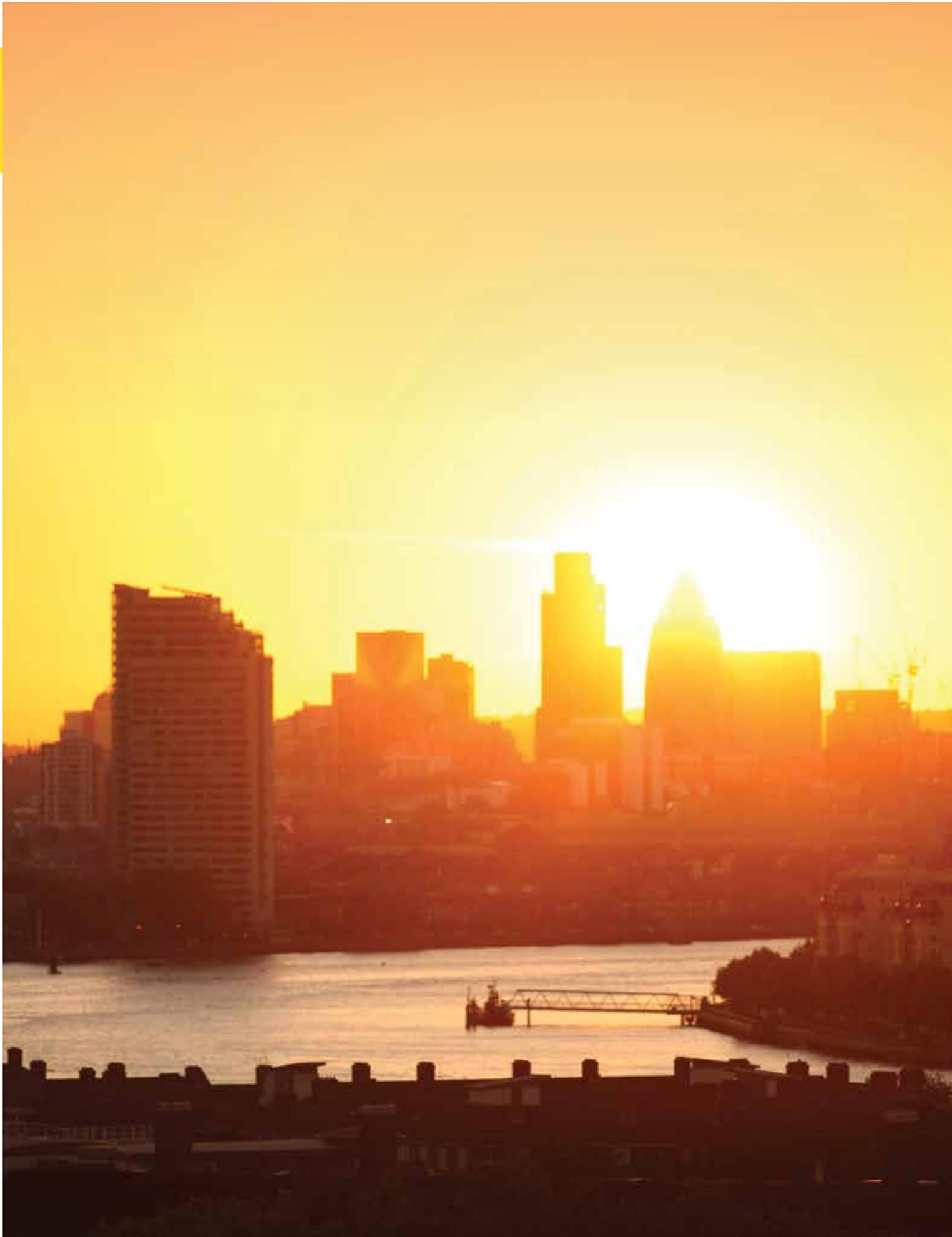




Aviva's strategic response to climate change

July 2015



Foreword

By Mark Wilson

Aviva has served its customers for a remarkable 319 years, with our oldest predecessor company, the Hand in Hand, formed in London in 1696.

