



### Aviva - ClimateWise response 2014/15

#### Introduction – background of Aviva's business

Aviva provides life, health and general insurance, and asset management to 34\* million customers, across 16 markets worldwide. In the UK we are the leading insurer serving one in every four households and have strong businesses in selected markets in Europe, Asia and Canada. Our shares are listed on the London Stock Exchange and we are a member of the FTSE100 index.

Aviva's asset management business, Aviva Investors, provides asset management services to both Aviva and external clients, and currently manages over £245 billion in assets, and Aviva owns asset totalling over £296 billion.

Aviva helps people save for the future and manage the risks of everyday life; we paid out £24.6 billion in benefits and claims in 2014.

By serving our customers well, we are building a business which is strong and sustainable, which our people are proud to work for, and which makes a positive contribution to society.

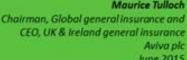
Long term insurance and savings business from continuing operations accounted for 78% of our total business, based on worldwide sales for the year ending December 2014. General insurance and health insurance together accounted for 22% of our total worldwide sales for year ended December 2014 (mainly in Northern Europe and Canada).

We are ranked as one of the UK's top ten most valuable brands and Aviva Plc is in the top 10% of socially responsible companies globally in the Dow Jones Sustainability World Index.

We are ranked as one of the UK's top ten most valuable brands and Aviva Plc is in the top 10% of socially responsible companies globally in the Dow Jones Sustainability World Index. We are classed as a systemically important insurer, due to our interconnectivity with others, as well as non-traditional insurances.

Note - Our response to the ClimateWise Principles excludes our acquisition of Friends Life which took place in April 2015. We intend to report on the whole of business from 2015 onwards.

"Put simply, a deal in Paris represents the largest combined health, life, liability and general insurance contract that the world could sign up to. The risks resulting from not signing on the dotted line are incalculable."





#### The revised ClimateWise Principles

(grey coloured text indicates last years response providing a foundation to demonstrate this year's progress)

#### 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) The issue of stranded assets is an emerging area of research for Aviva Investors. In 2013 we, and others, commissioned research by <u>University of Oxford Smith School of Enterprise and the Environment</u>. This was followed up in July 2014 when we published a report with <u>Standard & Poor's</u> on the impacts of carbon constraints on the future of the coal industry.

At the beginning of the year we commissioned some research from the <u>Economist Intelligence Unit</u> (EIU) on the Value at Risk from Climate Change to investments, pensions and long term savings. The report was launched at the end of July

The key findings of the report were that:-

- The value at risk to manageable assets from climate change is US\$4.2trn, in present value terms
- The tail risks are more extreme; 6°C of warming could lead to a present value loss worth US\$13.8trn, using private sector discount rates
- From the public-sector perspective, 6°C of warming represents present value losses worth US\$43trn-30% of the entire stock of the world's manageable assets
- This is not a risk of volatility or temporary price movements but of permanent
- impairments and capital losses
- 2) The issue of stranded assets and our response as an investor and asset owner was a question that was posed by one of our individual shareholders at our AGM at the end of April 2014. The question was answered at that point in time. However, the issue has now been tabled as a paper on the agenda items for the next Aviva Board Governance Committee. Following the Governance committee Aviva Investors were tasked with creating a strategy to help address the climate risk of investment in fossil fuel companies and an increased focus on investment in a low carbon future. This strategy (which goes hand in hand with the EIU Value at risk report) was approved by the Governance Committee in February 2015, and launched at an event on 24<sup>th</sup> July 2015.
- 3) Building on our previous advocacy work with UNCTAD around the <u>Sustainable Stock Exchanges</u> work and the Corporate Sustainability Reporting Coalition (CSRC), in June 2014 Aviva Investors launched a White paper A <u>Roadmap for Sustainable Capital Markets</u> which provides some recommendations on how policy makers could move capital markets onto a more sustainable basis; taking into account systemic risks such as climate change. In March 2015 we built on this at an EU Level launching the <u>Sustainable Markets Union manifesto</u>, in response to the European Commission's Capital Markets Union initiative. Aviva believes that the Capital Markets Union should include, from the very start, a long term, sustainable vision on investment and working practices in business to ensure that the lessons of the financial, economic and social crisis have been learnt, both in the EU and globally, so that we are better placed to deal with other extreme financial market shocks. We also backed President Juncker's investment plan.

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

1) Over the past several years, changing weather patterns and climatic conditions have added to the unpredictability and frequency of natural disasters in certain parts of the world and created additional

uncertainty as to future trends and exposure. Extreme weather events pose a serious risk to our business, with the potential for fluctuations in claims and challenges to risk pricing. We use catastrophe models to help inform our capital requirements. These models are generated from a number of data sources including climate models. More details of the current reserves we hold in respect of our largest exposure can be found in our <u>Annual Report and Accounts 2014 page 228</u>, General Insurance Risk section.

- 2) In 2014 Aviva Canada highlighted increasing <u>extreme weather risks</u> and what customers could do to safeguard their homes and possessions from water damage. According to Environment Canada, severe weather events that used to happen every 40 years can now be expected to happen every six years.
- 3) In February 2015 Aviva Canada announced that they would be first-to-market in the provision of an Overland Water Coverage Option for home insurance, to provide water damage coverage for certain categories of claims not previously covered by the industry.

