action.

Allianz's support for the low carbon transition does not stop there. Allianz is also a member of the Portfolio Decarbonisation Coalition, a multi-stakeholder initiative mobilising institutional investors who are committed to gradually decarbonising their portfolios. Allianz is also one of the leading private investors in renewable energy, with more than 3 billion euros committed.

Case study QBE: Premiums4Good initiative

QBE recently launched its Premiums4Good initiative (P4G). Under the initiative, policyholders can opt to have up to 25 per cent of their premiums invested in investments with an additional social objective.

Examples of these investments include Social Impact Bonds, Green Bonds or investments into projects with social benefits. The investment is made directly into projects which deliver direct benefits to communities and the environment, rather than into general ethical or environmental funds. Policyholders can easily opt in at the time at which they renew their policy. In the event that suitable investments are not available at the time a policyholder pays their premium, QBE commits to holding the money temporarily in other socially responsible investments.

QBE takes all the investment risk, and therefore there is no risk to the policyholder. Furthermore, as it is client funds that are invested, they can include their P4G investments in their own corporate responsibility reporting. QBE also commits to report annually about the investments made and the projects which benefited.

The initiative was launched in March 2016 with the support of Government Minister Rob Wilson MP, Minister for Civil Society.

Principle 5
Reduce the environmental impact of our business

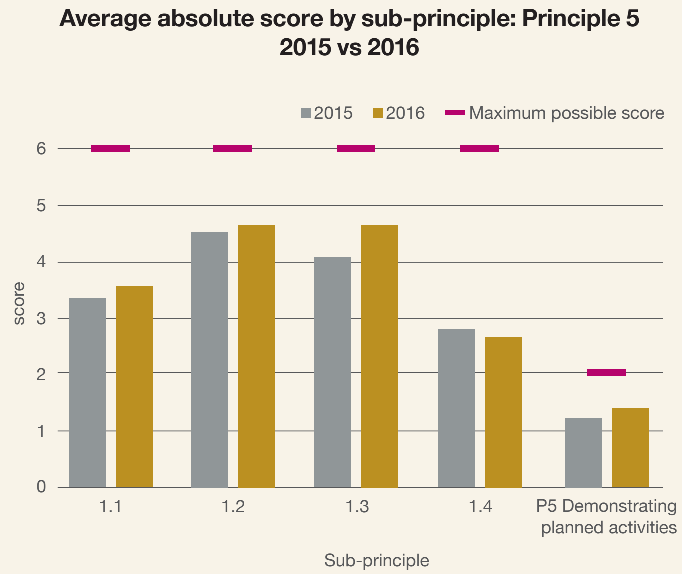
The sub-principles

Supply chain: 5.1 Engage with our supply chain to work collaboratively to improve the sustainability of their products and services.

Operations: 5.2 Measure and seek to reduce the environmental impact of the internal operations and physical assets under our control.

Direct emissions: 5.3 Disclose our direct emissions of greenhouse gases using a globally recognised standard.

Employee incentives 5.4 Engage our employees on our commitment to address climate change, helping them to play their role in meeting this commitment in the workplace and encouraging them to make climate-informed choices outside work.



The demand for sustainable business practice comes from regulators, customers, and employees. Members generally demonstrated an excellent range of impact-reduction initiatives and provided excellent disclosure of greenhouse gas emissions. Such practices are now becoming the rule, rather than the exception. Members should aim to further improve their employee engagement initiatives, and could provide better disclosure on their sustainable procurement policies.