The Hand in Hand – and our other ancestor companies – created a fine legacy for us.

Now we are creating a legacy of our own by doing the right thing for our customers today, building a strong and innovative company to look after them tomorrow, and make a positive contribution to society now and in the future. We are all about longevity – because we manage and mitigate long term risks.

And there is no greater collective risk we face today than tackling climate change. If we do not take urgent action to limit global temperature increases to within 2°C the impacts upon the economy, society and our business will be nothing short of devastating.

Aviva is determined to make its own contribution to tackling climate change. This is not at odds with business or investment. In fact, it is a business imperative. As far back as 20 years ago we signed up to a UNEP Statement of Commitment, in which we recognised that sustainable development is the shared responsibility of governments, businesses and individuals and committed to work towards common goals on sustainability.

We commissioned the Economist Intelligence Unit as part of that contribution to review the cost of inaction on climate change. The stark conclusion is that, from the perspective of investors, an estimated \$13.8 trillion dollars of global assets, discounted to present day value, are at risk if global temperatures rise by an average of 6°C. This rises to \$43 trillion dollars if we use a discount rate for governments. This is a risk we literally cannot afford to take.

This paper sets out our response to the challenge – one part of our contribution to being good ancestors. Our five ‘carbon pillars’ are built on the strong foundations of our existing long-term approach to business and investment. We want it to encourage others to reflect on the contribution they can make and to act on this opportunity to be good ancestors themselves.



Mark Wilson
Group Chief Executive Officer, Aviva plc



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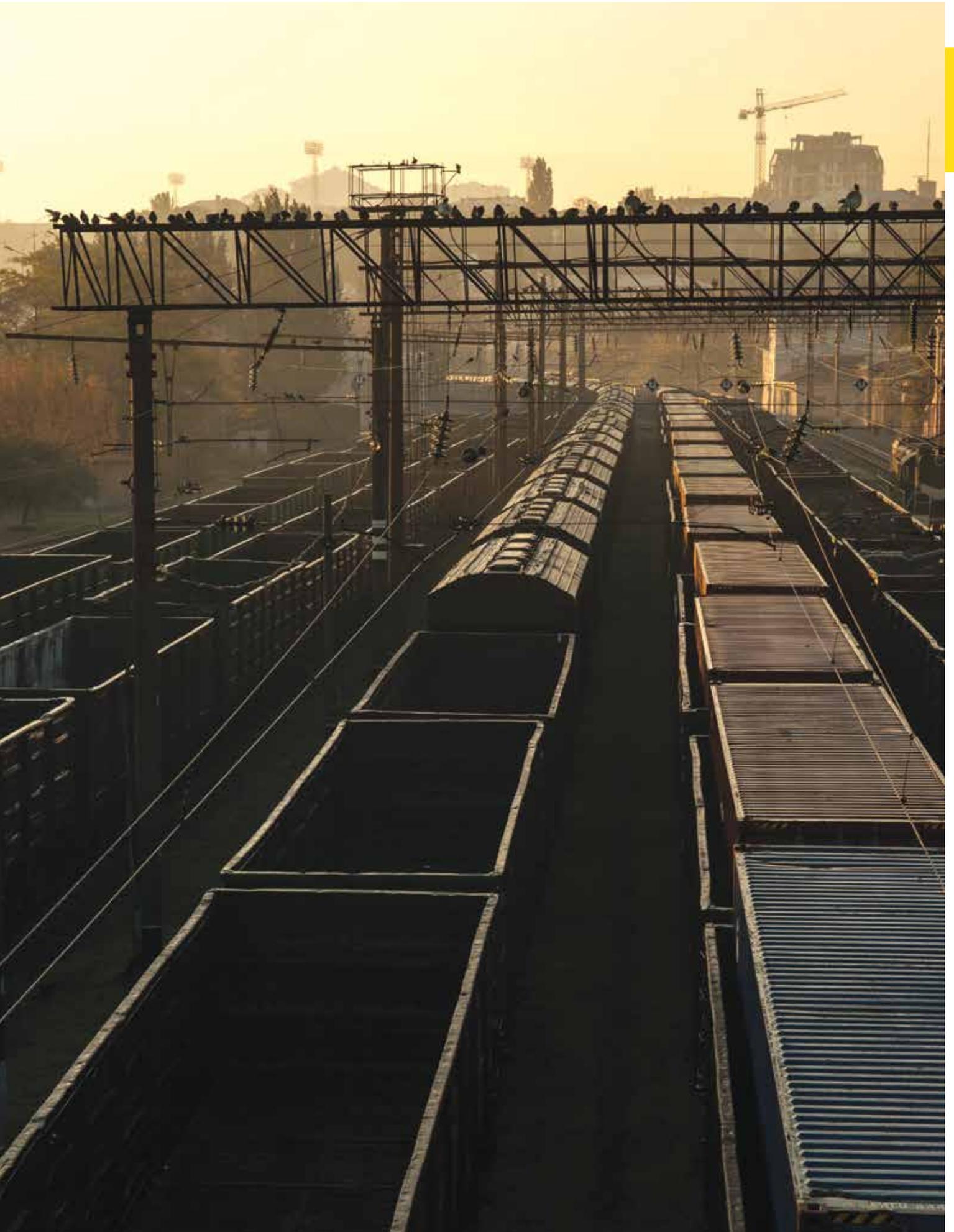
Introduction

