ClimateWise

Insuring a sustainable future

A Climate of Change

ClimateWise Principles Independent Review 2015

UNIVERSITY OF CAMBRIDGE
INSTITUTE FOR SUSTAINABILITY LEADERSHIP

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Independent Reviewers

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 range of far-sighted and innovative Action Research Collaborations (ARCs), which bring together experts from across the insurance industry, partner organisations, 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, climate-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 low 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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Author and Acknowledgements

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The study design and editorial process was led by Tom Herbstein, Tamara Slater and Caroline Bentham at CISL, with input from James Cole.

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Copies

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

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Executive summary

Against the backdrop of climate change negotiations in Paris at the end of 2015, and the key role of business in responding to climate change, the ClimateWise initiative and the strong performance of members against the ClimateWise Principles has never been more relevant.

Since last year's independent review, the interest of investors and regulators in the management of climate risk by the insurance industry has continued to rise. Most notably, the UK's Prudential Regulation Authority (PRA) recently published its findings from a review of the impacts of climate change on the UK insurance sector – ranging from the more obvious physical impacts to the risks and opportunities of a transition to a low-carbon economy and the potential for liability. The G20's Financial Stability Board has also proposed the creation of a disclosure taskforce on climate-related risks; an initiative closely aligned to the ethos of ClimateWise and its members.

ClimateWise is a voluntary leadership group driving an insurance industry response to the transition to a low-carbon, climate-resilient economy. The 2015 review continues to demonstrate how members are both managing the risk implications to their business and developing their role as a key risk manager to societies and economies.

In order to manage their exposure to climate risk, members are integrating climate change into risk analysis and underwriting decisions. They are increasingly considering their exposure to climate risk in investment portfolios and the need to move capital away from activities inherently at risk from the transition to a low-carbon, climate resilient economy, as well as companies or regions not taking adequate steps to manage their own exposure. Members are also developing their role as climate risk managers to societies and economies by innovating in terms of product development and sustainable claims processes.

2015 was the second year of review under the updated ClimateWise methodology. Member scores across the ClimateWise Principles saw an average increase from 51% to 56%, although the detail suggests a set of leaders are raising the performance bar. In 2015 five members scored over 70% (with one over 80%), a significant increase from none in 2014.

56%

In 2015, member scores across the ClimateWise Principles saw an average increase from 51% to 56%.

At the individual ClimateWise Principle level, no notable decreases in performance were seen across any ClimateWise Principle or sub-principles. Significant increases were seen across Principle 1 (Lead in risk analysis) and sub-principle 3.4 (Under-insured markets).

This report describes the latest climate change context for the insurance industry including the implications of climate change for investment decision making. It presents perspectives from both investors and regulators as to the role voluntary disclosure plays in communicating the sector's exposure to climate risk. It also reviews member performance across the ClimateWise Principles, highlighting case studies of innovation and good practice throughout.

Contents

ClimateWise members 2015

Chairman's foreword

Judging by the evidence in this report, it's been a busy year for members as they continue to embed the ClimateWise Principles across their business activities. This is particularly welcome, especially as we gear up to the crucial climate negotiations in Paris at the end of 2015.

It's remarkable how far the understanding of climate change and the insurance industry has come. Even a few years ago, it would have been considered unthinkable that a central regulator like the Bank of England would publish a report examining the potential impact of climate change for the insurance sector and its clients. The Prudential Regulation Authority's (PRA) engagement during the drafting of their report was a welcome opportunity for our members to reflect with regulators on climate change related concerns.

Indeed, given the continual growth in exposure to natural catastrophes, insurance cannot simply rely on a strategy of assessing and repricing risks as this may ultimately lead to uninsurable markets, thereby undermining our own industry's relevance and future. Thus we need to become more systemic in our thinking around climate risk, leveraging all of our resources in response and creating the types of partnerships that can lead to a meaningful and sustainable response to climate change.

The newly rebranded ClimateWise exists precisely to support such a response. The ClimateWise Principles provide a clear framework that help our members to demonstrate their commitment to the societal transition to a low-carbon, climate-resilient society. Its Action Research Collaborations identify and address gaps in the knowledge in how insurance can better respond to the challenges faced, particularly with regard to resilience.

I thank all of our members for the hard work they have put in this year and look forward to another year of positive and productive engagement by ClimateWise and its members as we collectively respond to climate change.

Maurice Tulloch, Chair, ClimateWise

Introduction

Climate change context

The latest report by the International Panel on Climate Change (IPCC)[1] in 2014 observes that without significant action, increasingly severe and frequent climate shocks such as heat and water stress, flooding and drought, combined with social and political impacts may cause inescapable pressures for society and business.

[1] http://www.ipcc.ch/report/ar5/syr/

Flooded fields close to Kalavryta town, Achaia, Peloponnese, Greece

The insurance industry, as a key risk manager of societies and economies, will need to adapt its business models to ensure these risks are accurately measured and remain insurable at reasonable economic cost. It will also need to consider the opportunities this could bring from new products, new markets and investments.

At its summit in Paris in December (COP21), the United Nations Framework Convention on Climate Change (UNFCCC) looks set to agree a framework for national governments to limit warming to 2°C above pre-industrial levels, to avoid extreme climate change, and to prepare for the already anticipated impacts. During 2015, the UNFCCC held a number of intersessional negotiations to build momentum and consensus towards an agreement in Paris. In Bonn in June, emphasis began to be placed on carbon markets and the role of the private sector in mobilising climate finance. The private finance sector has found it increasingly difficult to invest in long-term infrastructure as the capital requirements are often high relative to other asset classes, particularly in developing countries. For insurance companies, the emphasis is on the need to engage policy makers and financial regulators to ensure that policy changes do not work against the large scale deployment of finance for climate mitigation and adaptation.

The start of 2015 also saw governments disclosing their 'intended nationally-determined contributions' (INDCs) – their national climate targets. Analysis by PwC[2] suggests that many INDCs are not ambitious enough to limit warming to below 2°C. This outcome has two significant implications for the insurance

[2] http://www.pwc.co.uk/services/sustainability-climate-change/insights/low-carbon-economy-index.html

sector: firstly, unless targets are ratcheted upwards over the next decade, the industry will be exposed to a higher level of physical climate risks, particularly in terms of severity, frequency and unpredictability of impact; secondly, the currently proposed INDCs would still require a significant increase of decarbonisation efforts, particularly in the EU and US, opening up investment opportunities on the one hand but also exposing high carbon assets to the risk of stranding as economies transition away from fossil fuels.

The need to limit emissions, as well as the commitments made by the INDCs, pose the threat of stranded assets on a significant scale. It has been suggested that the 2°C limit will only be achieved if 82% of global coal reserves, 49% of gas reserves, and 33% of oil reserves are left in the ground[3]. The Bank of England's Prudential Regulation Authority (PRA) formally examined the risks posed by such stranded assets and the valuation of fossil fuel companies to financial stability[4]. This culminated in Mark Carney – the governor of the Bank of England – publicly highlighting to investors at Lloyd's the risk posed by climate change and that the current challenges "pale in significance compared with what might come"[5].

The G20's Financial Stability Board has also established a taskforce to examine the issue and its impacts on the global financial system.

With climate change increasingly posing a range of risks to global prosperity, the ClimateWise Principles provide a framework for insurance industry organisations to consider how they can best fulfil their risk management role by supporting climate resilience within the economies and societies to which they are exposed.

Rewiring the Economy: Ten tasks, ten years

Within the context of growing international focus on sustainability and climate change issues in 2015, the University of Cambridge Institute for Sustainability Leadership (CISL) – the facilitator of ClimateWise – recently published a report entitled *"Rewiring the Economy:* Ten tasks, ten years"[6]. It sets out a ten year plan for government, business and finance to lay the foundations for a sustainable global economy. Underpinning this ten year plan are ten interconnected tasks:

Figure 1: Ten tasks

Task 1: Measure the right things, set the right targets
Governments can set bold targets for social and environmental progress, and adopt new measures to track how well the economy is delivering them.