  Sharon Ludlow, Aviva president advised "Why did it take so long? We didn't have the right maps,". She said dramatic weather surges that have now prompted government flood mapping and the gathering of weather metrics by the insurance industry. "And now we've had some helpful, but very tragic, events but helpful in the way we can now assess how and where those exposures are, what the risks are and

provide coverage against that. "We're seeing more water events and more flash events than we've seen before, and it's tied in some fashion to climate change". In 2014, Aviva paid out 57% more in water

While many recent flood claims were actually paid based on sewer back-up coverage provisions, true overland water coverage has never been available to consumers. With improved mapping technology and data to model the severity and frequency of flood losses, we're now able to put that coverage in place.

damage claims than in 2012.

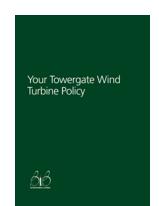
While the product will not be available in the highest risk zones – typically riverfront homes with risks that can't be cost-effectively insured – we estimate that the coverage will be available to 94% of our customers. And it can cover owners or tenants of houses, condos, rental properties, seasonal properties or secondary properties.

Aviva Canada is taking a leadership role in addressing the challenges of severe weather on our business through our work with the Institute of Catastrophic Loss Reduction partnering on the 'Cities Adapt' initiative, to address our most pressing current and foreseeable challenge - dealing with the fallout from severe weather. The project involves the creation of a series of publications highlighting case studies for local leadership across Canada to address the growing challenges from increasing losses from extreme heat, wildfire, storms and heavy rainfall. This is our chance to influence positive change to mitigate risks and damage from extreme weather. Audiences include local governments, insurance companies and engaging customers in education and prevention; and building opportunities to reward the right behaviour. We are also continuing our work with the Insurance Bureau of Canada and the industry to use technology to provide affordable insurance, help customers manage risk and prepare them for future risks.

In respect of our own groupwide operations, we are committing to adopt a science-based GHG emissions reduction target – we believe that our ambitious long term reduction targets of 40% to 2020, rising to 50% by 2030 are aligned to within a 2 degree C limit.

Whilst we believe that the climate risk of an investment portfolio is a vital consideration, we are committing to undertake foot printing in line with the Montreal Pledge.

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



We use catastrophe models to help inform our capital requirements. These models are generated from a number of data sources including climate models. More details of the current reserves we hold in respect of our largest exposure can be found in our <u>Annual Report and Accounts 2014 page 228</u>, General Insurance Risk section.

See 1.2 – Canada overland water example in respect of mapping and working with the Canadian Insurance Bureau on pricing the risk.

Climate Change has been flagged as an emerging risk again this year in the <u>2014</u> Annual Report and Accounts (pages 15 and 59). All emerging risks are assessed

for their proximity and significance to Aviva via our embedded market and group emerging risk processes. The 'increased incidence of extreme weather events' risk has been assessed as 'less remote' therefore requiring regular analysis. Whilst it not significant over the planning horizon, emerging risks, such as climate change are assess over longer time periods to ensure all risks to both the medium and long term future of the company receive appropriate attention. An associated, but more proximate risk is political risk. Investors need a stable, long term policy environment to be able to invest in renewable energy and lower carbon infrastructures opportunities. Bringing forward deadlines and reducing support for such technologies leads to instability and may drive funding away.

## 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.

Due to the makeup of our business, particularly on the General Insurance side with a high proportion of inmarket insurance provision and personal lines business, our focus is not on insurance products for new technologies such as CCS for example. In 2011, we created a new endorsement covering the provision of Environment Goods and Services.

The take up of such cover is growing steadily with quotes for new business increasing significantly over the last six months – including covers for micro –hydro turbines and wind turbine installations – some of which have been in respect of community-based renewable energy generation. We are working with intermediaries to understand customer demand for similar products to meet their needs in this area. Due to the commercial reasons this information has been reported to ClimateWise on a separate basis. We have just (June 2015) launched a new wind turbine product through Towergate Insurance.

#### 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.

In September 2014 we hosted DECC's launch of the <u>UK Government's Pathway to Paris report</u>. Challenging policymakers to address climate change and support a lower carbon future – we signed the 2014 Global Investor Statement on Climate Change presented at the UN Climate Summit in September.

In February 2015 we backed the <u>UK cross party agreement on climate change</u> to ensure consistent a policy framework on Paris regardless of the outcome of the UK general election.

In March 2015 we backed the <u>UNPSI United in Resilience statement</u> from Insurers launched in Sendai. In June 2015 we signed the WWF/Aldersgate <u>letter to the Prime Minister</u> calling of approval of the 5<sup>th</sup> carbon budget and a strong deal at the UNFCCC COP in Paris in December.

We are also supporting strong progress at COP21 at the end of this year and recently <u>wrote to G7 Finance</u> Ministers together with other investors supporting a long-term global emissions reduction goal. We are

members of the ABI's climate change working group to provide a strong sector voice on climate risk, policy and actions that need to be taken by Government in the run up to Paris, and have been working with the FFSA to provide a consistent voice on a 'European insurer' basis.

In June 2015, The Lancet Commission released their report on Health and Climate Change. Aviva, along with Allianz and Axa issued a joint opinion piece on the implications for insurers. Aviva's GI CEO – Maurice Tulloch said, "Put simply, a deal in Paris represents the largest combined health, life, liability and general insurance contract that the world could sign up to. The risks resulting from not signing on the dotted line are incalculable."