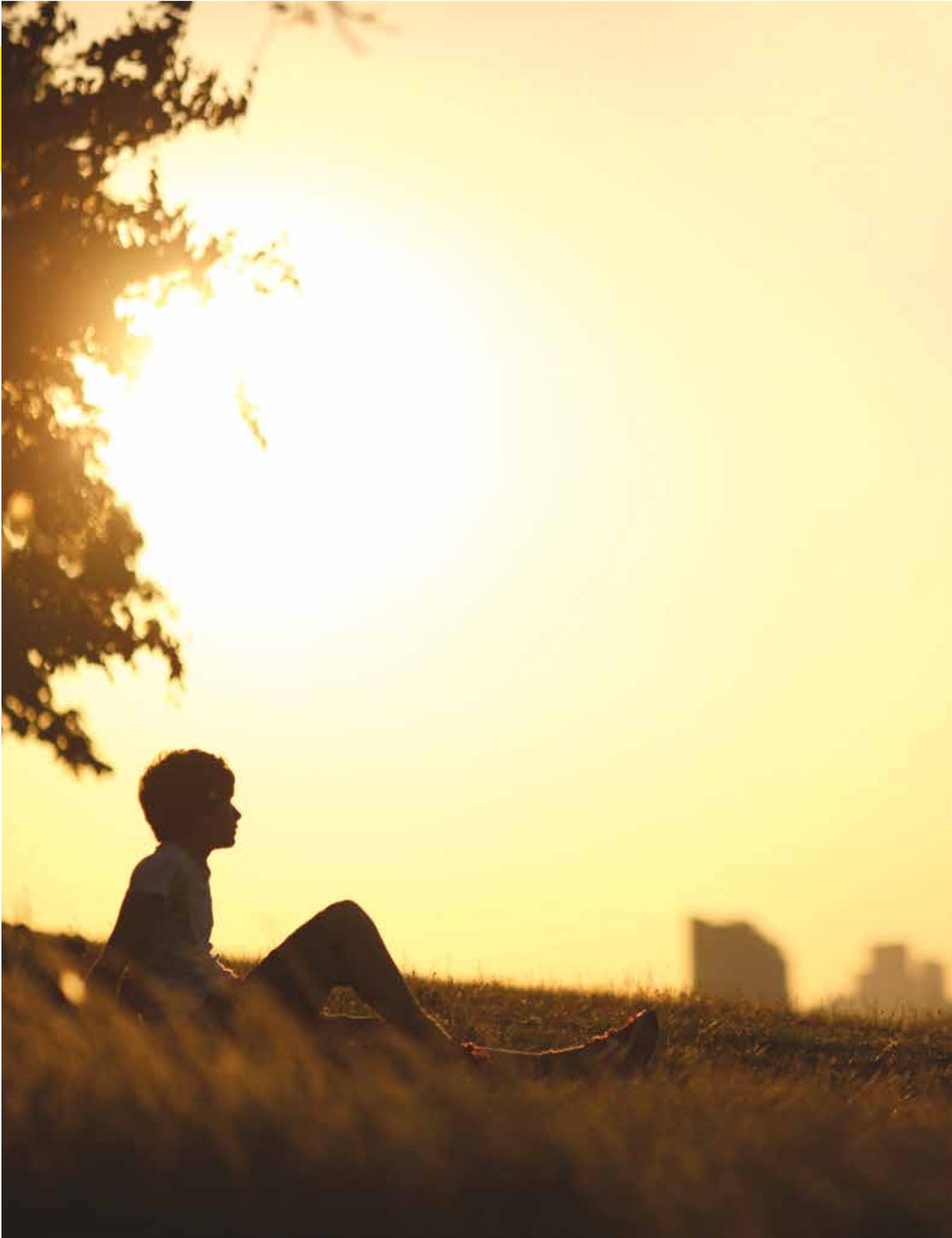
Aviva is one of the largest pensions and insurance companies in the world. We manage more than £246 billion of assets, making us a global institutional investor. Our history goes back more than 300 years. As both insurers and investors, we are accustomed to thinking about the long term. Climate change is a long-term issue with very real near and mid-term impacts.