Key strengths and progress achieved

Many members have now integrated supplier assessment processes which consider climate-related criteria. Members including **Allianz** and **If P&C** have supplier management processes in place and will engage with suppliers if sustainability standards are found to be inadequate. If one of **Allianz's** suppliers, for example, is found to be in breach of its obligations, Allianz will enter in to dialogue with that supplier to identify the seriousness and extent of the breach. Depending on the outcomes of this dialogue, contracts could be terminated, suspended, or provisions imposed that the supplier must implement remedial measures to avoid future breaches. One standard enforced by Allianz is its Green IT Hardware Purchasing Policy. This means that all IT devices must meet certain energy efficiency standards. **RSA** states that it will give preference to suppliers with environmental policies. All contracts over a certain threshold are sent via the Corporate Responsibility team for advice on how to engage with suppliers to improve the environmental and social performance of the products and services provided to RSA. Some members also choose to select suppliers based on their achievement of external environmental standards. For example, **XL Catlin** and **Aviva** require that their suppliers comply with the environmental management standards of ISO 14001 and the Carbon Trust's Supply Chain Standards respectively. Some members also engage directly with their suppliers to improve the sustainability of supplier operations. The **CII**, for example, has engaged with its canteen supplier and bathroom refurbishers to improve the sustainability of their office operations.

Members demonstrated a range of initiatives and quantitative achievements with respect to measuring and reducing the environmental impacts of the operations under their control. 12 of the 19 members reviewed this year scored the full 6 marks for this sub-principle. To gain full marks, these 12 members had to disclose their key environmental impact data, detail their impact reduction projects, and demonstrate progress over the last reporting year. This indicates that operational impact measurement and reduction is becoming standard practice across the insurance sector. Some members have used external standards as a means of verifying their efforts. **Allianz** aligns its environmental data reporting to the Greenhouse Gas Protocol's Corporate Accounting and Reporting Standard. The CII was awarded the Carbon Smart Blue Certificate in May 2016. Members have achieved impressive outcomes due to their efforts. **Direct Line** has diverted 100 per cent of its waste from landfill since 2015 while **If P&C** decreased its number of flights by 35 per cent between 2007 and 2015. **Tokio Marine** has been carbon neutral since 2013.

Members also demonstrated excellent measurement and disclosure of their operational greenhouse gas emissions. 11 of the 19 reporting members gained the full 6 marks. These members were able to disclose their greenhouse gas emissions over multiple years, providing a performance trend and accompanying narrative. A number of external standards and organisations were used to help structure this reporting. **If P&C** followed the Greenhouse Gas Protocol Corporate Standard while **Tokio Marine Kiln** developed its data management system with support from an external environmental consultant. **Amlin**, **Marsh**, and **Allianz** all reported to the Carbon Disclosure Project. Members scoring full marks on this sub-principle were able to disclose emissions trends over multiple years, using a consistent approach to measurement and reporting.

Some members are also now demonstrating ongoing sustainability engagement amongst employees throughout the year, rather than just for Climate Week or Earth Day. **RMS** has employee-driven 'Green Teams' implementing sustainability initiatives across the RMS offices. These initiatives have included both educational drives and practical office changes, like installing light motion sensors. The **CII** has 'Green Champions' who monitor energy emissions, costs, and carbon savings. **If P&C** also offers all employees the opportunity to complete an e-learning course in environmental responsibility.

Recommended areas for development

As recommended in both 2014 and 2015, members could do more to disclose the processes of their sustainable procurement policies. Many members indicate that they have a sustainable procurement policy and some higher scoring members even outline the governance structures and criteria considered. However, members typically failed to give any information about what would constitute an unacceptable score. Whilst there were some examples of engagements with suppliers to reduce environmental impacts, these were relatively few and were rarely with high-impact suppliers. Better policy disclosure and further supplier engagement would boost members' scores.

Again, as recommended in 2015, members could improve their disclosure of employee engagement numbers and establish engagement targets. Monitoring and targeting of such activities could encourage further uptake throughout the year.

Case study Aviva: Engaging Suppliers

Aviva has taken an innovative approach to supplier management by encouraging collaboration between its three damage management suppliers.

Rather than pitch these suppliers against each other, Aviva has worked with Belfor, Revival, and Disaster Care Platinum on a collaborative basis. All three suppliers are paid equally, and discussions with all suppliers take place in the same room. This encourages the suppliers to share their progress and discuss best-practice approaches.

