

ClimateWise principles report 2013

Introduction

The threat of climate change and environmental impacts continue to be a primary material issue for Aviva through the risks it presents. The way we address these risks, may also provide some opportunities to differentiate ourselves and added value to our customers.

Setting the context

Aviva provides insurance, savings and investment products to 34 million customers in Europe, Asia and Canada including being the number one insurer in the United Kingdom.

We combine strong life insurance, general insurance and asset management businesses under one powerful brand. We are committed to serving our customers well in order to build a stronger, sustainable business, which makes a positive contribution to society, and for which our people are proud to work.

Long term insurance and savings business from continuing operations accounted for over 58% of our total business, based on worldwide sales for the year ending December 2012. General insurance and health insurance together accounted for 42% of our total worldwide sales for year ended December 2012.

Aviva Plc is in the top 10% of socially responsible companies globally in the Dow Jones Sustainability World Index, as well as ranked as one of the FTSE4Good top 5 companies in their index. We ranked 42nd in the Bloomberg Global Corporate Renewable Energy Index 2012, and our 2012 score for the CDP response was 78B. In 2010 we became one of 50 companies to gain LEAD Global Compact status. We are a strong supporter of United Nations Principles of Responsible Investment, with representation on the UN PRI Board.

[Principle 1 - Lead in risk analysis](#)

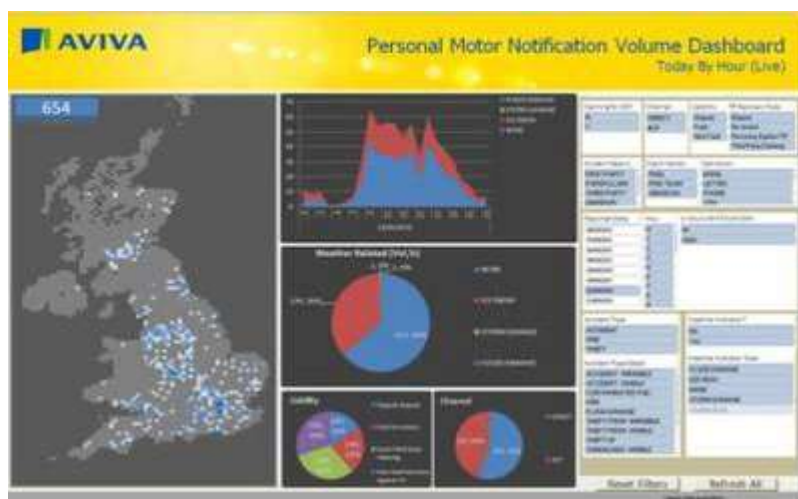
- Support and undertake research on climate change to inform our business strategies and help to protect our customers' and other stakeholders' interests
- Support more accurate national and regional forecasting of future weather and catastrophe patterns affected by changes in the earth's climate
- Use research and improve data quality to inform levels of pricing, capital and reserves to match changing risks
- Evaluate the risks associated with new technologies for tackling climate change so that new insurance products can be considered in parallel with technological developments
- Share our research with scientists, society, business, governments and NGOs through an appropriate forum.

1. Despite the continuing economic issues externally and the structural changes being a focus of the last year, the issue of climate change remains and a clear material issue for Aviva to address. Our research into climate change; the risks and opportunities it presents continues at several levels from how [ecosystems deal with CO2 sequestering](#) and how this can create poverty alleviation – now in its final year of a five year programme, to commissioning a four research programme considering stranded assets (mentioned further in Principle 1.5)
2. One thing that's harder to control is the Great British weather. In 2012, the UK and Ireland were impacted by flood losses and France by a severe freeze. 2012 saw the wettest April on record followed by more flooding in June and July. As one of the biggest providers of home and commercial insurance in the UK, we expected to be hit by this, as home and business owners claimed for property damage.