The physical effects of climate change have the potential to significantly impact the value of all asset classes, across all geographies. However, there is still no effective global policy mechanism to price carbon or a sufficiently robust policy framework to ensure that the carbon impact is fully priced into the current asset base. This means carbon-intensive companies will continue to benefit, and in many cases thrive, in the short and medium term. Conversely, a 'shock' market correction with regard to carbon price would negatively impact carbon-intensive companies and may trigger a disorderly transition to a low-carbon economy.

Science tells us that our politicians and policymakers have a narrow window of opportunity to take action. The Intergovernmental Panel on Climate Change (IPCC) estimates that in order to limit global temperature increase to 2°C – the internationally agreed goal to avert the most severe and widespread implications of climate change – the world cannot emit more than around 1,000 gigatonnes (Gt) of carbon dioxide (CO₂) from 2014 onwards. At current rates of CO₂ emissions, this entire budget expires by 2040.

We have seen positive indications of meaningful action through the Intended Nationally Determined Contribution (INDC) process with commitments by key countries such as China. COP21 presents a timely opportunity to take decisive collective action but we should not lose sight of the fact that this is a long-term issue that will require continued leadership for decades to come.





Five carbon pillars

In shaping our priorities for focused action on carbon investment risk we have looked at both our capital allocation decisions and those associated with using our influence as asset owners. We have carefully considered what our most significant positive impact over the issue could be. And we have thought hard about how we can use this influence for optimum positive impact. These five pillars build on existing commitments and outline new commitments over the next five years (2015-2020). This is not just about supporting the long-term interests of our clients and shareholders; it is about ensuring a sustainable society and environment at large.

Five carbon pillars – Summary



1. Integrating climate risk into investment considerations – we will continue to explore ways to integrate carbon risk, alongside other material environmental, social and governance issues (ESG), and actively seek to collaborate to publish new research and insights. We remain deeply committed to ensuring ESG issues are included in our investment analysis and decision making.



2. Investment in lower carbon infrastructure – we will target a £500 million annual investment in low-carbon infrastructure for the next five years. This means more money invested into renewable energy and energy efficiency. We will also target 'carbon returns' alongside financial returns on our investment and are setting an associated carbon savings target for this investment of 100,000 tonnes of CO₂ annually. The transition to a low-carbon economy requires capital. A large proportion of this will need to be directed towards infrastructure.