Task 2: Use fiscal policy to correct externalities
Governments can internalise environmental and social costs in economic activities through fiscal policy, benefitting sustainable business models.

Task 3: Drive socially useful innovation
Governments can use every opportunity to create drivers and incentives for innovation aligned with core sustainability goals, and should exemplify and enable sustainable business.

Task 4: Ensure capital acts for the long term
Investors of capital can demand more from their money, using their influence to drive long-term, socially useful value creation in the economy in the interests of their beneficiaries.

Task 5: Price capital according to the true costs of business activities
Capital providers, and those who regulate them, can jointly consider how to reflect social and environmental risk factors in the cost of capital.

Task 6: Innovate financial structures to better serve sustainable business
Financial intermediaries in particular can apply their influence and creativity to increasing the flow of capital into business models that serve society's interests.

Task 7: Set a bold ambition, and innovate to deliver greater value
Companies can seek models of value creation that generate a fair social contribution within the natural boundaries set by the planet.

Task 8: Broaden the measurement and disclosure framework
Companies can build a fuller understanding of their impacts (and dependencies) on society, including the implications for capital allocation.

Task 9: Grow the capability and incentives to act
Companies can align their capital, talent and senior attention with a sustainable business vision, and ensure people are empowered to deliver.

Task 10: Harness communications for positive change
Companies can use their communications and marketing muscle to build public understanding of (and appetite for) sustainable business.

[3] http://www.nature.com/nature/journal/v517/n7533/full/nature14016.html
[4] http://www.bankofengland.co.uk/pra/Documents/supervision/activities/pradefra0915.pdf
[5] http://www.bbc.co.uk/news/business-34396961
[6] http://www.cisl.cam.ac.uk/about/rewiring-the-economy

The ClimateWise Principles complement and align with this plan in that they provide guidance as to how insurance industry organisations can contribute to a low-carbon, climate-resilient future. Members with investment mandates, for example, must consider how their capital can be deployed in ways which directly support the management of climate risk impacting their underwriting activities, e.g. investing in climate-resilient infrastructure, (ClimateWise Principle 4, and Tasks 4 and 6). We explore the implications of this for the insurance industry in more detail in the next chapter of this report. Members providing insurance products and services can innovate and promote climate change awareness and action through their core business activities (ClimateWise Principle 3 and Task 7). Critical to this is ensuring responsibility and accountability for climate change action is held at the highest management level, and that organisations are open and transparent about their actions, successes and challenges (ClimateWise Principle 6, and Tasks 9 and 10).

In essence, members reporting against the ClimateWise Principles contribute to the broader strategic objectives of ClimateWise as an industry leadership initiative. The resilience of the insurance industry is inherently dependent on the communities within which it operates and the governments that govern them. It is therefore imperative that ClimateWise members continue to collaborate with others to address gaps in the knowledge that will allow the industry to respond to climate change in ways that generate business value, and help to improve the resilience of the societies within which they exist.

The revised ClimateWise Principles approach

2015 marks the second year of members reporting against the updated ClimateWise Principles. Previously members were rewarded by providing evidence of initiatives and process. The new approach focuses instead on understanding the outcomes and social and environmental impacts of initiatives in response to climate change. This encourages members to align their response to climate change with their organisation's core strategy and services to prioritise efforts based on issues material to them, and to consider planned activities.

Each ClimateWise Principle carries a weighting specific to each organisation type (insurers, brokers, etc) that reflects its respective materiality. Figure 2 below highlights how, given the applied weighting, focusing on material principles can have a positive impact on a member's total weighted score. The left column represents the average total members scored in pre-weighted terms against each ClimateWise Principle. The right column shows how these absolute scores are then converted via their sector specific weightings. For example, member scores in Principle 5 (environmental impact of the business) represented 25% of their total score in absolute terms. However, this decreased to an average of only 11% across all members after weightings had been applied, reflecting this Principle's lower relative materiality.

The introduction of this revised approach in 2014, following a one year hiatus in reporting in 2013, led to a significant decrease in average score across the ClimateWise membership between 2012 and 2014, as illustrated in Figure 3. This was not a surprise, as the criteria were made intentionally more challenging as the ClimateWise initiative raises the bar of the reporting requirements and highlights how the membership is adapting and advancing its response to climate change. We expect to see average scores continue to improve as organisations increasingly improve their response and that this will, ultimately, require the bar to be raised again sometime in the future.

Figure 2: Average total score vs average weighted score

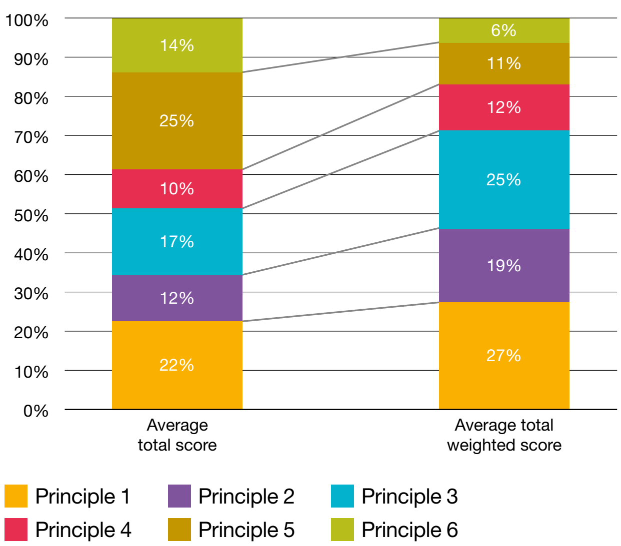
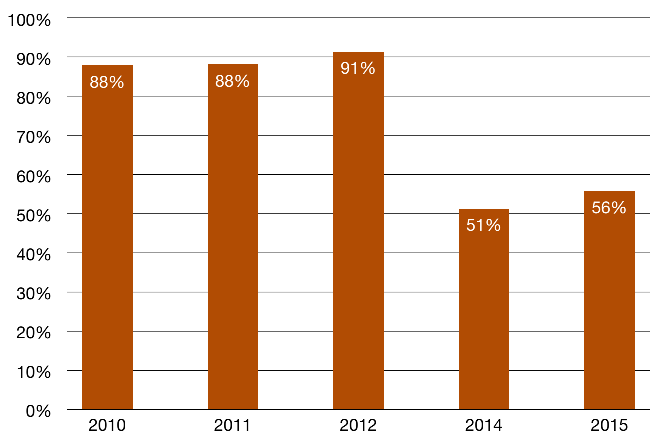


Figure 3: Average member score over time



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

Disclosure on climate change risk

Stakeholder perspectives

An investor perspective

- **Increasing regulator concern over climate risks to the financial sector.** The leaders of the G20 economies have asked the Financial Stability Board to convene a public-private inquiry into the risks posed to the financial sector from "stranded assets" – a term increasingly used to describe assets that become economically unviable due to the transition away from fossil fuels. This inquiry follows on from a similar review by the Bank of England.

- **Investor interest and expectations are increasing.** In a recent report '21st Century Engagement' Blackrock, the world's largest asset manager, outlined various questions that need to be asked prior to making investments in insurance companies[7]. This includes whether the company is actively integrating climate change into its risk management systems and, consequently, adequately responding to the challenges faced.

- **Investors interested in opportunities as well as risks.** Morgan Stanley's 'Embedding Sustainability into Valuation' report highlights its new framework that identifies which ESG risks and opportunities could impact a company's earnings or cash flow, then shows where to incorporate those factors in a typical stock valuation model[8]. The report also describes how analysis of a potential insurer investment should consider exposure to 'cluster events' and unexpected natural catastrophes and assesses its engagement in the potential opportunities for innovative products and services.

- **Evidence emerging of outperformance by climate engagers.** Companies actively engaging and reporting on their response to climate change are emerging as preferential investment opportunities. For example, companies that have disclosed their response to climate change, have outperformed the Bloomberg World Index of top companies by over 9% for the past four years[9].