This approach stimulated innovation, reduced environmental impacts, and provided the best possible outcomes for customers. In April 2016 the Carbon Trust completed their research into the carbon reductions under this approach to create more sustainable claims processes. The research looked at how category 3 water claims and carpet claims are now dealt with following adoption of this collaborative process.

The research indicates that Aviva has saved 7,200 tonnes CO_2e by changing how it processes escape of water claims – a 43 per cent reduction in carbon emissions per claim and an estimated 400 tonnes CO_2e, by changing how it processes carpet claims – a 35 per cent reduction in carbon emissions per claim. In total, this is equivalent to 9 per cent of Aviva's direct annual emissions (84,000 tonnes CO_2e). Whilst restricted by data availability, Aviva believes that the figures given are on the conservative side. Going forward it is working on the provision of more comprehensive data, and a further improvement in sustainable claims processes.

This approach can have broader positive implications for damage management in the insurance sector, as these suppliers engage on other projects and with other insurers.

Case study Prudential: Improving environmental performance at the global scale

Prudential recognises that, as an international financial services business, one of its most significant direct impacts on the environment is from the operation of the properties it occupies.

This has been a key focus area over the past year as it strives to improve environmental performance at the global scale.

Historically Prudential's environmental targets have focused on resource reduction (energy, water, waste and paper) associated with the UK occupied portfolio, a reflection of the scope of its ISO 14001 certified environmental management system. The Group now recognises the need for a broader set of targets to capture the global business. These targets, which will cover around 400 properties, will help to drive ambition and support the monitoring and evaluation process.

Moving forward, the Prudential Group is also working to understand how it can broaden the level of its scope 3 emissions reporting and engage more comprehensively with its supply chain. This holistic approach to considering environmental impact management is vital if companies are to ensure that they are reducing their total impact.

Principle 6

Report and be accountable

The sub-principles

Strategy: 6.1 Ensure that the organisation is working to incorporate the Principles into business strategy and planning by encouraging the inclusion of the social and economic impacts of climate risk as part of the Board agenda.

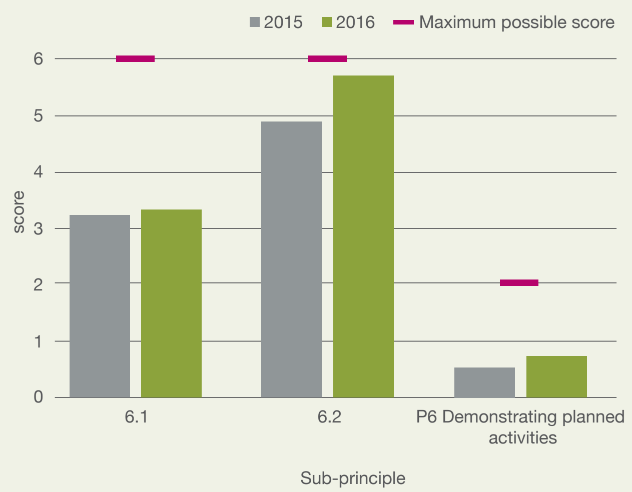
Transparency: 6.2 Publish a statement as part of our annual reporting detailing the actions that have been taken on these principles.

