Our climate-related financial disclosure

As an international insurance group, our sustainability and financial strength is underpinned by an effective risk management framework. Our business is directly impacted by the effects of the climate crisis. We believe that unmitigated climate-related risks present a systemic threat to societal and financial stability and therefore to our business, over the coming decades.

This disclosure reflects Aviva's 2019 response to the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD). It sets out how Aviva incorporates climate-related risks and opportunities into governance, strategy, risk management, metrics and targets and how we are responding to new regulatory requirements. These pages, along with the expanded report, are available at www.aviva.com/TCFD.

Governance

Aviva has built a strong system of governance, with effective and robust controls. In 2019 we updated the Senior Management Function's Statements of Responsibilities in line with the PRA's Supervisory Statement 3/19[1]. The regulated entities' Chief Risk Officers (CROs) are responsible for ensuring that climate-related risks and opportunities are identified, monitored and managed through Aviva's risk management framework and in line with our risk appetite. The Group CRO is responsible for overseeing, at Group level, the embedding of the risk management framework. To support the CROs in meeting regulatory expectations, we have initiated a group-wide climate-related risks and opportunities project. The Group CRO is the executive sponsor of the project.

The Board Risk Committee and Board Governance Committee[2] oversee our management of climate-related risks and opportunities. The Board Risk Committee[2] met six times in 2019 to review, manage and monitor all aspects of risk management, including climate-related risks and opportunities. The Board Governance Committee[2] met four times in 2019 to oversee how Aviva meets its corporate and societal obligations.

In 2019, we updated our risk policies and business planning process to ensure the assessment of climate-related risks and opportunities is integrated into our overall strategy, decision-making, risk management and reporting frameworks. Local markets have also responded to local regulations (e.g. Article 173 in France and the PRA's climate change Insurance Stress Test). In 2019 papers considering the impact of climate change on our business have been presented to Board committees across the group (e.g. the outcomes of the PRA's climate change Insurance Stress Test were presented to the UK Life and UK GI Risk Committees).

As part of our regular Board training programme, Aviva's climate-related risks and opportunities are presented to the Board. This training equips the Board to give appropriate direction to the company and ensure actions are taken to identify, measure, manage, monitor and report these risks and opportunities.

Strategy

Having achieved the targets set as part of our 2015 strategic response to climate change, this year our climate strategy took another important step forward. We are widening the scope from primarily focusing on investments, to create a broader, joined-up four-pillar approach covering investments, insurance, our operations and influence.

Aviva is a trusted climate leader. We commit to aligning our business to the 1.5°C Paris target[3] and to be a net zero asset owner by[4] 2050. Our businesses will seek to develop and offer further climate-friendly products. We also commit to further cutting our operational carbon impact, as well as using our influence to help tackle climate change. This strategy is aligned to our Company Purpose 'With you today, for a better tomorrow' and will be implemented as part of the Group Business Strategy.

Investments – There are three ways in which Aviva is involved in investments i.e. as an asset owner, a long-term savings and pensions provider and as an asset manager.

- **As an asset owner**, we seek to align our investments with a pathway towards net zero carbon emissions and ensure consistency with the Paris target. We have signed-up to key global commitments such as the UN Net Zero Asset Owners Alliance. We are working with the industry to define methodologies and milestones with respect to these commitments and plan to increase our level of investment in low carbon infrastructure through to 2030; in addition to our £3.8 billion investments since 2015. We use our shareholder influence to encourage companies to transition to a low carbon economy and divest from highly carbon-intensive fossil fuel companies where we consider they are not making sufficient progress towards the engagement goals set. We engaged with an initial set of 40 companies where Aviva has beneficial holdings, and which have >30% of their business (by revenue) associated with thermal coal mining or coal power generation. By the start of 2020 we had divested Aviva's own assets from 18 thermal coal mining and power generation companies; we are prepared to add further companies to our Investment Stoplist to limit our exposure to this and other carbon intensive sectors.
- **For long-term savings and pensions,** we integrate consideration of long-term issues into the products and services we offer. We continue to develop our customer Environmental, Social and Governance (ESG) strategy, and offer climate friendly and ethical funds such as the stewardship fund range.
- **As an asset manager,** Aviva Investors (AI) integrates consideration of ESG factors into the investment process to deliver long-term sustainable and superior investment outcomes for customers whilst adhering to their mandate. AI is developing a range of funds that support the climate change transition. In 2019, AI launched the European Equity Climate Transition Fund, which whilst excluding investments in companies with exposure to high carbon fossil fuels, invests in companies that provide solutions for climate mitigation/adaptation; or are orientating their business models to be successful in adapting to a warmer world, and supporting the transition to a low-carbon economy. In 2019 we integrated the T-Risk methodology[5] into our real assets' assessment process and continued to integrate climate issues into our voting strategy by withholding support for high carbon emitting companies that do not publish TCFD disclosures.