The linkage of health and climate change was first researched through a ClimateWise workstream. This new report provides further understanding, which in turn will help to ensure that we are monitoring this risk and how products and services can be further enhanced to meet customers' needs.

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

- 1) Aviva and Aviva Investors needs a stable public policy framework on climate change so that we can assist our customers to manage climate risk, and invest for the long term in supporting a low carbon economy. The physical and economic risks of climate change will play out over a long time horizon. However, as a true composite insurer we have to understand and anticipate today what the landscape could look like for us and our customers going forward.
- 2) In 2012 Aviva Investors signed an open letter to the former Director General of the Bank of England and commented that 'we need to prevent the deep and profound harm that could be wrought by an overexposure to high-carbon assets and a rapid shift in their values. Unlike sub-prime mortgages before the financial crisis, this time regulators must act to prevent the build-up of systemic risk in our financial system.'
- 3) Last June Aviva, along with about 30 other insurers completed a survey on Climate Risk from the Prudential Regulatory Authority, the authority which is responsible for the safety and soundness of 1,700 financial firms. We responded on a group wide basis, as climate risk impacts different areas of our business in different ways. We followed this up by hosting the first of the PRA/ClimateWise private roundtable discussions on focused areas of climate risk for insurers and had representatives from relevant areas of the business at all three of the roundtables. We have public disclosed our PRA response and consider that other insurers should do likewise and/or that ClimateWise should prepared a report (anonymised, if necessary) to provide an overview of the sectors' preparedness.

We were founding signatories of the CDP and in 2010 catalysed and funded the Carbon Action Programme. Here is an update on the <u>work of the Carbon Action Programme to date</u>.

- 1) At the end of 2014 the ABI looked to reinvigorate its strategic policy work on climate change in 2015. Aviva is represented on the working group. The group is focus on ensuring that insurance is a strong, supporting advocate of the growth of the low carbon economy, considering how government or regulatory action might stimulate insurers to channel more of their investment power into green sectors, and influencing, supporting and communicating what insurers are doing to be a positive, collective voice in the international climate negotiations in Paris.
- 2) In March, <u>Maurice Tulloch spoke at the ABI Climate Change conference</u> from both an Aviva and ClimateWise Chair perspective. "I think this makes our business case pretty compelling. We have to understand, we have to model, we have to underwrite, we have to look at risk and we have to manage

climate change for our clients and customers," he said. "The Canadian experience shows us that it is a long-term issue but it's coming down the tracks unless we act."

3) Maurice will continue to be a senior spokesperson on this issue speaking at event like the London Climate Conference in October, along with key business leaders and policymakers in the run up to Paris.

In February, Aviva representatives attended the Fédération Française des Sociétés d'Assurances COP21 working group. The FFSA had been asked by the French government to co-ordinate a response from European Insurers to the COP21 in Paris in December. Other insurance association stakeholders are now involved in this work which will continue through to the COP, and beyond.

Aviva was one of the original member companies of the CBI's Energy & Climate Change Board which was set up in 2007 to work with the government, providing a business view to areas of essential policy framework. Our new Group Chairman – Sir Adrian Montague now (June 2015) represents Aviva on this board, bringing with him his vast experience of the issues being discussed – both an energy and low carbon investment standpoint.

#### 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.

Further to our work on flood prevention immediately prior to the 2013/14 winter floods (reported last year) we continued to work with customers who had been flooded. We made customers aware of the £5,000 government grant in respect of flood resilient measures that could be installed; the take up of the grant was varied greatly depending on the Local Authority application process. The Government reported that this total grants allocated was £11.5 million to 2,300 buildings.

We still have colleagues working with our customers in Somerset following the floods, no longer dealing with the immediate loss, but the long terms effects of flooding on the community. We are working with Bristol University to understand more fully the wider implications to our customers that such a loss causes, and how the way in which those claims are handled can influence the longer term impacts of a flood event on our customers. After the 2007 summer floods, mental health symptoms such as anxiety and distress we two to five times higher among those who had been affected by flood water in the home. Something that the Lancet report highlights as an issue and that we intend to do further work on going forward.

- In 2014 Aviva had just over 1,000 property flood claims with a total cost of around £20 million
- Flooding is consistently the highest single claim cost followed by major fire claims
- One flood claim for a property in the Somerset Levels totalled more than £350,000.

In Canada, beyond financial support, our employees and broker partners are being trained to be ready to respond in times of disaster through our partnership with the Canadian Red Cross' Ready When the Time Comes programme. Aviva Canada has become the first insurance company to join as National Corporate Partner of the Canadian Red Cross committing over \$500,000 to the partnership over the next three years.

Ready When the Time Comes recruits and trains corporate employees as disaster volunteers to provide assistance following natural disasters. Not only does this programme provide the Red Cross with much needed volunteer capacity during large-scale disasters, it also allows organizations like Aviva Canada to build stronger relationships, leadership, and motivation among their own teams.