- **Industry initiatives also an indicator for rating agencies.** Standard & Poor's states that insurers aligning to industry initiatives, such as the ClimateWise Principles, helps them to inform their 'rating analysis with regards to competitive position, capital adequacy, earnings and enterprise risk management.'

[7] http://www.blackrock.com/corporate/en-us/literature/publication/blk-ceres-engagementguide2015.pdf
[8] Morgan Stanley, 2015, Embedding Sustainability into Valuation

Climate risk is growing as a key factor in decision making for many organisations across all aspects of government, business and financial services. Public disclosure, through initiatives such as the ClimateWise Principles, of actions taken to mitigate climate risk is therefore likely to grow in prominence and importance into the future.

This year, we explore the case for public disclosure regarding climate risk from the perspectives of two key stakeholders groups – investors and regulators.

A regulator's perspective

- **Regulators are increasingly considering climate risk management.** In September 2015 the UK's Prudential Regulation Authority (PRA) launched its much anticipated report *'The impact of climate change on the UK insurance sector'*[10]. It provides one of the first examples of an insurance regulator examining the direct impact climate change may have for the insurance industry and its customers.

- **Climate risk is multi-faceted and extends into the long-term.** The PRA report found that while insurance is well placed to deal with the risks of climate change over the short-term there are a number of challenges the industry (and its regulators) will need to address over the long-term. These include the physical risks of climate change, the associated impacts of the transition to a low-carbon, climate-resilient world and the threat that increasing liability might present.

- **The risk needs to be embedded across insurer enterprise risk management.** As a regulator, the PRA is not alone in voicing its concern over climate change. The US National Association of Insurance Commissioners (NAIC), for example, has a Climate Change and Global Warming working group that, amongst other activities, reviews the impact climate change may have for insurer enterprise risk management and investigates sustainability issues and solutions related to the insurance industry.

- **Insurance is also a key part of the solution.** The role of regulation, in creating shared value, was highlighted recently in a Cambridge Institute for Sustainability Leadership (CISL) report ('Insurance Regulation for Sustainable Development') that called for access to insurance to be regarded as a basic human right and for regulation to enable the industry to play its role in sustainable development.

- **Industry collaborations are a source of innovation and advancement.** From an insurance perspective, the PRA's report highlighted how voluntary initiatives, such as the ClimateWise Principles, are playing an increasingly important role in helping insurers to communicate their individual responses to climate change to regulators. This will help to expose the insurance industry to emerging thinking on climate change, help to align sectors and resources and facilitate the sharing of knowledge of different geographical regions and with other stakeholders, like regulators.

[9] http://www.cdp.net/en-US/Pages/HomePage.aspx
[10] http://www.bankofengland.co.uk/pra/Documents/supervision/activities/pradefra0915.pdf

Climate change in investment

Insurance assets under management are expected to grow from $24.1 trillion in 2012 to $35.1 trillion in 2026[6]. Assets are critical for covering underwriting obligations and generating additional income.

Insurers are beginning to recognise that their exposure to climate risk can impact the value of investment portfolios as much as underwriting portfolios, increasing financial exposure and potentially correlating risks across their balance sheets. A recent Cambridge Institute for Sustainability Leadership report, entitled *'Unhedgeable Risk: How climate-related sentiment impacts investment'*, concluded that short-term shifts in market sentiment induced by awareness of future climate risks could lead to losses of up to 45% in investment portfolio[11]. Around half (53%) of this decline is "hedgeable" if investments are reallocated effectively, but the other half (47%) is "unhedgeable," meaning investors and asset owners are exposed unless some system-wide action is taken to address the risks[12].

In response, prudent investors are innovating ways to de-risk investments from climate change, such as mapping portfolios against physical and policy climate risks. Some go further, and are aligning capital to actively support the transition to a low-carbon, climate resilient economy, within the boundaries of their investment mandates, regulatory framework and reasonable allocation of resources.

Ahead of governments meeting in Paris in December for a global climate deal, both developed and developing economies have submitted national commitments to reduce their GHG emissions and develop renewable capacity. On the assumption that a deal is done in Paris then business can expect a step-change

[11] http://www.pwc.com/gx/en/asset-management/publications/pdfs/pwc-asset-management-2020-a-brave-new-world-final.pdf
[12] http://www.cisl.cam.ac.uk/publications/sustainable-finance-publications/unhedgeable-risk

The International Energy Agency (IEA) has predicted that nuclear and renewable power could account for up to 41% of the global energy mix by 2040.

France, Drome and Vaucluse, wind turbines and Tricastin Nuclear Power Station.

in climate change policies in the short-term in order to meet targets. Tighter regulation on climate change can be expected first between 2016-2020 in the EU and US (witness the Clean Power Plan for example), and then between 2020-2030 expanding into the larger emerging economies (China, Brazil, South Africa, India for example) as their emissions peak and then need to fall sharply. The INDC's suggest significant investment in renewables, totalling US$400bn per annum in China alone and US$300bn per annum in the EU[13]. This will give rise to significant opportunities for insurance companies, both in terms of providing cover and for investment.

So which world will it be? One in which governments set a path to 2°C and fossil fuel energy is swiftly phased out, or one where we are set for greater levels of warming and the physical impacts this presents? The political reality is a world with a bit of both: According to PwC analysis the commitments by developed countries would require a doubling (1.3% to 3%) of the current rate of decarbonisation but even this is less than half the rate required to limit warming to 'only' 2°C (at 6.3%). The targets set by governments will be insufficient to fully mitigate climate change, and there are likely to be some implementation failures. So whilst there will be a significant decarbonisation effort, with all the risks and opportunities this brings, there will also be physical impacts that will need to be insured against and paid out as they occur. The outcome of deal negotiations will simply dictate the pace at which these changes occur.

Investment risk

There are a variety of sectors to which climate regulation may extend, such as transportation, infrastructure, agriculture and forestry, but it's energy that is a particular focus given its current dependence on fossil fuels. There is already evidence of a shift towards low-carbon energy sources. The International Energy Agency (IEA) has predicted that nuclear and renewable power could account for up to 41% of the global energy mix by 2040, compared to 18% in 2012. The issue of 'stranded assets' is well reported: high emission assets will suffer significant and unexpected write-downs rendering them economically unviable.

The IEA estimates that 60-80% of coal, oil and gas reserves of publicly listed companies cannot be monetised, and $180bn of oil and gas exploration costs will be sunk and irrecoverable by 2035, if global warming is to be limited to the 2°C target, calling into question the rationale of further investment in fossil fuel exploration. Coal is likely to face the toughest short-term constraints given it is at least twice as carbon intensive as gas, although oil is likely to face similar medium term limits on use[14]. Stranded assets could therefore represent a significant risk to investors with exposure to affected energy sub-sectors, and their value chains. Several investors are already selling down coal investments and restricting future exposure.

[13] http://www.pwc.co.uk/services/sustainability-climate-change/insights/low-carbon-economy-index.html
[14] http://assets.wwf.org.uk/downloads/wwf_coal_report_imperial_college_final.pdf

ClimateWise members provide some indication that they are taking action to reduce climate risk in their investment activities. **SwissRe** screens its equity and credit portfolios on an annual basis against environmental, social and governance criteria including climate change. **Allianz** examines the implications of climate risk in an investment context by investigating how they can be a) incorporated into strategic asset allocation, and b) assessed as part of an overall evaluation of individual stocks. Such activities should help insurers to identify and prioritise actions to reduce risk in the long term interest of their portfolios.

Investment opportunity

In addition to posing significant risks, climate change also provides sizeable opportunities for financial institutions to facilitate and provide climate finance. To limit warming to 2°C, an additional $40tn of investment in clean energy and resilient infrastructure is needed – an annual investment of c. $1.1tn per year until 2050 – the so-called “missing trillion”. The insurance industry can play a major role in leading the transition towards a low-carbon climate-resilient economy, not just through the provision of products and services, but also through active investment strategies. There are numerous examples of ClimateWise members using investments to achieve positive environmental outcomes through renewable energy production. **Prudential**, for example, has invested in renewable power across Europe, including a £100m cornerstone investment in a large tidal lagoon project in Wales.