3. Supporting strong policy action on climate change – we will support policymakers in negotiating a credible long-term greenhouse gas reduction goal at the upcoming UNFCCC negotiations in Paris in December 2015 and beyond that at a national and regional level. It is in all our interests to see a smooth transition to a lower carbon economy. Climate change is a market failure that requires government action to correct.



4. Active stewardship on climate risk – we will actively engage with companies to achieve climate-resilient business strategies. We have a fiduciary duty to protect and enhance the value of client assets. Acting as responsible stewards – engaging and voting with the companies where we are shareholders – is central to delivering this.



5. Divesting 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.



1. Integrating climate risk into investment considerations

We are a founding signatory to the UN-backed Principles for Responsible Investment (PRI) and in 2012 committed to integrating ESG issues into all assets across all regions. The asset classes we cover include fixed income, equities and real estate. For example, within real estate we consider flood risk and building-related energy efficiency.

Our Responsible Investment integration management system now covers more than 90% of Aviva Investors global AUM (up from 80% in 2013). We do this because we believe it strengthens our investment analysis and decision-making, reducing risk and enhancing long-term value of our own and our clients' investments.

Our RIO network – We will use our internal Responsible Investment Officer (RIO) network to continue to share relevant climate change research to facilitate better integration.

Insight & research – We will continue to commission, collaborate and contribute to new research on the investment implications of climate change with the aim of facilitating better understanding of climate risk.

Measurement – We will identify and undertake carbon foot-printing on a sample equity portfolio from our beneficial holdings to better understand and evaluate the methodology. We support greater transparency and continue to advocate for better data to support this.