However, our world-class underwriting and expertise in flood mapping meant we were well prepared. The spike in flood claims never really materialised to the extent we have seen before, mainly thanks to good risk management. However, for the hundreds of flood claims and thousands of storm claims, our dedicated teams were on hand to support them throughout the claims process.

In January 2013, our motor claims teams in Stretford dealt with 3000 snow-related claims, as roads covered in snow and ice made driving hazardous. We have developed a new tool to show the type and location of potential weather-related motor claims. The claims teams are able to use this information to accurately predict when they'll need more advisers on the phones and when our suppliers might be under pressure.

Kirstie Carruthers, motor claims team manager, had this to say *“The Weather Notification Tool introduced was amazing; we were able to monitor the volume of snow claims we received and also identified the hotspot areas. This allowed us to manage our customers’ expectations successfully.”*



We also dealt with over 200 snow-related home and travel claims, from customers who suffered damage to their properties or had their holiday plans disrupted by the weather.

3.

- a. Our general insurance and health business results are affected by the amount of claims we need to pay out which, in turn, can be subject to significant volatility depending on many factors, including natural and man-made disasters. Natural disasters arise from adverse weather, earthquakes and other such natural phenomena. These events are difficult to predict with a high degree of accuracy, although they generally occur infrequently at a material level. Our exposure to large disasters is somewhat reduced through our focus on personal lines business and small to medium sized commercial risks in the general insurance business. The Group cedes much of its worldwide catastrophe risk to third-party reinsurers but retains a pooled element for its own account gaining diversification benefit. The total Group potential loss from its most concentrated catastrophe exposure zone (Northern Europe) in respect of windstorm is approximately £260 million (2011: £280 million), for a one in ten year annual loss scenario, compared to approximately £460 million (2011: £490 million) when measured a one in a hundred year annual loss scenario.

Weather-related insurance claims for the Aviva UK business in 2011 increased by £31 million compared to long-term average.

- b. In Aviva Canada, we use predictive analytics to enhance our underwriting capabilities and further research and development is underway to enhance our pricing for weather-related perils.

4.

- a. Further to our development of the expansion of cover for the Environmental Goods and Services sector, the roll out of the second tranche of covers is still ongoing.
- b. Aviva Investors is a supporter of the Climate Bonds Initiative which is an investor-focused not-for-profit, promoting large-scale investment in the low-carbon economy. The Climate Bonds Initiative is developing proposals for governance architecture (regulatory mechanisms, standards, tax policies, green banks) that will support a rapid scaling up of investment, also models for engineering investments in projects and assets necessary for attracting bond financing such as renewable energy, energy efficiency and forestry.

5.
 - a. Aviva, along with HSBC and WWF have commissioned four years research by Oxford University which aims to highlight investments whose value is likely to decline in a low-carbon future. These 'stranded' high-carbon assets may be affected by renewable alternatives or the lack of materials due to a resource constrained world.
 - b. Following Aviva Canada having an advisory role in the ClimateWise workstream with CERES, looking to understand at how cities can adapt to be more climate resilient, we presented our research and view on urban drainage at the San Diego workshop - [Climatewise's City Resilience workstream](#) .
 - c. In February [Aviva and the Green Investment Bank](#) published details of our first joint funding support for investment in energy efficient plant.

[Principle 2 - Inform public policy making](#)

- Work with policy makers nationally and internationally to help them develop and maintain an economy that is resilient to climate risk
- Promote and actively engage in public debate on climate change and the need for action
- Support work to set and achieve national and global emissions reduction targets
- Support Government action, including regulation, which will enhance the resilience and reduce the environmental impact of infrastructure and communities
- Work effectively with emergency services and others in the event of a major climate-related disaster.