Green bonds have emerged as a new and quickly growing asset class. They help issuers to mitigate climate risk by financing mitigation or adaptation initiatives. **Allianz**, **Aviva** and **Zurich** signed the Investor Statement re: Green Bonds & Climate Bonds in early 2015 calling for improved standards and transparency in the market. **Zurich** has committed to invest up to US$2 billion in green bonds, of which US$681 million was invested as of the end of March 2015. **If P&C** invested in a green bond launched by the City of Gothenburg to finance a portfolio of windfarms. For insurance companies that do not hold equity investments this is an attractive new channel for aligning asset allocation with the low-carbon economy and for providing climate finance. Some investors also see green bonds as climate risk instruments and a form of ‘impact investing’. There is also the opportunity for investments to be made which support insurers’ underwriting activities, in resilient infrastructure for example. Such investments could help to enhance societal resilience and provide financial returns, whilst also helping insurers to manage their risk exposure from underwriting.

Investment decisions

ClimateWise members are a sub-set of the insurance industry proactively engaging on climate risk. Members embedding Principle 4, to evaluate – incorporate – communicate climate change in investment decisions, will be better positioned to respond to the future risks and opportunities. For those with equity portfolios an initial carbon-profiling of portfolios is often a first step towards evaluating exposure and can provide the basis for engaging with investees that present the most risk and opportunity. For those without equity portfolios a similar but lighter approach can be undertaken. The Montreal Carbon Pledge by investors to annually measure and disclose ‘portfolio carbon’ is gaining traction, with nearly 70 signatories so far, including **Aviva**. In France this has become regulation with the government now requiring institutional investors to make this disclosure. Demands on insurers to manage and report climate risk is only likely to grow, even if just from shareholders rather than regulators.

$40tn

To limit warming to 2°C, an additional $40tn of investment in clean energy and resilient infrastructure is needed.

The ClimateWise Principles Independent 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 14

Principle 2
Inform public policy making
See page 17

Principle 3
Support climate awareness amongst our customers
See page 20

Principle 4
Incorporate climate change into our investment strategies
See page 23

Principle 5
Reduce the environmental impact of our business
See page 26

Principle 6
Report and be accountable
See page 29

Principle 1
Lead in risk analysis

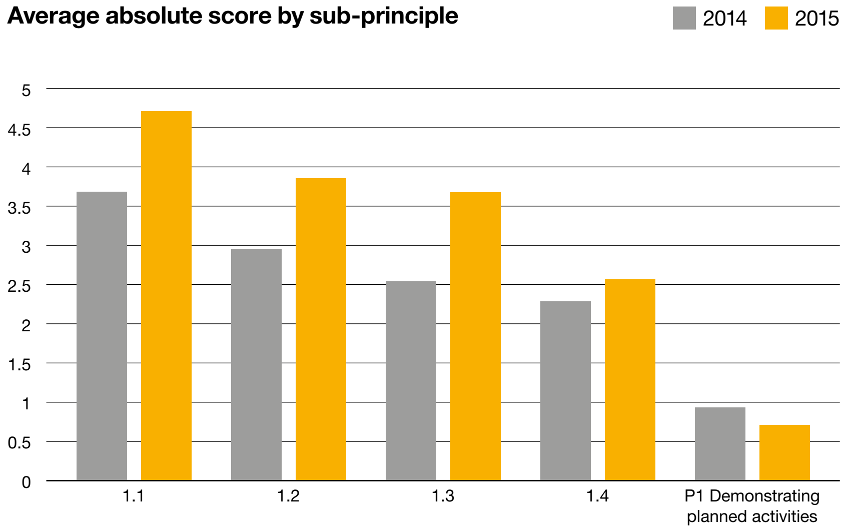
The sub-principles

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.



Activities to support the accurate pricing of risk related to climate change continues to be critical to the insurance industry. This is underlined by the members generally demonstrating evidence of good progress across ClimateWise Principle 1 this year, particularly in terms of research and forecasting. However, greater disclosure on their efforts to innovate regarding products and services for new technologies and future planned activities regarding risk analysis would help to demonstrate further how members are continuing to integrate climate change considerations into their core business strategy now and into the future.

Key strengths and progress achieved

As in previous years, members of different organisational types continue to provide strong evidence of not only their research initiatives, but also the efforts made to share and engage others on their outcomes. For example, building on previous work conducted on flood risk, the **Chartered Institute of Insurance** published a new report on flood risk from an insurance claims perspective[15]. It examined how the experience of home insurance customers affected by flooding could be improved and also provided insight into how insurers can help to reduce the likelihood and impact of future flooding incidents. **RSA** co-hosted a roundtable to launch its whitepaper titled "Environmental Systemic Risk and Insurance". This event brought together other insurers, analysts, policymakers and campaigners to engage on how environmental systemic risk can be better managed by the industry.

Members also improved their quality of disclosure regarding their support of national and regional forecasting efforts, including how initiatives in this area are informing core business practices. **Cunningham Lindsey** continues to research weather patterns through Weathernet, its subsidiary. This weather forecasting service has enabled the company's clients to support their own claims processes. It also regularly issues reports to the insurance market on weather forecast research it has conducted. Where forecast modelling is not directly conducted by an organisation, there were examples of members collaborating with external parties to support forecasting activities. For example, **Hiscox** discloses details of its relationships with various modelling companies and how its provision of claims data and feedback to these organisations has led to more accurate underwriting of risk in its core business.

It is also encouraging to see members increasingly demonstrating how they have identified areas of data quality requiring improvement and acted upon these through new research efforts. **Tokio Marine** and **RMS** continue to work together to improve the quality of earthquake and typhoon risk analysis by combining RMS's modelling capability and Tokio Marine's information and knowledge. This is a good example of collaboration between ClimateWise members.

There was a slight improvement in members demonstrating activities related to new technologies addressing climate change impacts and increasing their evaluation of risks associated with such technologies. **Allianz** commissioned a study which examined the need for additional incentives for the construction of new wind and solar power plants to guarantee the security of supply. In a departure from the more common disclosure on renewable technology, **Santam** reported on how it has improved its underwriting capability with regards to climate smart agriculture by examining advanced farming technology such as soil moisture conservation and drought resistant crops.

Recommended areas for development

Innovation in terms of understanding and mitigating the costs and risks of insuring new climate change-related technology continues to be an area of risk analysis which could be enhanced. While a few members disclose some interesting examples regarding technologies such as offshore wind energy, hydro energy and autonomous vehicles, there is significant scope for members to better illustrate how they are increasing efforts to support the development of new technologies and the impact this is having on their business.

[15] http://www.cii.co.uk/media/6175205/coordination_of_flood_response.pdf

Members continue to struggle to provide specific examples of planned activities for the reporting year. While it is understandable that some members may be reluctant to disclose future initiatives ahead of them being launched due to competition with others, a few were able to articulate how recent research and analysis work was going to be shared with a wider audience in the future, how research outcomes were going to be acted upon by the business, and potential projects and publications for the coming year. We would expect to see greater disclosure of this nature as insurance organisations begin to consistently and systematically consider how they can continue to conduct and share research.

Case study Hiscox customer values

To better inform its customers about climate change, Hiscox recognised that it needed to better understand its customers' attitudes towards sustainability issues.

Hiscox recently completed a study looking at insurance customer values and how best the company can engage and influence them for positive environmental change. The study surveyed over 600 customers and found that Hiscox's customers:

- Believe that insurers should take a lead role in informing and advising consumers about relevant environmental issues such as flooding and other weather related risks;
- Believe that sustainability efforts should be a collaborative approach between consumers, companies and the government;
- Feel that insurers should take a proactive approach when it comes to climate change, such as offering customers discounts and rewards for acting sustainably and taking measures to reduce climate related risks; and
- Possess a natural optimism about their ability to affect climate change, with the majority claiming to make lifestyle compromises to benefit the environment.