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

- 1) In Aviva Canada, further to the endorsements that we made available to household customers in respect of coverage for domestic Solar PV and wind. One year ago we launched a new policy endorsement available to all <a href="https://example.com/household-insurance">household-insurance</a> which, on reinstatement upgrades the damaged items from new for old to the most energy efficient. For example, replacing a broken double-glazed window with a tripled-glazed argon-gas filled unit, improving insulation and therefore reducing future household emissions.
- 2) We researched the potential take-up of this endorse prior to launch, and take up of this endorsement has been steady. Due to the commercial reasons this information has been reported to ClimateWise on a separate basis.

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

Building on the work we have done in previous year on repair over replace in respect of our motor accident repairs, we have continued to work on the challenge of making our claims processes more sustainable. Last year we turned our attention to <a href="https://www.noisenstream

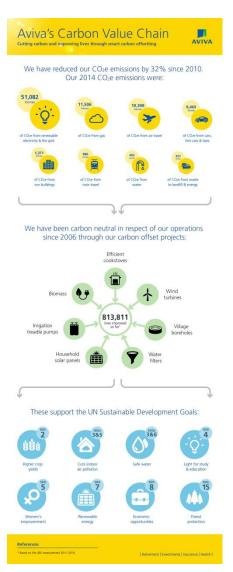
Building on the more sustainable claims process that was in last year's response, we are now working with the Carbon Trust to measure the carbon reduction of the 'average' water, fire and carpet claim being dealt with through the new process, and comparing these to the examples that were created as a result of the ClimateWise Sustainable claims workstream from the other year.

- We deal with an average of 22,000 water-related claims per year i.e escape of water/ burst pipes/ flood perils at an approximate cost of £95 million
- We have a much smaller number of fire claims per year 1,500 at an approximate cost of £33 million per year.

We have now rolled out our new more sustainable claims management process so that all property claims are dealt with in a more sustainable way, with no change of policy wording or new policy. We are able to do this by working with our three main claims damage management suppliers – Belfor, Revival and Disaster Care Platinum on a collaborative basis. We will communicating the results of this work later this year, but we believe that further improvements can be made to the benefit of our customers, further improving our satisfaction results, whilst reducing the environmental impact. (See also 5.1 & 3.2)

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

The majority of Aviva General Insurance business is in Canada and Northern Europe; as such we do not have the opportunity of providing micro-insurance products in developing countries from a GI cover. Aviva's presence in the markets with overall low insurance penetration is in respect of Life business lines. For example in India we provide affordable life insurance products to rural communities covering more than 3 million lives. (Please see the background of Aviva's business at the beginning of this response). However, as per 1.2 we are providing greater access to insurance covers that were previously not available, from private insurers. As the overland water protection was only launched in May 2015, and is being rolled out across the Canadian provinces this year it is too early to provide details of take up by our C. ½ million eligible customers.



In November 2014 our Chief Marketing Officer was seconded to work on the education/communication element of the Sustainable Development Goals being launched in September 2015. At the same time we mapped the materiality of the 17 SDG goals and their subtargets to Aviva's business. As an example of what is possible, we investigated how our support of carbon finance projects aligned to the various goals. Going forward we will seek ways of further measuring that impact, beyond a 'lives improved' figure with others such as ClimateCare and the Gold Standard.

We will also see how our other areas of our business align to the SDGs, and again seek ways to measure our contribution to meeting these 2030 goals.

#### 4. Incorporate climate change into our investment strategies

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

 As a major asset manager, Aviva Investors sees both the risks and the opportunities that issues such as climate change present to our clients. This is why environmental, social and governance (ESG) considerations form an integral part of both our investment and research processes across all asset classes and all regions.

This approach enables us to offer better quality, more risk-aware investment propositions for our clients. For us, it's about aligning our organisation and investment philosophy for the long term. As asset managers, we believe our industry has a fiduciary duty to do what we can to protect and enhance the value of client assets. This includes putting pressure on policymakers to address the key sustainability challenges within our capital markets and the broader economy.

Aviva Investors is a long term, active investor. We aim to invest in a responsible and sustainable way, encouraging transparency, more sustainable business practices and good governance in the companies we invest in. This benefits our customers, by identifying and reducing environmental, social and governance (ESG) risks in our holdings, and in many cases benefits society and the broader economy by promoting more sustainable companies.

The strategy that was launched in 2012 onwards Aviva Investors started to include environmental, social and governance considerations (ESG) in all mainstream investment decisions. By the end of 2014 90% assets under management have tailored responsible investment policies. We have a target to reach 100% by the end of 2015.

- 2) In February, The Board Governance Committee approved a <u>5-year Low Carbon Investment Strategy</u> which was launched on 24<sup>th</sup> July. This strategy builds on work which already in train around increasing investment in low carbon infrastructure, engagement with policymakers, engagement with companies consistent with a low carbon future, further integrating climate change issues in our investment decision making, and if/when engagement with a limited number of highly carbon intensive fossil fuel companies using divestment as an option on a balanced and proportionate basis.
- 3) This strategy goes hand in hand with our continuing research we commissioned from the <a href="Economist Intelligence Unit">Economist Intelligence Unit</a> on the Value at Risk from Climate Change to investments, pensions and long term savings.