1.
 - a) At Rio+20, Aviva Investors headed up a coalition calling for national governments to implement mandatory reporting on non-financial aspects of companies such as environmental management.
 - b) [Aviva, ACCA and EuroSIF published a press release](#) in June 2013 supporting the EU draft legislation on nonfinancial disclosure and diversity information.
2.
 - a) The Rio+20 world summit in 2012 saw the launch of the [UN Principles for Sustainable Insurance](#) (UN PSI), under the UN Environment Programme Finance Initiative. Aviva has been represented on the PSI working group since 200- and our chairman called for every insurer to sign up. A PSI board was appointed at the end of 2012 and Nishit Majmudar, our Singapore CEO, is our representative.

- b) In 2012/13, we continued to work with the ABI, that ClimateWise began, on the Sustainable Property Claims working group, the work is progressing and focusing on comparing drying regimes impacts, costs and time.
 - c) Our other activities in 2012 included representation on the [Confederation of British Industry Energy and Climate Change Board](#) and chairing the [Chief Risk Officers Forum](#) (CRO). As a member of the CRO's Sustainability Working Group, we contributed to two 'blueprint' papers for insurers to raise awareness of sustainability and reputational risks. One of the blueprints focuses in insurers considerations in respect of oil sands.
 - d) In November 2012, [the world's biggest investment fund managers called on Governments](#) ahead of the Doha summit to act faster to address the risks of climate change as the World Bank warned a warmer world could lead to food shortages, cyclones and drought. Aviva is a member of an alliance of 200 investment institutions controls \$21 trillion (£13 trillion) of assets worldwide is lobbying ministers as part of a broader campaign for action from leading global economies.
 - e) Aviva Investors are founding member of the CPSL Investor Leadership Group, set up in 2012.
3. Aviva is a member of the EU Corporate Leaders Group on Climate Change (EU CLG). We signed the 2012 Carbon Price Communiqué calling for a clear carbon price framework that will drive change towards the 2°C goal.
- 4.
- a) Aviva has had an employee seconded to the HRH charities for the past year, in particular the Foundation for Built Community focusing on SUDs (sustainable urban drainage systems), and the role that they play in the everyday value as a community area as well as providing resilience against a changing climate. As part of the ABI, we are nearly there on a new long term solution to deal with the effects of climate change for flood risk, which shares the burden in an amicable way among all the stakeholders involved.
 - b) The Institutional Investors Group on Climate Change (IIGC) of which Aviva Investors is a member urged EU finance ministers to revise the emissions trading scheme to combat the exceptionally low price of carbon. Current low carbon prices do not create the right incentives for private investors to allocate capital to low carbon sources.
5. Aviva France and the Red Cross have signed a partnership focusing on training to educate and improve community reaction and resilience to unforeseen events. In February, 300 employees underwent a training day on ways to reduce the risks. Following this a joint event was arranged for April in Nîmes, making the city the capital of Prevention.

For three days, two huge tents were erected at the foot of les arenas de Nimes, in the heart of the city. Assisted by trainers Red Cross, school pupils and the general public were educated in awareness of their vulnerability to risks associated with their environment, whether everyday accidents or extreme weather events and natural disasters. Participants recognised that in just thinking through scenarios and identifying potential dangers helps minimise the possible consequences such as disasters.

This work is important to Aviva as the very nature of insurance is to not only intervene in the event of disaster, but also to raise awareness of possible risks, which may help to limit the consequences. This is the focus of the partnership "Aviva for the Prevention" to develop awareness raising and training in the risks for our customers, employees and the general public.