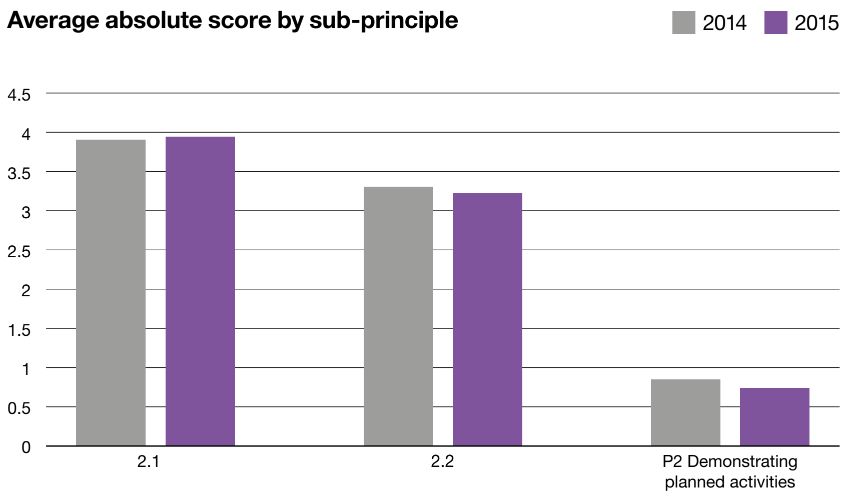
The outcome of the study was a series of recommendations and opportunities for Hiscox products and services. Hiscox continues to conduct regular, more general, customer surveys to understand what motivates customers and how best the company can engage with them.

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.



As governments seek to protect economies and societies against the consequences of climate impacts, insurance organisations can use their expertise and experience to inform the development and implementation of policies to promote climate resilience. Members describe a range of initiatives to engage and influence policy makers on climate related issues by participating in conferences, workshops and publications both individually and as part of wider multi-stakeholder initiatives. It is clear from the majority of evidence provided that insurance organisations are recognising the role their expertise, products and services can play in climate change adaptation and mitigation, and engaging on policy accordingly. However, the slight decrease in scores across the Principle suggests this is a ClimateWise Principle members could look to focus on for next year.

Key strengths and progress achieved

It is encouraging to see examples where members have prioritised policy engagement efforts based on material issues to their organisation. For example, as one of the leading crop insurance providers in the United States, and with prior experience of drought conditions negatively impacting crop production in 2012 and 2013, **ACE Group** prioritised its policy engagement efforts on legislation regarding approaches for improving the public-private crop insurance for farmers. Consultation was undertaken with legislators both directly and through trade associations. Similarly, **Swiss Re** recognises there is an opportunity in building climate resilience for reinsurers in terms of providing risk transfer solutions from low frequency, high impact events and the clean technology sector. As such, it has actively engaged with the US Federal Emergency Management Agency to support reform to make the National Flood Insurance Program more financially sustainable, including through the expansion of the flood reinsurance market.

This is a key principle for professional bodies and associations, which as industry representatives, are well placed to inform public policy making and engage in public debate on how the industry can contribute to climate resilient societies. There were good examples of these organisations playing a leading and convening role in stimulating public debate and awareness through both events and publications. The **Association of British Insurers** hosted its first climate change conference in five years which featured a keynote speech from the Department for Energy and Climate Change Secretary of State and focused on mitigation, adaptation and investment opportunities for the industry. The **Chartered Institute of Insurance** meanwhile published a series of papers titled the 'Social Value of Insurance' which emphasised the role of insurance in promoting economic development and supporting social outcomes. Topics covered in the series included the role of insurance in mitigating and preventing climate change and flood prevention.

Another popular method of public engagement is leaders of organisations speaking publicly on the importance of climate change, the impact on their organisation, and the challenges faced in managing this. **Lloyd's** Head of Exposure and Reinsurance has spoken at a number of public events related to influencing policy, including sessions attended by government representatives and hosted by international organisations such as the World Bank.

Recommended areas for development

Despite the examples provided above, the average score across the principle fell last year. Members generally still struggle to explicitly identify the areas of public policy related to climate change which are most important to their respective organisations, and how their engagement efforts are aligned to these. This will help to demonstrate that member activities under the ClimateWise Principle are focused on issues where they can have the most impact.

Additionally, while public engagement as part of a wider industry or multi-stakeholder initiative is commendable and often useful in enacting change, members should take care to explain their specific contribution to these activities and any associated outcomes. For example, members could flag where they have participated in and contributed to a particular working group focused on a certain issue, or if they chaired and facilitated a workshop. This will help to better evidence the impact of an initiative attributable to individual members.

Case study Willis and the Insurance Development Forum

With the number of severe weather events growing, there is a pressing need to develop specific disaster insurance systems to improve climate resilience. However, access to disaster insurance remains low.

Policy-related reasons for this include a lack of awareness among relevant authorities operating at local, national or regional levels, the perception of political risk in undertaking such policies, and insurance legislation.

Willis plays a key role in addressing this challenge, notably through its involvement in the creation of the Insurance Development Forum (IDF). The IDF is a network that brings together the global insurance sector, international institutions as well as national and local governments, and aims at developing relevant disaster insurance capabilities and facilities. The Forum will help to coordinate the initiatives of the insurance sector and international institutions regarding disaster insurance, support the development of effective regulation, and implementation of sovereign disaster risk financing instruments. The Forum's initial meeting held in Washington DC in April 2015 allowed members to specify the primary purpose of the Forum and the types of programmes that it will support in order to contribute to the development of efficient disaster insurance systems.

Principle 3

Support climate awareness amongst our customers

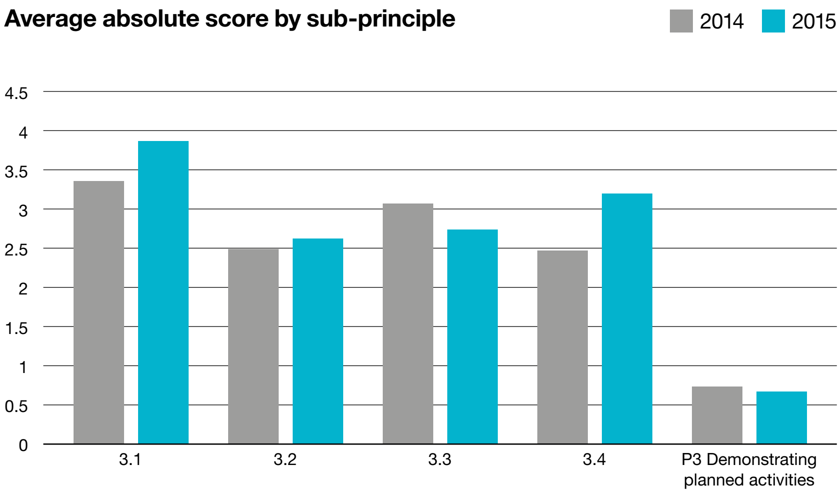
The sub-principles

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 can play a significant role in communicating and educating customers on climate-related risks, and thereby promote, incentivise, and remove barriers for customers to increase their uptake of lower carbon solutions and climate-resilient repairs. Members continue to provide strong evidence of how they provide customers with information and tools to help them assess climate risk. However, disclosure regarding the efforts being made to mainstream products and services which contribute to sustainable behaviours among customers remains an area of development and opportunity for the industry.

Key strengths and progress achieved

Members continue to provide good evidence of how they are supporting their customers assess and understand their exposure to climate risk. Notable initiatives in the reporting year include **RSA's** Climate Smart microsite. This provides information and tools for its brokers to share with their customers so that end clients can improve their resilience to climate change. In autumn 2014 after concerted development efforts, **If P&C** launched VisAdapt – a web-based visualisation tool designed to help homeowners decrease their vulnerability to weather impacts. **Marsh's** NAT CAT pack provides customers with a guide to best practice in risk management and transfer of natural catastrophe exposures.