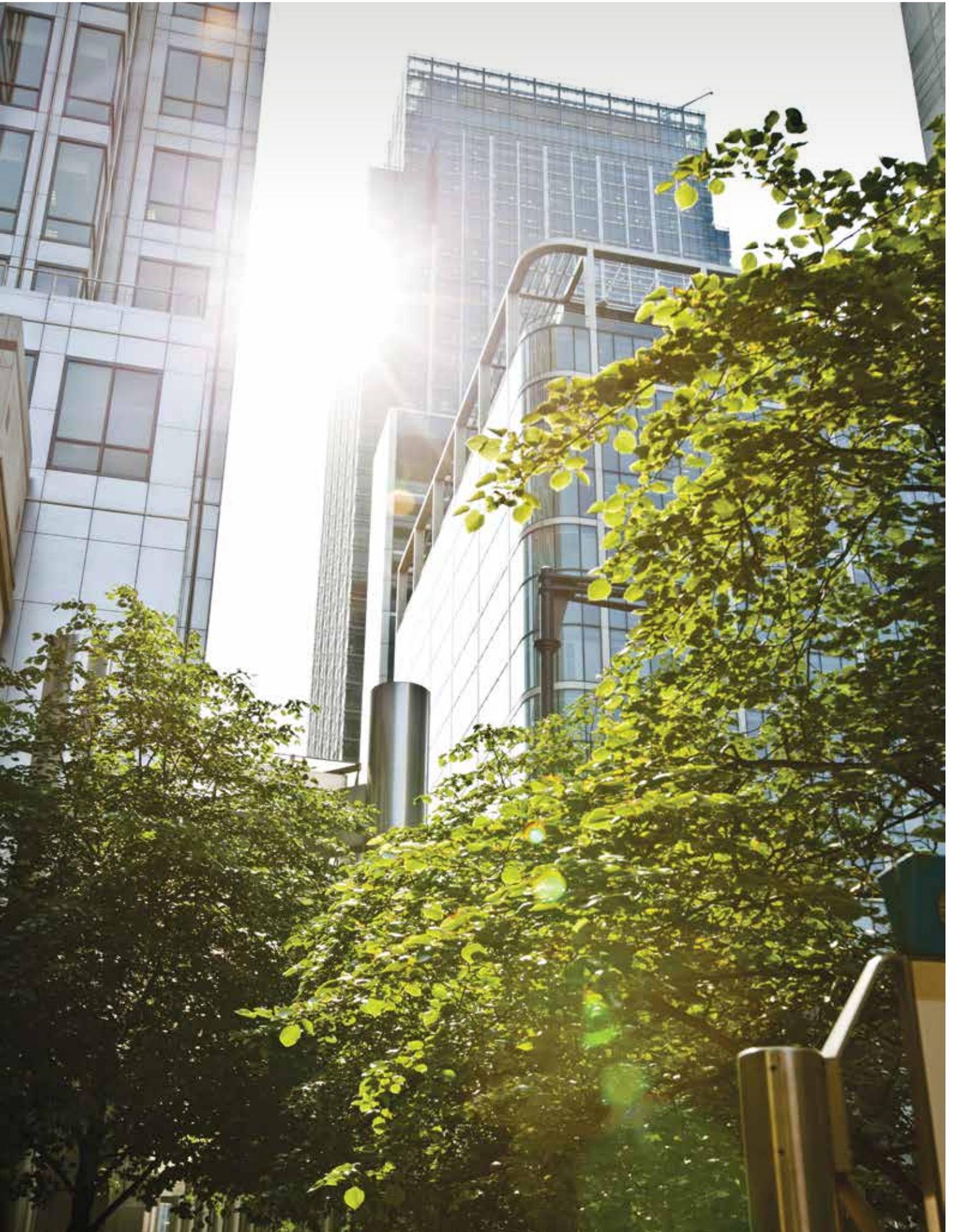


2. Investment in lower carbon infrastructure

The transition to a low carbon economy requires capital. A large proportion of this will need to be directed towards infrastructure. The Global Commission on the Economy and Climate identified infrastructure investment needs over the next 15 years, totalling approximately US\$90 trillion between 2015 and 2030. A low-carbon pathway has incremental infrastructure investment requirements of US\$4 trillion between 2015 and 2030, an increase of less than 5% on baseline levels. This is a phenomenal challenge but we see low carbon infrastructure as a good investment for today and tomorrow.

Investment – We will target a £500 million annual investment in low-carbon infrastructure for the next five years. Aviva Investors has a strong track record of investing in renewable energy installations (e.g. solar photovoltaic (PV) and wind) and projects that support energy efficiency initiatives (e.g. combined heat and power). We will significantly build on this investment, investing Aviva's own money and that of our clients. This means more money in renewable energy, such as solar PV, wind and other technologies and energy efficiency, such as new energy centres reducing users' demand for energy or increasing the use of waste resources, such as heat. Our focus will be on European infrastructure – we consider Europe the most established market supported by a clear and relatively stable climate change and energy policy framework and therefore the most suitable focus for long-term investors. This policy clarity makes it easier for us to commit capital; another reason why we advocate strong climate policy.

Measurement – We will be working with the UK Green Investment Bank to pilot the Green Investment Handbook methodology for our infrastructure investments. We want to see 'carbon returns', as well as financial returns, on our investment and are setting an associated carbon savings target for this investment of 100,000 tonnes CO₂ annually.





3. Supporting strong policy action on climate change

It is in all our interests to see a smooth transition to a lower-carbon economy. Climate change is a particularly acute example of where markets have failed. Addressing this failure requires action throughout the investment chain. We have set out our thinking in the Aviva Roadmap for Sustainable Capital Markets, which was launched in June 2014 by Aviva CEO Mark Wilson when we hosted the United Nations Principles for Sustainable Insurance conference.

The legal framework that informs investment decisions heavily influences the behaviour of the entities in which these assets are invested. Despite a number of legal reviews supporting the integration of environmental, social and governance issues as consistent with fiduciary duty, misunderstanding remains and this can be a barrier to investment. In 2015 we have therefore called on the OECD to consider a Convention on Fiduciary Duty and Long Term Investing that defines a common interpretation of fiduciary duty focused on the long-term rather than purely short-term outcomes. We believe this would do much to mobilise the trillions of pounds required to transition to a low-carbon economy.

Public policy engagement – We will support policymakers in negotiating a credible long term greenhouse gas reduction goal at the upcoming UNFCCC negotiations in Paris in December 2015 and beyond that at a national and regional level. We will continue to advocate for broader policy action to make capital markets more sustainable.