The key finding of the report were that:-

- The value at risk to manageable assets from climate change is US4.2 trn, in present value terms
- The tail risks are more extreme; 6°C of warming could lead to a present value loss worth US\$13.8trn, using private sector discount rates
- From the public-sector perspective, 6°C of warming represents present value losses worth US\$43trn-30% of the entire stock of the world's manageable assets
- This is not a risk of volatility or temporary price movements but of permanent impairments and capital losses

#### 4.2 Incorporate the material outcomes of climate risk evaluations into investment decision making

At Aviva Investors, we believe that fiduciary duty requires that when we are made aware of an issue we must act and in a manner that is in the best interests of our clients.

Clearly, climate change is one such issue. Failing to acknowledge, address and mitigate the significant economic risks raised by climate change means a failure to meet our fiduciary duty. As such, investment managers should be required to act in order to mitigate the consequences of climate change.

- Investing in low carbon infrastructure Aviva Investors has renewable infrastructure investments totalling approximately £400 million.
  - We announced further plans on this in July committing to target a £500 million annual investment in low-carbon infrastructure for the next five years; alongside financial returns on our investment we have set 'carbon returns' of associated 100,000 tonnes of CO2 annually.
- Continuing to challenging policymakers to address climate change and support a lower carbon future –
  climate change is a market failure and requires government action to correct. For as long as there is
  money to be made by extracting oil, gas and coal, companies involved in those activities will continue to
  do so despite the long term consequences for the environment, society, and the economy. We
  therefore focus resources on government engagement.
- Engaging with companies to drive business strategies consistent with a lower carbon future we are founding signatories of CDP and active members of the Institutional Investors Group on Climate Change. While engagement on business strategy is often complex and lengthy, we are confident we are making modest progress with a number of companies. We consider it our responsibility to act as engaged stewards of the companies in which we invest. In particular we are engaging with carbon intensive companies. One commitment from our new strategic response is to divest where necessary we will divest highly carbon-intensive fossil fuel companies where we consider they are not making sufficient

progress towards the engagement goals set. This decision will not be taken lightly and only where we believe that divestment is a balanced and proportionate response. We view divestment as a failure of the engagement process.

- Harnessing our existing ESG integration strategy to further integrate climate change into our investment thinking we integrate a range of environmental, social and governance issues into our investment analysis and decision making. This includes consideration of carbon risk factors. We also commission research to better understand the risks of climate change.
- Offering choice our investment platforms both adviser and direct to customer offers a range of funds
   c.3000 containing different assets including those underweighted in fossil fuels
- Our environmental, social and governance voting and engagement work has continued and strengthen
  over the year. We publish our voting effectiveness on an annual basis, but also on an individual
  company voting results three months after the each AGM.

We have a long track record of successfully engaging across a range of sectors and on a number of different issues over two decades. In line with the UK Stewardship Code, we are strong supporters of engagement and are mindful of our role as active and responsible stewards of the companies in which we invest. We supported 402 shareholder resolutions related to climate change in 2014.

We incorporate all the research and climate risk evaluation into investment decision making. One funding tool which we continue to be involved in developing is environmental bonds. The development of <u>green bonds</u> as a legitimate funding tool to attract significant mainstream investment in climate change initiatives is extremely welcome.

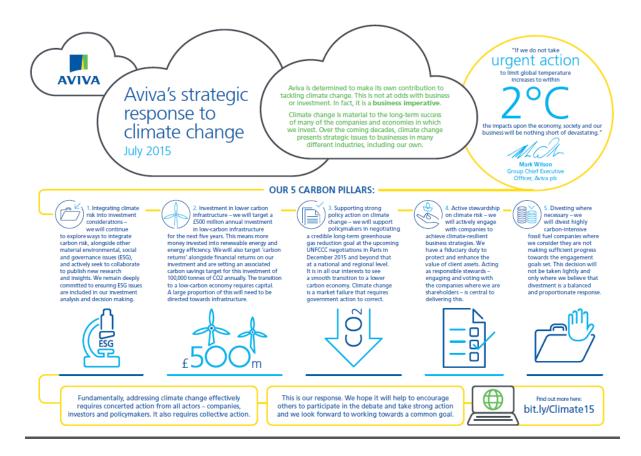
From the perspective of a mainstream fund manager it is important to recognise the important role that green bond standardisation could play, particularly with 64% of our asset base being fixed income. For the sake of the green bond market, the move towards green bond standards is very clearly a positive step.

Aviva Investors currently manages global real estate assets in excess of £23.5 billion and already has extensive holdings in Europe as well as a growing presence in North America and the Asia-Pacific region. We are members of several sustainable real estates management groups in the UK. Last year we put two of our property fund through GRESB - the global real estate sustainability benchmarking process. This year were are putting 15 funds through the benchmarking process,

**4.3 Communicate our investment beliefs and strategy on climate change to clients and beneficiaries**We believe that clients and beneficiaries should understand how companies shape our world and the fact that they themselves can be shaped by clients. At a recent TEDx talk in Glasgow, Aviva's Chief Responsible Investment Officer advised that finance isn't complicated and it should be part of the national curriculum. He also said "Your pension can shape the future you retire into. Make sure you know what you own."

Following up on our last meeting with Aviva customers/ShareAction members and their responses to a stakeholder survey we carried out to help shape Aviva's Corporate responsibility strategy going forward, we are arranging another meeting after the launch of our Low Carbon Investment Strategy to discuss it's impact, the <a href="Independent Governance Committee">Independent Governance Committee</a>, and the direct to customer investment platform which we launched earlier this month.