Principle 3 - Support climate awareness amongst our customers

- Inform our customers of climate risk and provide support and tools so that they can assess their own levels of risk
 - Encourage our customers to adapt to climate change and reduce their greenhouse gas emissions through insurance products and services
 - Increase the proportion of repairs that are carried out in a sustainable way through dialogue with suppliers and developers and manage waste material appropriately
 - Consider how we can use our expertise to assist the developing world to understand and respond to climate change.
1. Aviva Risk Management Services identified that climate change risk has potential impacts on business continuity planning and offered training around the issue. [Continuity planning focus on climate change](#) .
 2. Aviva France has signed a national partnership with the French Chambers of Commerce to promote an Environment Management System dedicated to small and medium businesses: EnVol. As one of the main partners, we offer a 5% discount on professional's insurance policies when the customer obtains the EnVol certification. This rewards them for having assessed their environmental impact and defined a plan to reduce it.
 3. We are working with one of our property restoration companies and are in the early pilot stage with of considering ozone cleaning technology as a way of reducing the environmental impact of dealing with smoke damage. The cleaning process takes place in situ which reduces the environmental impact and cost of transportation, cleaning and drying cleaning of hard and soft furnishings. We also believe that the process could reduce the cost and environmental impact of the provision of alternative accommodation, and so provide greater customer satisfaction.

4. In January 2013 detailed guidance was published on the UK government's CMCI programme. Aviva contributed to the guidance on raising private funding for renewable energy projects in the developing world.

Principle 4 - Incorporate climate change into our investment strategies

- Consider the implications of climate change for company performance and shareholder value, and incorporate this information into our investment decision-making process
 - Encourage appropriate disclosure on climate change from the companies in which we invest
 - Encourage improvements in the energy-efficiency and climate resilience of our investment property portfolio
 - Communicate our investment beliefs and strategy on climate change to our customers and shareholders
 - Share our assessment of the impacts of climate change with our pension fund trustees
1.
 - a. Aviva continues considers the implication of climate change and incorporates this is our [investment decision-making process](#) .
 - b. In a challenging macro-economic environment institutional investors are looking for diversified sources of stable income. In August 2012, Aviva Investors acquired a [residential solar project totalling 23 megawatts](#) of capacity making it the largest investment of this kind in the UK and the company's first of this type. The assets are spread across 7,000 homes. The assets are held in the Realm Infrastructure Funds, which are mainly targeted at UK pension fund investors and is in keeping with the strategy of producing long term profitability with a reduced appetite for risk. Aviva Investors also acquired the Almatret wind farm near Lerida in Spain in the same month.
 2. Appropriate disclosure of climate change issues are included in our investment engagement strategy and [voting policy](#) . We work with other through initiatives such as [CarbonAction](#) .
 3.
 - a. Aviva invests in property as part of its overall investment strategy. These properties could be impacted through the risk of coastal, fluvial or pluvial flooding, which could limit the lease value of the property or create access issues as a result of a weather event. Aviva Investors currently have £17.8 billion UK real estate assets under management.

As part of the due diligence process that the Aviva Investors Real Estate team have in place for investment in UK property is that they contact the Geographic Information Team in the General Insurance area of Aviva to understand the flood risk at that particular potential investment property.

There is no cost for this action, as the transfer of this information from one area of the business to the other is not charged. The benefit to the General Insurance team is that the subsequent building insurance policy required for the investment property is invariably purchased from Aviva GI.

- b. The combination of the CRCEES and the Energy Performance certificates has provided the drivers to understand and measure and seek to reduce the environmental impacts of Aviva Investors' investment properties. There is emerging evidence that premiums will be paid in respect of leases in energy buildings and also in respect of the sale of properties able to evidence energy efficiency. Research has been conducted in the USA which suggests that rental rate premium of a commercial property with energy efficiency badging is an average of 8% higher than a property without any badging. Similarly, an average of 12% higher sale price premium for properties of energy efficient badging.

Aviva Investors UK Real Estate Team has had all their +2,000 UK investment properties assessed and rated on energy efficiency through EPCs. B rated properties account for 6% of the total, C - 43%, D-29%, E -13% and F&G -9%. Using this information the team can decide on where they can make improvements and how greatly energy efficiency may affect the rental value of the space in a particular location.

The costs associated with the audit and certifying of these investment properties range between £200 to £2,000 depending on the size and complexity of the properties involved.