We were an early member of the Institutional Investors Group on Climate Change (IIGCC) and have attended previous Conference of Parties (COP) negotiations. We welcome a collaborative approach and will continue to support public policy engagement towards a long-term global emissions reduction goal and the policy and regulatory framework necessary to achieve this in line with previous examples, such as the Carbon Price Communique, the Global Investor Statement on Climate Change and recent Letter to G7 Finance Ministers.



4. Active stewardship on climate risk

We have a fiduciary duty to protect and enhance the value of client assets. We were in the vanguard of signatories to the UK Stewardship Code and view acting as responsible stewards – engaging with and voting on the companies where we are shareholders – as central to delivering this.

We believe informed engagement has an important role in the transition to a lower-carbon economy. Companies across all sectors need to ensure they have climate-resilient business strategies. Shareholders have a unique role in the stewardship of companies they invest in and the impact of exercising this voice is not to be underestimated.

By way of an example, Aviva was catalytic in forming the Carbon Action programme of the CDP. Carbon Action now has 190 signatories representing \$18 trillion in assets. Notable achievements of this collaborative engagement include that 61 companies (out of 205) set new emissions reduction targets and companies reported reductions of approximately 500 million tonnes of CO₂ equivalent as a result of emissions reductions activities.

Company engagement – We will actively engage with companies to achieve climate-resilient business strategies. We focus on concrete outcomes and commitments from companies, such as reducing or mitigating their own carbon impact now and through their capital expenditure decisions. Responsible corporate engagement on climate and energy policy, either directly or through trade associations, is particularly critical given the need for a strong climate agreement. We engage directly and collectively with other investors, in particular through the Institutional Investors Group on Climate Change (IIGCC).

Considered voting – We will use our vote to support our engagement. Since 2001 we have formally integrated sustainability issues into our voting policy. We will vote against the annual report and accounts, specific directors and remuneration reports where we consider material sustainability issues have not been addressed. Our voting and engagement goes hand in hand. We are also strongly supportive of shareholder resolutions, such as the recent BP and Shell resolutions on 'Strategic Resilience for 2035 and Beyond'.



5. Divesting where necessary

We aim to use our shareholder influence to encourage companies to transition to a lower carbon future. We recognise that policy, technology and demand/pricing drivers that will influence the transition to a lower carbon economy are shifting. Risks to the fossil fuel sector (in particular the most carbon intensive fuels) are likely to grow in the absence of wide scale post-combustion Carbon Capture and Storage (CCS) or alternative abatement technology.

Not all companies will successfully make the transition in line with a lower carbon economy but we wish to support those companies that are willing and able to play positive and active role.

Focus companies – 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 have identified an initial set of 40 companies where Aviva has beneficial holdings and which have more than 30% of their business (by revenue) associated with thermal coal mining or coal power generation. While coal delivered 29% of total primary energy supply in 2012, it accounted for 44% of global CO₂ emissions. Coal is nearly twice as emission intensive as gas on average, contributing significantly to the rapid consumption of the global carbon budget.

These 40 companies will form the basis of well-resourced and focused initial engagement over the next 12 months. Engagement progress will be reviewed on an annual basis. Where we consider companies are not making sufficient progress towards the engagement goals, we will withdraw our capital. This is intended to add additional focus to the engagement.

Two decades of action on climate change

In 1995 Aviva was one of the first companies to commit to 'balance economic development, the welfare of peoples and a sound environment', by incorporating these considerations into business activities as signatory to the United Nations Environment Programme Statement of Environmental commitment by the insurance industry. Aviva has focused on delivering this commitment through its operations and business activities.



Environmental reporting

We first published an environmental report in 1998. We have aimed to continuously improve our reporting and last year were pleased to be awarded 94/100 for Disclosure and an 'A' grade for performance by CDP (previously the Carbon Disclosure Project).