In July Aviva's CEO Mark Wilson launched the EIU report and Aviva's five year strategic response to an audience of investors, opinion formers, employees and customer advocacy groups. We have set up a follow up meeting with our customers and ShareAction so that we can discuss what it means for customers and what else we can do to demonstrate this area of our fiduciary duty, and provide clear information about our investment and engagement processes.



#### 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.

- Building on our procurement work detailed in our previous years' submissions. This year we are a pathfinder company for the Carbon Trust's new Supply Chain Standard this considers the quality of our supply chain-related processes from a carbon emissions perspective as well as seeking to baseline and reduce our supply chain emissions. This work is ongoing but we estimate that our current emissions baseline of our supply chain area is approximately 780,000 tCO<sub>2</sub>e.
- 2) We continue to work with our suppliers to assess the sustainability and minimise the impact of the products and services we buy. Our Travel Management companies have assisted us in implementing and reminding employees about the availability of 'tech over travel' communication facilities and no travel weeks. Our tech over travel produced some great results in terms of avoided travel costs and emissions in respect of telepresence alone we have estimated the cost of travel avoidance in 2014 as £10.95 million (2013: £10.66 million) and 10,151 tonnes (2013: 9,009 tonnes) in carbon savings.
- 3) Building on the work done previous in the motor accident repairs process, over the last year or so we focused our work with suppliers on the domestic claims area. Beginning with how we can make the process better for the customer we have been able to identify how we can make the claims process more sustainable. Please see the examples given in sub-principle 3.3. We have taken the example

supply chain processes that we have made more sustainable mentioned in last year's response above, and are now working with the Carbon Trust to measure the carbon reduction of the 'average' water, fire and carpet claim – compared to the examples that were created as a result of the ClimateWise Sustainable claims workstream from the other year. We are also working with our three main claims damage management suppliers – Belfor, Revival and Disaster Care Platinum on a collaborative basis to make further improvements to the benefit of our customers and the environment.

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

- 1) We disclose the key environmental impacts of our business operations in detail through the 'how we are performing' section of the Corporate Responsibility section of the website.

  Our progress against our Environmental KPIs can be seen on the KPI table in our Annual Corporate Responsibility Report (page 8). From a 2010 baseline, we set ourselves an ambitious target to cut CO2e emissions by 20% by 2020, with a minimum 5% reduction each year. In 2014, we exceeded that target, achieving a 32% reduction well ahead of plan (ARA page 53).
- 2) With renewable energy generation and energy efficient technologies reducing in price, trials proving the savings and therefore the ROI that such initiatives represent becoming clearer, over the past year we have undertaken a series of new projects to reduce our energy consumption. Attached is an extract from our 2015 CDP response which details the projects/initiatives we have and are undertaking to further reduce of CO2e emissions.

Activity type	Description of activity	Estimated annual CO2e savings	Scope	Voluntary/ mandatory	Annual monetary savings (£)	Investment required (£)	Payback period	Estimated lifetime of the initiative	Comment
•	_	(metric tonnes)			savings (±)	<b>-</b>	·		<b>▼</b>
Low carbon energy	Solar panel installation -	02	Scope 2	Voluntary	36000	205000		21-30 years	2,100 m2 available roof
installation	Norwich	32	Scope 3	Voluntary	30000	203000	4-10 years	21-30 years	space which can generate c.15% of current site consumption & save 90 tonnes CO2 per year
Low carbon energy installation	Solar panel installation - Perth	52	Scope 2 Scope 3	Voluntary	21000	140000	4-10 years	21-30 years	2,000 m2 and will generate just over 2% of current site consumption saving 70 tonnes CO2 per year
Behavioral change	Installation of energy information dashboards London HO	400	Scope 1 Scope 2 Scope 3	Voluntary	50000	5000	<1 year	Ongoing	
Behavioral change	Installation of energy information dashboards Norwich Horizon		Scope 1 Scope 2 Scope 3	Voluntary	6000	3000	<1 year	Ongoing	5% reduction in energy consumption expected
Behavioral change	Installation of energy information dashboards - Bishopbriggs, Scotland	56	Scope 1 Scope 2 Scope 3	Voluntary	13000	3500	<1 year	Ongoing	5% reduction in energy consumption expected
Behavioral change	Installation of energy information dashboards Perth , Scotland		Scope 1 Scope 2 Scope 3	Voluntary	34000	5000	<1 year	Ongoing	5% reduction in energy consumption expected
Behavioral change	Installation of energy information dashboards - Dublin	86	Scope 1 Scope 2 Scope 3	Voluntary	16000	5000	<1 year	Ongoing	5% reduction in energy consumption expected
Behavioral change	Installation of energy information dashboards Wellington Row in York		Scope 1 Scope 2 Scope 3	Voluntary	13000	3000	<1 year	Ongoing	5% reduction in energy consumption expected
Behavioral change	A team of Environmental Champions instigated a big switch off initiative on floor 4 of Rosso and Antico in the Norwich Island site	150	Scope 2 Scope3	Voluntary	40000	0	<1 year	Ongoing	
Energy efficiency: Building services	In Scarles Yard, Norwich, we have converted all the carpark lights to LED.	25	Scope 2 Scope 3	Voluntary	5000	10000	1-3 years	16-20 years	This has cut emissions by 50%
Energy efficiency: Building services	In Norwich, for the first time ever, our stairwell lighting is now switched off over night and when not in use, by investing in lighting sensors at the Island site.	79	Scope 2 Scope 3	Voluntary	20000	24000	1-3 years	16-20 years	The change will save 79 tonnes of carbon emissions every year cutting night time light
Energy efficiency: Building services	Bishopbriggs has just had all of its feature gullwing lighting converted to LED.	1	Scope 2 scope 3	Voluntary	1000	12000	1-3 years	16-20 years	The change has vastly improved the look and feel of the office and will cut our consumption.  Maintenance requirement enabled the project.
Energy efficiency: Building services	In our group Head Office our stairwell lighting is now switched off overnight and when it is not used through investment in lighting	110	Scope 2 Scope	Voluntary	24000	27000	1-3 years	6-10 years	
Energy efficiency: Building services	sensors Perth LED re-lamp project	303	Scope 2 Scope 3	Voluntary	78000	151000	1-3 years	6-10 years	
	. ,								