Key strengths and progress achieved

Member performance regarding the engagement in climate change strategy at Board level has improved. More members have governance structures around climate change in place. For example, **If P&C** has three executive Board members on its environmental steering committee. This committee establishes If P&C's environmental strategy and overall goals. It meets at least twice a year to review the environmental policy and strategy, the result of environmental activities and their progress against targets, climate change trends and climate compensation. **Santam** has a Social, Ethics and Sustainability (SES) committee assisting the Board in ensuring that the sustainability strategy and objectives are effectively integrated into the business. The committee is also responsible for providing oversight regarding management's responses to the material risks associated with social, economic and environmental impacts. **Lloyd's** ensures there is a certain level of climate governance through its structure by requiring that each managing agent has a ClimateWise sponsor at Board or senior level. Senior executives have the promotion and progression of Lloyd's CSR agenda as part of their objectives. More practically, their terms of reference mandate how they may delegate authority in relation to this agenda. In addition to governance structures, Board-level sign-off of climate change initiatives can be used to publicly emphasise the importance of this issue to employees and customers. For example, **Zurich** annually develops a Public Affairs and Corporate Responsibility strategy which is signed off both by the UK Executive Committee and at Group level. This year, Zurich identified flood resilience as a business priority at both Group and UK level. It developed key performance indicators accordingly, and these were also signed off at Board level.

Members have requested less optional exemptions this year and as such full disclosure of members against all relevant sub-principles has improved. Nonetheless, some members leave their responses to certain sub-principles blank and may use this report as guidance on how some sub-principles apply to them.

Average absolute score by sub-principle: Principle 6 2015 vs 2016



A clear and robust governance structure is vital to ensure proactive management of climate-related risks and opportunities throughout an organisation, regardless of the complexity of its structure. While members have improved their disclosure for this Principle, we identify room for improvement regarding the existence of a Board-level sponsor and the frequency of discussions held at this level.

Recommended areas for development

Members struggle with reporting on the regularity of discussions held at senior level. Furthermore, while this principle clearly requires the identification of a Board-level sponsor, it is often unspecified by members whether the sponsor exists or is a Board member.

Non-insurer organisations especially struggle with this principle but many have indicated plans to improve their general corporate responsibility reporting.

Case study Allianz: Accountability for climate change

The highest governing body for sustainability-related issues at Allianz is the ESG Board, established in 2012.

It consists of three Allianz SE Board members, who meet quarterly. The ESG Board is responsible for integrating ESG across all business lines and core processes dealing with insurance and investment decisions. It also leads to associated stakeholder engagement.

Several Board members assume responsibility for specific sustainability topics, and functional departments provide regular updates on sustainability issues directly to the Board. In addition to the ESG Board, several committees with Board member leadership play an important role in Allianz's decision-making processes: these are the Group Finance and Risk Committee, the Underwriting Committee and the Investment Committee.

The Group sustainability management is made up of two Centres of Competence – Allianz4Good and the ESG Office. Allianz4Good reports directly to the Allianz SE Board member responsible for investments. The ESG Office reports directly to the Allianz SE Board member responsible for Asset Management Worldwide and Insurance USA and Chair of the ESG Board.

During 2015, Allianz focused on leveraging its governance processes to further embed sustainability into the core business, using internal debate, stakeholder engagement, being an incubator for new business opportunities, and pilot projects. In 2016 it will launch a new sustainability and corporate responsibility strategy, which will include the integration of Allianz4Good and the ESG Office into one Corporate Responsibility department.

Appendices

Appendix 2: Scoring methodology

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

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

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

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

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

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

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

Scoring process

1. **Detailed review of ClimateWise submissions**
   Members submitted their reports and supporting documents to CISL which are in turn reviewed and scored by PwC analysts using the methodology described above.

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

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

4. **Reassessment of scores**
   Some member scores were then amended as a result of the discussions with members and the review of additional relevant documentation.

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

Appendix 3: Member ranking

Member	2016 score	2015 score
Member A	88%	74%
Member B	84%	60%
Member C	81%	82%
Member D	80%	79%
Member E	77%	72%
Member F (New)	73%	n/a
Member G	71%	71%
Member H	65%	67%
Member I	60%	64%
Member J	59%	58%
Member K	57%	63%
Member L	56%	49%
Member M	55%	50%
Member N	48%	65%
Member O	44%	56%
Member P	43%	39%
Member Q (New)	33%	n/a
Member R	26%	22%
Member S	16%	18%

Appendix 4: Compliance breakdown

Compliance breakdown by sub-principle
The table below provides the number of members obtaining each score.