Good quality comparative data on climate risk is still lacking for a large proportion of our portfolios. Despite initiatives such as CDP, which we have supported since its inception, Bloomberg Data shows us that of 25,000 companies reviewed, 75% do not produce even one data point on sustainability. Even the most respected 'carbon foot-printing' methodologies focus on a limited proportion of company emissions (scope 1 and scope 2) and in many cases do not look at the carbon impact of the products.

We have actively advocated greater disclosure at a national level, supporting mandatory GHG disclosure in the UK, at an EU level with the Non-Financial Reporting Directive and at the UN level, where we built the Corporate Sustainability Reporting Coalition to present a proposal for a convention on sustainability reporting at the UN Rio+20 Conference in 2012.

In 2008, Aviva Investors catalysed the Sustainable Stock Exchange Initiative, now co-convened by the UN-supported Principles for Responsible Investment, the United Nations Conference on Trade and Development, the United Nations Environment Programme Finance Initiative, and the UN Global Compact. The aim is to advance sustainability and sustainability disclosure of the companies listed on the member exchanges. There are now 23 partner exchanges, including the London Stock Exchange, NYSE, Bovespa and the Johannesburg Stock Exchange. An annual benchmark was launched in 2012. Now in its fourth year, we see that all of the top 10 stock exchanges are located in jurisdictions with mandatory sustainability disclosure policies.

Long-term targets

Using 2010 as a baseline we set a long-term operational emissions reduction target of 20% to 2020. By the end of 2014 we had far exceeded this with a 32% reduction. Building on this, we have set new ambitious reduction targets of 40% to 2020 rising to 50% by 2030. We are now committing to measure our strategy against a scientifically benchmarked emissions reduction target – we believe that the long-term targets we have set align to a 2°C level.

Renewable energy

We first purchased renewable electricity in 2004. We currently purchase 56% of our worldwide electricity consumption from renewable sources. At the end of this month we will start generating our own onsite renewable electricity at two of our UK locations.

Carbon neutral

To complement our in-house emission-reduction initiatives and purchasing of renewable energy, we have purchased voluntary market carbon credits to the equivalent of our remaining operational CO₂ equivalent emissions since 2006. This made Aviva the first carbon-neutral insurer on a worldwide basis. We have maintained our carbon-neutral stance ever since.

Climate-aware business

We strive to integrate climate considerations into our insurance business to benefit our shareholders and our customers. Here are some examples:

- Our sustainable general insurance claims settlement process features energy efficient replacement white goods, improved drying times for water damaged properties, increased restoration rates and reduction of waste.
- Innovative renewable energy insurance – we support the industry by providing cover for everything from residential solar PV systems through to micro-hydro turbines and on-shore wind farms, the demand for which has been growing steadily.

Conclusion

Left unchecked, climate change will continue to affect the actuarial assumptions underpinning the insurance products that our industry provides. It will also render significant proportions of the economy uninsurable, shrinking our addressable market.

Climate change is material to the long-term success of many of the companies and economies in which we invest. Over the coming decades, climate change presents strategic issues to businesses in many different industries, including our own.

Fundamentally, addressing climate change effectively requires concerted action from all actors – companies, investors and policymakers. It also requires collective action. There has been some inspirational leadership from across these constituencies but more is required. This is our response. We hope it will help to encourage others to participate in the debate and take strong action and we look forward to working towards a common goal.

Acknowledgements

We have benefited from, and been inspired by, strong collaboration on the climate change agenda. We would therefore like to highlight and thank some of the organisations we have worked alongside to advocate change at a systemic level. These include Aldersgate Group, Carbon Tracker, CDP, Ceres, Climate Bonds Initiative, ClimateWise, Forum for the Future, Forceful Stewardship programme, Green Alliance, IIGCC, NSFM – Network for Sustainable Financial Markets, PRI, Prince of Wales International Sustainability Unit, ShareAction, Tellus Mater, UKSIF and UNEP (including UNEP-FI and UN PSI) University of Cambridge Institute for Sustainability Leadership, University of Oxford Smith School of Enterprise and the Environment and WWF.

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