3) The installation of solar panels on two of our locations in the UK is the first time we have started to generate renewable electricity in the UK. Our Italian Head Office has solar generations that supply the common areas of the building. The measurement of our supply chain carbon footprint as a whole and in particular our claims processes demonstrates the increasing comprehensiveness of our scope of work.

Furthermore, we have once again this year completed the <u>Asset Owners Disclosure project (AODP)</u> Global Climate 500 survey, which focuses on climate risk management. We were ranked 12<sup>th</sup> overall and highest ranking insurance company by AODP.

We have a three year contract in place in respect of purchasing carbon credits from renewable energy and energy efficiency community projects to account for our unavoidable carbon emissions. We have

done some further work with ClimateCare to better understand the <u>value of the community impact</u> of the projects that we purchase carbon credits from.

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

1) We publish annual Group performance data for CO2e emissions, waste and water consumption. Our carbon footprint boundaries identify the scope of the data we monitor and the emissions we offset. Our total operational carbon emissions for 2014 were 83,924 tCO2e.

Aviva plc – Global greenhouse gas emissions data			
Tonnes CO2e	2014	2013	2012
Scope 1	20,031	21,787	23,849
Scope 2	46,231	56,842	75,733
Scope 3	17,662	26,688*	13,181*
Absolute CO2e footprint**	83,924	105,317	112,763
CO2e tonnes per employee	2.4	2.8*	2.6*
CO2e tonnes per GWP	3.87	4.78	4.96
Carbon offsetting ***	-83,924	-115,889	-132,827
Total net emissions	0	-10,572	-20,064

Scope 1 – operational emissions from owned sources e.g. gas, vehicle fleet as part of product/service.

Scope 2 – operational emission from non-owned sources e.g. electricity.

Scope 3 – business activity emissions from non-owned sources – e.g. business travel.

We report on all of the Greenhouse Gas (GHG) emission sources on a carbon dioxide emissions equivalents (CO2e) required under the Companies Act 2006 (Strategic Report and Directors' Reports) 2013 Regulations, which are material to our business operations. We report our emissions using the operational control approach as defined by our organisational boundary. We do not have responsibility for any emission sources that are not included in our business operations or included in our carbon footing boundaries. Our reporting follows the GHG Protocol Corporate Accounting and Reporting Standard, and emission factors from UK Government's GHG Conversion Factors for Company Reporting 2014. We use the Department for Environment, Food and Rural Affairs (Defra) latest factors that are annually revised for our emissions factors: <a href="http://www.ukconversionfactorscarbonsmart.co.uk/">http://www.ukconversionfactorscarbonsmart.co.uk/</a>

We have used the two most appropriate intensity measures to our business CO2e per employee and CO2e per £ million GWP which are expressed in the table above. Aviva also reports on a number of our Scope 3 emissions which go beyond the requirements of the 2013 Regulations.

From a 2010 baseline we set ourselves an ambitious target to cut CO2e emissions by 20% by 2020, with a minimum 5% reduction each year. In 2014, we exceeded that target, achieving a 32% reduction well ahead of plan (page 53). We have set two new ambitious targets of a 40% CO2e reduction target to 2020 and 50% by 2050 – this is using the existing 2010 baseline. Again we have had our data verified by Third Party Assurance providers (page 282).

<sup>\*</sup>restated

<sup>\*\*</sup>Limited assurance provided by PricewaterhouseCoopers LLP.

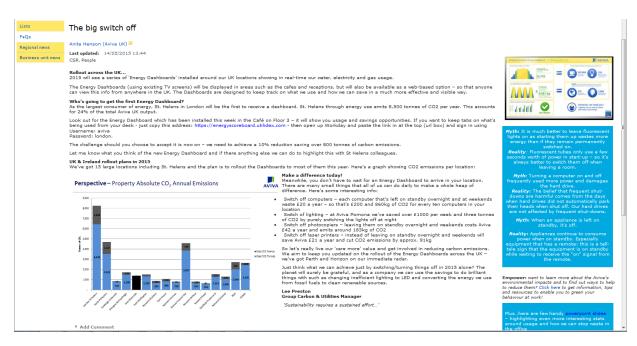
<sup>\*\*\*</sup> Carbon offsetting through the acquisition and surrender of emissions units on the voluntary market.