- 4.
 - a. In September 2012 Aviva Investors published a [paper on Climate Change regulation](#) and the impacts on investment properties.
 - b. Aviva Investors has tied 5% of investment desk heads' salaries to ESG integration. This will help ensure climate change is taken into account.
- 5. At Aviva Investors we have a web area providing [pension trustee learning](#) , one area focuses on environmental, social and governance considerations.

Principle 5 - Reduce the environmental impact of our business

- Encourage our suppliers to improve the sustainability of their products and services
 - Measure and seek to reduce the environmental impact of the internal operations and physical assets under our control
 - Disclose our direct emissions of greenhouse gases using a globally recognised standard
 - Engage our employees on our commitment to address climate change, helping them to play their role in meeting this commitment in the workplace and encouraging them to make climate-informed choices outside work.
1. We work with existing and new suppliers to, improve the sustainability of their products and services, improve the sustainability of our operations and understand what more can be done to demonstrate the full value of what we already do together.
 - a. In 2012 we worked with a company called WhiffAway Ltd, a company providing waterless urinal solutions, we aim to reduce our water consumption in the UK operation by 20 million litres of water per year. As well as the reduced environmental impact of supplying clean water and sewage disposal, an overall reduction in carbon emissions of 21 tonnes per annum, the financial savings will be £123,660 over 3 years.
 - b. We are also working further with Powerperfector, a company providing voltage optimisation units installed at our larger locations which reduce incoming electricity from 240v to approx 220v which all equipment can still operate at. This makes our consumption of renewable electricity more efficient, producing a run rate saving of £83,000 based on current electricity prices and 661 CO₂e tonnes (according to Government guideline) per annum.
 - c. In 2011 and 2012 Aviva worked with our IT hardware supplier Dell to reduce and consolidate our European server fleet by 75%, reduce electricity consumption and therefore carbon emissions.
 - d. At a Group level Aviva is working with our carbon offset provider, ClimateCare, to understand and be able to report on the social impact of the projects we have chosen to purchase carbon credits through the use of the London Benchmarking Group measurement.
 - e. We have also worked with Restaurant Associates, our catering supplier to ensure that all the fish served in our cafés in the UK is sustainable fish and MSC accredited.

2. We continue to measure and reduce Aviva's own operation impacts.
- a. In August 2012, we reverted back to a renewable (CCL exempt) electricity tariff for our electricity consumption in the UK.
 - b. We are on target to meet our zero to landfill target by 2015. Our current recycling rate is 95%.
 - c. An area that has been attracting interest from some stakeholders over the past year or so is that of asset ownership. The AODP (asset owners Disclosure Project) is a comprehensive, independent reporting framework and index that assesses the readiness of the world's 1,000 largest asset owners to manage the risks associated with climate change. The index was compiled for the first time last year and showed the overall rank Aviva received in is ranked =79 (out of 1000) and was awarded a rating of C. The rating is based on responses to the survey that was issued mid-2012 as well as on publicly available information. The rating was derived from five main areas of inquiry and our ranking is shown below:

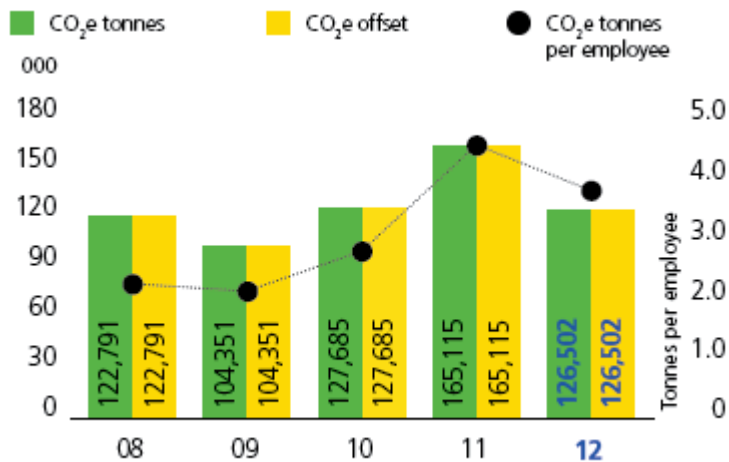
Section	Ranking (out of 314)
Transparency	= 101
Risk management	= 52
Low-carbon investment	= 34
Active ownership	= 48
Investment chain alignment	= 109

N.B - Please note that these rankings are in relation to the 314 funds that have been rated to date.