Within this principle, members continue to struggle to provide evidence of how their products and services are contributing to sustainable behaviours among customers. Examples provided include Green Property Insurance (**ACE Group**), solar panel provisions in home insurance (**Hiscox**) and cover to wind and geothermal electrical power generating systems (**Zurich**). There were also isolated examples of members beginning to measure the impact of environmentally friendly products and services. For example, **Cunningham Lindsey's** Sustainable Claims Initiative, focused on the restoration of wet peril cases, showed that thermal drying resulted in an 80% decrease in carbon emissions in comparison to traditional restoration efforts.

Members provide good examples of how claims activities are being conducted in a more sustainable manner, mainly through making environmentally friendly replacement and repair decisions, and reducing waste production and water consumption. **Innovation Group** uses its aerial and digital imagery capabilities to assess subsidence risk in property, negating the need for employees to manually assess and map these and saving on the associated carbon emissions. It is also eliminating the need for paper through the use of software in triaging property claims. There were good examples of members working with suppliers to reduce environmental impacts in the claims process. **RSA** has a supplier contract which enables it to provide rapid drying solutions in the event of water damage which reduces drying time from 12 weeks to 3-4 days, thereby decreasing energy consumption on site and disruption to the customer. An encouraging development was evidence of members measuring the progress of sustainable claims initiatives. For example, the share of e-invoices in **If P&C's** vehicle claims handling increased from 81% to 85% between 2013 and 2014, and the proportion of claims reports submitted online increased from 27% to 35% between 2010 and 2014.

There were significant improvements in disclosure regarding under-penetrated markets, with the focus of member efforts continuing to be on products and services provided in developing countries. **Willis** recently helped to secure US$55 million of reinsurance coverage for Africa's first ever catastrophe insurance pool – the Africa Risk Capacity Insurance Company Ltd (ARC Ltd). ARC Ltd issues insurance policies against drought in five African countries. It will allow these countries to respond quickly in times of crisis and reduce their dependence on international aid during periods of drought. Members also explain how their philanthropic activities contribute to climate resilience in emerging economy communities. For example, **Prudential's** Prudence Foundation launched the Safe Steps programme, which aims to enhance disaster preparedness across Asia through educational initiatives, for example short educational videos providing communities with critical information in the event of different disasters. Outside of developing countries, **RSA** provided the example of a flexible home contents policy for low income households in the UK. Sold through Social Housing Associations to tenants, payments cost an average of £1.61 per week which customers are able to pay weekly or less frequently. RSA currently has 86,000 customers of this product.

Recommended areas for development

Members could demonstrate higher performance by clearly illustrating how the organisation has identified areas of behaviour change required to reduce emissions and overall impact, and how it has subsequently developed products and services to address these. It is encouraging to see members beginning to quantitatively measure the environmental savings associated with use of these products and services, as this will help to prioritise initiatives in future and demonstrate their impact.

Although there were good examples of members implementing initiatives to improve the sustainability of the claims process, the average score across the membership decreased in this regard. Members should look to provide greater levels of evidence regarding how they educate and engage with customers in the principles of sustainable claims. Disclosure could also be improved by members demonstrating that the proportion of repairs taking place in a sustainable manner is actually increasing, which will require some degree of ongoing monitoring and measurement.

Case study Allianz and RIICE

Allianz Re is a founding partner of Remote sensing-based Information and Insurance for Crops in Emerging Economies (RIICE). RIICE is a multi-stakeholder partnership which aims to provide governments and NGOs with better information on rice crop growth to support the development of more robust food security policies and new and enhanced crop insurance programmes in South-East Asia.

RIICE is a collaboration between the International Rice Research Institute, sarmap (a software developer), AllianzRe the insurance developer, the Swiss Agency for Development and the German Development Agency.

The project partners use radar images to determine how much rice grows in each of the markets each season including total national yield estimates and, based on this, the project offers to develop appropriate insurance products for farmers. Governments can also be alerted to possible shortfalls in rice yields so they can make adequate provisions to respond to potential food shortages. RIICE is currently being implemented in Bangladesh, Cambodia, India, Indonesia, Philippines, Thailand and Vietnam. It has already used satellite images to monitor rice-growing areas in 13 test sites.

In the long term, it is hoped that the information generated by the initiative will be used to support better decision-making, targeting of resources, crop insurance, and disaster mitigation and response systems in both the public and private sectors. For Allianz, this new technology will support the development of new crop insurance markets. For existing crop insurance markets the technology, if fully adopted, would be an upgrade and hence lead to more accurate underwriting and increase the insurability of agricultural markets.

Principle 4

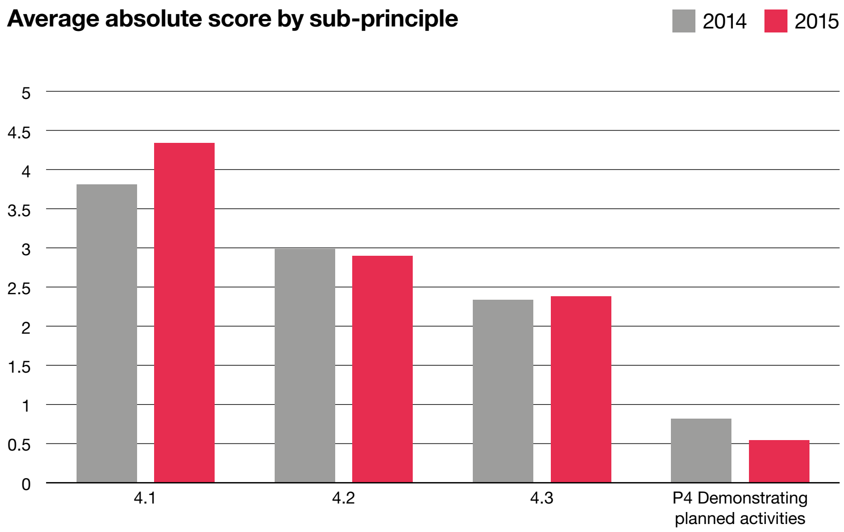
Incorporate climate change into our investment strategies

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 has significant potential to influence change through its investment activities by factoring climate risk into investments and deploying capital for positive financial, social and environmental return. This year, members demonstrated greater evidence of steps being taken to evaluate the implications of climate change for investment performance and shareholder value. However, incorporating the outcomes of these evaluations into investments, and communicating and engaging stakeholders on climate change impacts in investment continue to be areas for improvement among the membership.

Key strengths and progress achieved

Last year, a recommended area for development was greater disclosure regarding the assessment of climate risk and opportunities in investments. It is encouraging to see greater evidence of this, predominantly by placing climate change considerations alongside traditional financial and governance factors when evaluating the long term potential of an investment. **Prudential** includes climate change considerations as part of its fiduciary responsibility as investors, and as such, the topic forms a key component of its analysis of an investment's long term prospects. **Allianz** has developed a series of 'Energy Factsheets' which summarise the critical ESG issues associated with the value chain of eight key energy sources. These are intended to help inform and design the company's investment activities in the energy sector.

Where investment activities were outsourced to external providers, there were also greater examples of members taking steps to influence fund managers on environmental issues. For example, **RSA** reviews the social and environmental policies of its fund managers to check they adhere to RSA's own policies and practices. **Swiss Re** engages an independent consultant to annually review its externally managed portfolio against environment, social and governance criteria, while **Amlin** requires its investment managers to submit annual reports on their ESG activities.

Members typically disclose their initiatives to invest in climate-friendly energy as evidence of their approach in this area, and how investment decisions have been influenced by evaluations of climate risk. **Tokio Marine**, **Prudential** and **Zurich** are just a few members that outline in quantitative terms their current and future investments in renewable technology. For example, Prudential has become one of the main investors in a power-generating tidal lagoon in Swansea, committing up to £100 million. As part of **Zurich's** efforts to integrate climate change considerations into its investment approach, it has implemented mandatory responsible investment training across its investment management organisation. Additionally, its internal asset management teams are provided with comprehensive ESG data and analysis, including relevant climate risk indicators, and are monitored on how well they integrate ESG factors into their overall practices. **Santam** and **Tokio Marine** continue to operate Socially Responsible Investment (SRI) funds which place climate change and wider environmental and social outcomes as key objectives.