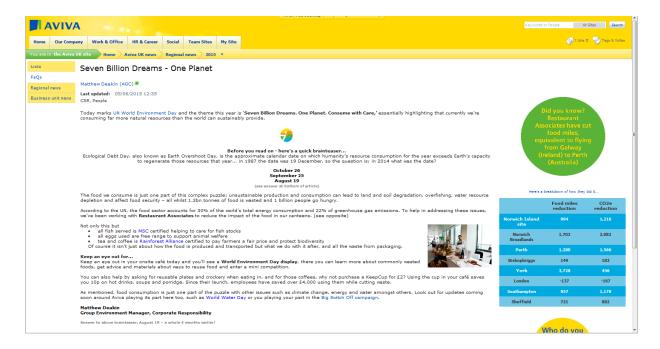
We purchase 56% (2013: 48%) of our electricity from renewable sources round the world. However, the UK Government conversion factors require that the CO2e element of UK renewable electricity should be reported as grid average. For our unavoidable remaining carbon emissions we offset these to the value of 100% through the acquisition and surrender of emission units on the voluntary carbon market (VERs).

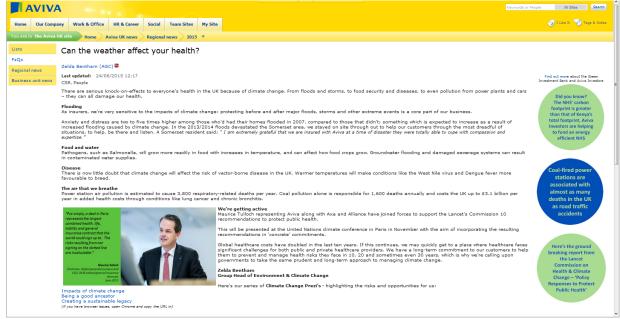
In 2014 CDP ranked Aviva as the joint lowest carbon intensive insurer. We achieved a score of 94A in terms of disclosure and performance.

## 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.

- 1) We have focused further on engaging our employees in terms of communicating the issue, the risk and how Aviva is seeking to help address climate change. For ClimateWeek this year we launched a Climate Change Prezi, following its success with employees we have made it available externally.
- 1. <a href="http://bit.ly/ImpactsOfClimateChange">http://bit.ly/ImpactsOfClimateChange</a>
- 2. http://bit.ly/BeingAGoodAncestor
- 3. http://bit.ly/CreatingASustainableLegacy
  - 2) our most effect communications channel in respect of employee is Aviva World, our intranet.







3) Such communications are adapted from English speaking countries to be picked up in markets throughout the group. Our intranet AvivaWorld is accessible to all employees on a worldwide basis.



#### 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.

Overall responsibility for Aviva's corporate responsibility lies with Aviva's Group Chief Executive and the Aviva plc board. The <u>Governance Committee's</u> (page 84) key responsibilities are to:

- take a leadership role in shaping the corporate governance principles, culture and ethical values
  of the Group in line with the Group's strategic priorities
- oversee the brand and reputation of the Group
- ensure that reputational risk is consistent with the risk appetite approved by the Board and the creation of long term shareholder value
- oversee the Group's conduct with customers, including the regulatory requirements relating to treating customers fairly and offering of products and services that are fit for purpose and meet customer needs
- oversee the Group's conduct in relation to its corporate and societal obligations, including setting the guidance, direction and policies for the Group's customer and corporate responsibility (CR) agenda and related activities and advising the Board and management on these matters

CR accounted for 5% of the committee's time.

With climate change being highlighted again this year as an emerging risk in the 2014 Annual Report & Accounts, the Board Risk Committee will review, manage and monitor the risk as it may impact our ability to write profitable new business over the longer term. All emerging risks are assessed for their proximity and significance to Aviva via our embedded market and group emerging risks processes. The "Increased incidence of extreme weather events" risk has been assessed as 'less remote' therefore

requiring regular analysis and its potential impact is considered significant at an Aviva level, though not over the current planning horizon. Emerging risks are assessed over longer time periods than the current business plan to ensure all risks to both the medium and long term future of the company receive appropriate attention.

Aviva continues to incorporate the ClimateWise Principles into business strategy and planning. Underlining the value of doing so, Maurice Tulloch – CEO Aviva UK & Ireland GI, Chairman of GI Council agreed to <a href="https://example.com/become-climateWise's Chair last December">become ClimateWise's Chair last December</a>. Commenting on his appointment, Maurice said:

"Insurance companies have an incredibly important role to play when it comes to reducing the risks of climate change. Not only are we long-term investors with a responsibility to act sustainably, we are also there to protect our customers against the adverse impacts of climate change itself. This requires partnership and greater engagement between industry and government, particularly in terms of the frameworks established for incentivising a low-carbon future and improved resilience."

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

This document constitutes Aviva's 2014 response to the ClimateWise Principles and is the basis of our actions taken in continuing to address the issue of climate risk/climate change. We have not excluded ourselves form responding to any of the sub-principles.

Similar information is available in <u>Aviva's Annual Report & Accounts</u>, <u>our Annual Corporate Responsibility Report</u> as well as information on the <u>Corporate Responsibility section of our website</u>.

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. <u>This response</u> is publicly available on our website with our previous year's responses.