We seek to improve our ranking in this area going forward.

We include our performance against our CR KPIs in our 2012 Annual Report & Accounts and [2012 Annual Corporate Responsibility Report](#) .

2012 CO₂e data



3.

- a. Details of how we report on our carbon emissions can be found in our [boundaries of reporting](#).
- b. The UK businesses were financially impacted in 2012 by the cost of the Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES). The total CO₂ emissions in respect of CRCEES for 2011/2012 financial year were 97,729 tCO₂ e (2010/2011: 105,418 tCO₂e) with a cost to the business of just under £1.1 million. Aviva's operational carbon boundaries differ from those reported for the CRCEES as that also includes energy emissions from our portfolio of properties included in funds which we manage and have responsibility for. Aviva's position in the CRCEES Performance League table in 2011/12 was 611 (2010/11: 899) out of a total of 2,098 participating organisations.

4.

- a. We engage with employees through particular campaigns around our material issues, such as ClimateWeek where this year we focused on energy, water and travel – how we reduce waste or unnecessary travel, carbon offsetting etc., waste and paper – segregation for recycling and food composting along with encouraging the use of KeepCups. We also have an intranet forum where employees can raise and debate any issue around the way we conduct business. In the past one year, issues as far-ranging as our carbon offsetting approach, energy consumption and waste recycling.
- b. We are working with The Carbon Trust to roll out a bespoke version of their Empower employee engagement tool to all our UK employees.
- c. Our employee engagement survey question which asks employees whether they feel that Aviva makes business choices that support the environment received a positive response of 76% again in 2012. This is 15 points above the Global Financial Services norm.

Principle 6 - Report and be accountable

- Recognise at Company Board level that climate risk has significant social and economic impacts and incorporate it into our business strategy and planning
 - Publish a statement as part of our annual reporting detailing the actions that have been taken on these principles.
1. Overall responsibility for Aviva's corporate responsibility lies with Aviva group Chief Executive and the Aviva plc board. The CR Committee was chaired in 2012 by Gay Huey Evans, and included our chairman, John McFarlane, the Group Chief Executive, and two other non-executive directors, Scott Wheway and Euleen Goh. Sir Adrian Montague (senior specialist advisor to the GIB) joined the committee in 2013. The Committee reviews strategy and policy and receives regional and functional reports four times a year. The purpose of the Committee is to set guidance and direction and to oversee the policies and progress of the Group's corporate responsibility (CR) activities. The key responsibilities of the Committee are:
 - assisting the Board in the development of the Group's strategy on CR related issues including social, environmental and ethical matters;
 - reviewing the Group's CR and environment policies to ensure they continue to meet the Group's CR strategy and objectives;
 - reviewing and monitoring the Group's CR risks and working with the Risk Committee to ensure that the Group's CR risks are properly considered; and
 - reviewing and approving the CR Report in the Company's Annual Report and Accounts and providing for an appropriate form of assurance.

Specifically, climate change accounted for 10% of the of the committee time although, reporting governance and strategy on CR accounted for 32% of the committee's time.

2. This document constitutes Aviva's 2013 response to the ClimateWise Principles and is the basis of our actions taken in continuing to address the issue of climate change. The document is published on Aviva's website. Similar information is available in [Aviva's Annual Report & Accounts](#) and [Corporate Responsibility Report](#) ;

However this report provides the level of detail which cannot realistically be included in other public reports that seek to cover a wider scope of information.