There were some good examples of members increasing their external communication with stakeholders on how they integrate climate change considerations into investment decisions. Some members, including **Swiss Re** and **Tokio Marine**, evidence their commitment to engage with stakeholders through their membership of the United Nations Principles for Responsible Investment (PRI). Others choose to communicate their approaches through publicly available documents such as Responsible Investment policies, annual reports and dedicated sections on their websites. Some members provided tangible examples of where they had engaged with external stakeholders to influence practices regarding climate change. For example, **Lloyd's** 'overlay manager' engaged with 62 investee companies across 25 different countries on Lloyd's behalf, leading to 25 instances at 21 companies where environmental, social and governance practices were improved.

Recommended areas for development

Insurance companies can play a critical role in encouraging greater action and ambition regarding climate change in the companies and projects they invest in. Member initiatives regarding climate risk in investments tend to be smaller, tactical activities. While there was greater evidence of members starting to develop strategies and identify climate risks and opportunities in investments, incorporating and implementing these is an area where disclosure could be improved upon in future. This should hopefully come naturally over time as more strategies and evaluations are conducted and acted upon. There also continues to be a lack of objective and target setting underpinning members' responsible investment activities.

Communicating investment beliefs and strategy regarding climate change continues to be an area where evidence of action and progress among the membership is weakest. While there is good evidence of members starting to publish more information regarding their approaches on company websites, a systematic and targeted approach to engagement with stakeholders will help to demonstrate greater progress in this area.

Case study Aviva Low-Carbon Investment Strategy

Aviva recently launched a 5-year Low-Carbon Investment Strategy to increase investment in low-carbon infrastructure, engage with policymakers and further integrate climate change issues into its investment decision making.

As part of this strategy, the fifth commitment is engage carbon-intensive fossil fuel companies to meet carbon reduction goals, and use divestment as an option on a balanced and proportionate basis should these goals not be met. Aviva's Chief Executive Officer Mark Wilson stated that 'Where we think a company is not making sufficient progress towards the engagement goals set, we will divest'.

In 2015 the company continued to undertake research into its portfolios' exposure to risk in this area, commissioning a study to investigate the value at risk from climate change to investments, pensions and long term savings. The research found the value at risk from the perspective of all global private investors at 4 degree warming to be US$4.2 trillion in permanent impairments and capital losses, rising to US$43 trillion in a 6 degree scenario from government perspective. As described above, it also continues to support the transition to a low-carbon economy through investment in renewable energy, pledging to commit £500 million annual investment in low-carbon infrastructure for the next five years coupled with an associated reduction target of 100,000 tCO_2 per year.

Communication and stakeholder engagement forms a significant part of Aviva's strategy. It continues to have meetings with its customers and ShareAction – a charity promoting responsible investment among pension funds and fund managers – to discuss the impact of its new strategy and how it can better provide information about its investment performance in relation to climate change.

Principle 5

Reduce the environmental impact of our business

The sub-principles

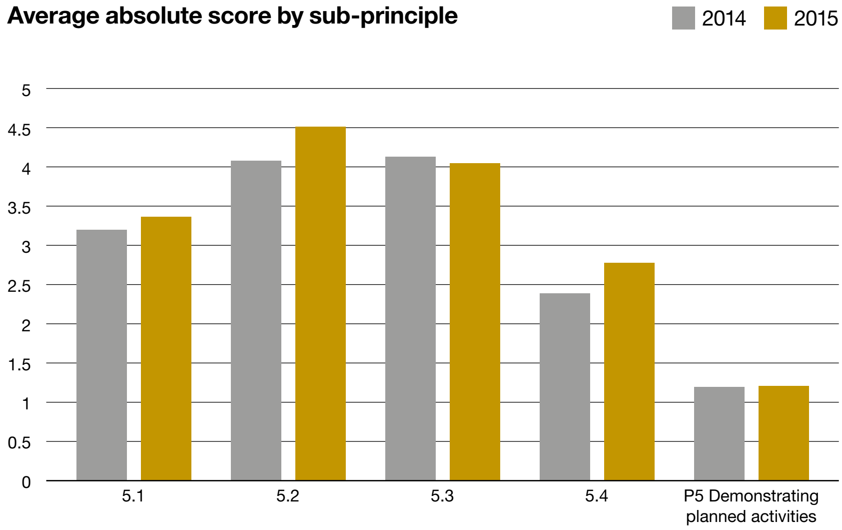
Supply chain: 5.1 Engage with our supply chain to work collaboratively to improve the sustainability of their products and services.

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.

Average absolute score by sub-principle



Although direct environmental impact is an issue of relatively lower materiality for insurance organisations, initiatives in this area nevertheless represent a way of demonstrating commitment to, and engagement of, employees on climate change adaptation and mitigation. ClimateWise members continue to be adept at measuring and disclosing their main direct environmental impacts, but struggle to disclose examples of how employees are being systematically engaged on the impact of the risks and opportunities posed by climate change.

Key strengths and progress achieved

Addressing the sustainability of products and services through engagement with suppliers improved this year, with a number of members encouragingly adopting specific sustainable procurement approaches. For example, the **Chartered Institute of Insurance** only considers suppliers with proven green credentials, and ensures that all information about the product or service, from where the item is made to the distance from original supply area, is divulged before any meaningful engagement. **Hiscox** also works with their supply chain to produce sustainable benefits, exemplified through their engagement with their landlords, managing agents and operators of their office, where they hold quarterly workshops with key premises operators to identify environmental performance improvements.

Encouragingly, members are also demonstrating improvement in seeking to reduce the environmental impacts of internal operations, showing their increased comprehensiveness and progress in this area. For example, **Direct Line** has developed an energy saving plan, seeking to optimise heating, ventilation and air conditioning systems in their buildings, as well as a programme of investment in energy-efficient devices such as lighting. Members have continued to show that they are adept at reporting on their greenhouse gas emissions to a global standard. For example, over the last year **Prudential** has not only increased its CDP disclosure score but also gained a Climate Disclosure Leadership Index position.

Employee engagement incentives related to climate change has improved but remains the lowest scoring sub-principle in Principle 5. Members have commonly identified ClimateWeek as a time to target employees, with **Aviva** developing internal presentations on 'Being a Good Ancestor' and 'Creating a Sustainable Legacy' which were made available externally following their success internally.

Looking forward, members are generally demonstrating a pipeline of planned activity, with **Cunningham Lindsey** beginning to develop their own green/sustainable building specification, and **Willis** undertaking a global carbon footprint to produce an environmental management plan.

Recommended areas for development

As in 2014, members are still not fully disclosing information on the process and results of sustainable procurement policies, affecting their performance in this area. Whilst many members state the existence of such policies, their performance could be advanced through examples of suppliers being selected or deselected based on environmental criteria, or examples of working with suppliers to produce sustainability benefits.

Data regarding targets and uptake of activities by employees also remains a struggle for members, resulting in its low scoring trend. It is encouraging that many members produce modules on sustainability, however further emphasis should be placed on recording the numbers that are impacted by such actions, as well as ensuring such activities occur throughout the year.

Case study

Innovation Group carbon management within a supply chain

In response to customer expectations that the company understands and manages environmental risks and opportunities within supply chain and internal business, Innovation Group worked with the CarbonFix Foundation to develop a carbon management supply chain model.

Initially the CarbonFix Foundation visited over 50 suppliers at their premises then worked with Innovation Group to develop a support programme.

Innovation Group delivered a series of regional workshops to explain the benefits of evaluating carbon footprints and the use of SmartCarbon software. An e-learning course was also provided which allowed the learners to explore the science of climate change and methods for carbon reporting at their own pace.

The model enabled the supply-chain companies to assess and understand their carbon footprint and report this to Innovation Group. Furthermore, Innovation Group's procurement team amended their supply-chain contracts to ensure that carbon management and annual reporting were part of the requirements. At the end of each reporting cycle, The CarbonFix Foundation provided a report and suggested actions to reduce these emissions. This resulted in the 'Approved Carbon Managed Supplier (ACaMS)' network, which has been piloted through the UK Property Division of the business. The company aims to extend this across global supply chains by 2020.