	Score available:	0	1	2	3	4	5	6	Exemption	
									Self	Fixed
1. Lead in risk analysis										
1.1	Support and undertake research on climate change to inform our business strategies and help to protect our customers' and other stakeholders' interests. Where appropriate share this research with scientists, society, business, governments and NGOs in order to advance a common interest.	1	0	0	1	1	11	5	0	0
1.2	Support national and regional forecasting of future weather and catastrophe patterns affected by changes in the Earth's climate.	1	1	1	3	3	4	5	1	0
1.3	Use research and improve data quality to inform levels of pricing, capital and reserves to match changing risks.	2	0	0	4	2	3	5	0	3
1.4	Evaluate the risks associated with new technologies for tackling climate change so that new insurance products can be considered in parallel with technological developments.	3	2	2	4	1	4	1	1	1
Demonstrating planned activities		7	8	4					0	0
2. Inform public policy making										
2.1	Work with policy makers nationally and internationally to help them develop and maintain an economy that is resilient to climate risk. This should include supporting the implementation of emissions reductions targets and where applicable supporting government action that seeks to enhance the resilience and reduce the environmental impact of infrastructure and communities.	1	2	0	1	4	4	7	0	0
2.2	Promote and actively engage in public debate on climate change and the need for action.	1	1	3	3	5	4	2	0	0
Demonstrating planned activities		9	4	6					0	0
3. Support climate awareness among our customers										
3.1	Inform our customers of climate risk and provide support and tools so that they can assess their own levels of risk.	0	0	3	2	1	6	4	1	2
3.2	Encourage our customers to adapt to climate change and reduce their greenhouse gas emissions through insurance products and services.	1	4	3	5	1	2	0	0	3
3.3	Seek to increase the proportion of non-life claims that are settled in a sustainable manner.	3	2	2	1	4	2	0	1	4
3.4	Through our products and services assist markets with low insurance penetration to understand and respond to climate change.	3	2	1	3	1	4	5	0	0
Demonstrating planned activities		9	7	3					0	0

Appendix 4: Compliance breakdown *continued*

	Score available:	0	1	2	3	4	5	6	Exemption	
									Self	Fixed
4. Incorporate climate change into our investment strategies										
4.1	Evaluate the implications of climate change for investment performance and shareholder value.	2	1	0	2	2	2	4	0	6
4.2	Incorporate the material outcomes of climate risk evaluations into investment decision making.	2	4	0	2	0	2	3	0	6
4.3	Communicate our investment beliefs and strategy on climate change to clients and beneficiaries.	2	3	0	10	1	1	1	1	0
Demonstrating planned activities		9	5	4					1	0
5. Reduce the environmental impact of our business										
5.1	Engage with our supply chain to work collaboratively to improve the sustainability of their products and services.	2	1	3	1	4	6	2	0	0
5.2	Measure and seek to reduce the environmental impact of the internal operations and physical assets under our control.	1	2	0	3	0	1	12	0	0
5.3	Disclose our direct emissions of greenhouse gases using a globally recognised standard.	1	1	0	4	0	2	11	0	0
5.4	Engage our employees on our commitment to address climate change, helping them to play their role in meeting this commitment in the workplace and encouraging them to make climate-informed choices outside work.	5	2	0	4	3	5	0	0	0
Demonstrating planned activities		2	7	10					0	0
6. Report and be accountable										
6.1	Ensure that the organisation is working to incorporate the Principles into business strategy and planning by encouraging the inclusion of the social and economic impacts of climate risk as part of the Board agenda.	3	1	2	4	1	7	1	0	0
6.2	Publish a statement as part of our annual reporting detailing the actions that have been taken on these principles.	0	0	1	0	1	0	17	0	0
Demonstrating planned activities		9	6	4					0	0

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