By supporting and enabling suppliers to measure and manage their carbon emissions, Innovation Group is able to bring the long-term benefits of reduced energy and material usage to its clients, suppliers and shareholders, as well as demonstrate the company's strong commitment to acting on Climate Risk.

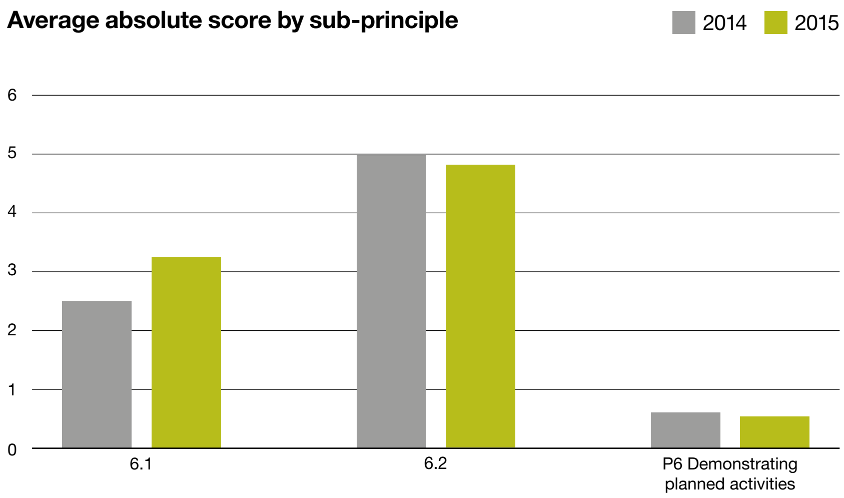
Principle 6
Report and be accountable

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.

Average absolute score by sub-principle



'Tone from the top' continues to be a significant driver for how well climate change is integrated into an organisation's core strategy and activities. Members are able to articulate which senior staff member is ultimately responsible for climate change, but disclosure could be improved in terms of if and how Boards review climate change related information.

Key strengths and progress achieved

Including climate risk on the Board's agenda continues to be a low scoring sub-principle for many members, however improvements have been made since last year. Though many members are able to identify a Board level sponsor for climate change strategy, the pitfall is the lack of continued engagement at Board level and evidence of incorporating climate risk into business strategy and planning. Members such as **RSA** demonstrate leadership in this area through changing their corporate responsibility governance structure to reflect a shift from building the strategy to implementation and improvement. Additionally, RSA evaluates strategic environmental, social and governance risks as part of its emerging risks process.

Members continue to show transparency in their reporting by disclosing information against relevant sub-principles, though a slight decline on last year's performance is seen. This reflects the scoring methodology where members achieve full compliance for reporting actions against all ClimateWise sub-principles relevant to its organisation type. A member's score against this sub-principle decreases in the event that it decides to exclude itself from reporting against other sub-principles, and there was a slight increase in this across the membership in 2015.

Recommended areas for development

As in 2014, the main area for members to develop on this Principle is improving and evidencing how climate change positions are reviewed or refreshed by the business, as well as how climate risk is incorporated into business strategy and planning at the Board level. This will help members to demonstrate that climate change is indeed a strategic consideration at senior level and thereby integrated into core business activities.

Case study Tokio Marine Board of Directors and CSR Board

Tokio Marine's Board of Directors is responsible for the corporate social responsibility (CSR) activities of the group, and directly supports the development of the group's CSR strategy.

Implementation of the strategy is delegated to promotion officers at each group company. The company also convenes a CSR Board which consists of the Presidents of each group company. The CSR Board evaluates CSR initiatives and emerging issues, and discusses future initiatives to be implemented across the Group.

Through the above forums this year, the group's non-life insurance carrier Tokio Marine & Nichido Fire revised its environmental policy to include the consideration of biological diversity and sustainability throughout the value chain. Prominent Board issues included the group's initiatives regarding disaster risk reduction, climate change and the Sustainable Development Goals (SDGs).

The Boards also developed the group's medium-term CSR strategy for 2015-2017 which focuses on three material CSR issues – "Providing Security and Safety", "Protecting the Earth" – including adapting and mitigating climate change impacts, and "Supporting People" as its high priority.

The Group also engages with external sustainability experts through an annual CSR Dialogue. The dialogue allows the company to solicit opinions from independent experts on the group's approach to CSR, which can then be incorporated into the overall strategy. All of this illustrates how climate change issues are escalated to, and discussed at, Board level, meaning that climate change is being considered as an integral part of overall business strategy.

Valero refinery, Aruba

Appendices

Appendix 1: Scoring methodology

Each sub-principle now 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 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 2: Member ranking

2014		2015	
Member	**Score**	**Member**	**Score**
Member A	68%	Member A	82%
Member E	67%	Member B	79%
Member J	67%	Member C	74%
Member K	66%	Member D	72%
Member V	66%	Member E	71%
Member C	64%	Member F	67%
Member F	61%	Member G	65%
Member B	57%	Member H	64%
Member I	56%	Member I	63%
Member D	55%	Member J	60%
Member G	50%	Member K	58%
Member M	49%	Member L	56%
Member R	47%	Member M	50%
Member U	45%	Member N	49%
Member L	44%	Member O	47%
Member Q	44%	Member P	39%
Member N	40%	Member Q	28%
Member H	39%	Member R	22%
Member S	22%	Member S	18%
Member T	16%		

Appendix 3: 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	N/A or exemption
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	3	0	9	6	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	4	4	3	0
1.3	Use research and improve data quality to inform levels of pricing, capital and reserves to match changing risks.	2	1	0	3	4	3	3	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.	4	1	2	5	4	2	0	1
Demonstrating planned activities		10	5	4					
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.	2	0	3	2	3	3	6	0
2.2	Promote and actively engage in public debate on climate change and the need for action.	3	1	2	4	3	4	2	0
Demonstrating planned activities		10	5	4					0
3. Support climate awareness amongst our customers									
3.1	Inform our customers of climate risk and provide support and tools so that they can assess their own levels of risk.	0	1	2	4	2	5	2	3
3.2	Encourage our customers to adapt to climate change and reduce their greenhouse gas emissions through insurance products and services.	1	4	1	7	0	3	0	3
3.3	Seek to increase the proportion of non-life claims that are settled in a sustainable manner.	2	1	3	6	2	1	1	3

continued...

Appendix 3:
Compliance breakdown *continued*

	Score available:	0	1	2	3	4	5	6	N/A or exemption
3.4	Through our products and services assist markets with low insurance penetration to understand and respond to climate change.	3	1	1	2	4	1	3	4
Demonstrating planned activities		8	8	2					1
4. Incorporate climate change into our investment strategies									
4.1	Evaluate the implications of climate change for investment performance and shareholder value.	1	0	0	1	1	7	1	7
4.2	Incorporate the material outcomes of climate risk evaluations into investment decision making.	2	2	1	1	2	1	2	7
4.3	Communicate our investment beliefs and strategy on climate change to clients and beneficiaries.	2	3	2	5	1	2	0	4
Demonstrating planned activities		9	4	2					4
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	3	1	3	2	6	2	0
5.2	Measure and seek to reduce the environmental impact of the internal operations and physical assets under our control.	1	2	1	1	0	5	9	0
5.3	Disclose our direct emissions of greenhouse gases using a globally recognised standard.	3	2	0	1	2	2	9	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.	4	1	2	5	2	5	0	0
Demonstrating planned activities		6	3	10					0
6. Report and be accountable									
6.1	Ensure that the organisation is working to incorporate the Principles into business strategy and planning by encouraging the inclusion of the social and economic impacts of climate risk as part of the Board agenda.	1	4	2	3	2	5	2	0
6.2	Publish a statement as part of our annual reporting detailing the actions that have been taken on these principles.	0	0	4	0	3	0	12	0
Demonstrating planned activities		10	8	1					0

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