1 Prudential Regulation Authority's (PRA) Supervisory Statement – 'Enhancing bank's and insurers' approaches to managing the financial risks from climate change'
2 From 1 January 2020 the Committee has become Customer, Conduct and Reputation Committee. Further details are available in the Governance Report in the Annual Report and Accounts
3 The 1.5C target was set as an aspiration by the global Paris climate change deal in 2015 to limit the damage wreaked by acute events such as extreme weather and chronic events such as sea level rise.
4 Reduce the carbon emissions of our investment portfolio to net-zero
5 T-risk is a model using research inputs from in-house as well as academia, consultants, civil society, peers to rate the 159 GICS (Global Industry Classification System) sub-industries on their risk exposure to both physical and decarbonisation risks through their value chain

Insurance – We seek to grasp opportunities to support the transition to a low carbon economy and promote activities that will secure a better future for our customers and wider society. We develop 'climate conscious' products across Aviva, which reward customers for environmentally responsible actions, provide an element of adaptation/resilience or additional cover for those customers at risk of the extreme weather impacts of climate change. For example, we offer products and services that support customers' choices such as bespoke electric vehicle policies (France), reduce premiums for customers who opt to use public transport (France), support the sharing economy (Canada), cover solar panels on residential insurance policies without charging an additional premium (UK GI). Last year, Aviva confirmed we would stop underwriting fossil fuel power generation worldwide and has recently launched its whole lifecycle insurance for renewable energy companies. We continue to reduce the environmental impact of our claims process and implement changes which benefit the customer and minimise the amount of waste to landfill or recycling.

Operations – Our operations have been carbon neutral since 2006, through reducing our emissions year-on-year and offsetting any remaining emissions. Our ambition over time is that our business operations should have positive climate impact. We have already reduced our emissions by 66%[1] since 2010 and have a long-term reduction target of 70% by 2030. We are committed to using 100% renewable electricity by 2025 (via our RE100 commitment[2]). In 2019, we commissioned a 'first of its kind in the UK' solar carport installation for our Norwich office, which with the right weather conditions removes our reliance on the National Grid and feeds surplus electricity back into the grid. In 2019 our carport produced 40 GWh of electricity, of which 3.8 GWh was exported to the grid. We have identified two further locations for the installation of solar carports which will come on-stream in 2020. We have planning permission for a wind turbine at our Perth office, which through the combination of the existing solar array, new solar carport and battery storage will take the location off-grid.

Influence – Aviva continues to provide strong and vocal support for capital market reform, to mobilise the trillions of pounds required to transition to a low carbon economy and correct existing market failures with respect to climate change.

We encourage policymakers and regulators to change the financial system so markets reward sustainable investments and sustainable businesses. Aviva's CEO spoke about climate at the UN High-level Dialogue Financing for Development Forum, which was convened by the UN General Assembly in September 2019. He highlighted the need for strategic asset allocation for governments and the private sector, the need for free public league tables e.g. the World Benchmarking Alliance, the need for subsidies to be in the right places and the responsibility of financial advisors to have to ask customers for their views on how their money is invested. We launched our report "A Marshall Plan for the Planet", which develops these ideas, during the UN General Assembly.

Risk management

Rigorous and consistent risk management is embedded across Aviva through our risk management framework, comprising our systems of governance, and risk management processes. This framework sets out how Aviva identifies, measures, manages, monitors and reports on the risks to which it is, or could be, exposed (including climate-related risks). Aviva considers climate change to be one of the most material long-term risks to our business model, and its impacts are already being felt.

Given its materiality and proximity, we are acting now to mitigate and manage the impacts of climate change both today and in the future. Through these actions, Aviva continues to build resilience to climate-related transition, physical and liability risks. Aviva has developed models and tools to assess the potential impact on our business of the four Intergovernmental Panel on Climate Change (IPCC) scenarios. Each IPCC scenario describes a potential trajectory for future levels of greenhouse gases and other air pollutants. These can be mapped to likely temperature rises: 1.5°C (aggressive mitigation), 2°C (strong mitigation), 3°C (some mitigation) and 4°C (business as usual).

Aviva calculates a Climate Value-at-Risk (Climate VaR) for each IPCC scenario to assess the climate-related risks and opportunities over the next 15 years with the ability to look at shorter time periods (three to five years) where appropriate. A range of different financial indicators are used to assess the impact on our investments and insurance liabilities. These impacts are aggregated to determine the overall impact across all scenarios by assigning relative likelihoods or probabilities to each scenario. Climate VaR includes the financial impact of transition risks and opportunities. This covers the projected costs of policy action related to limiting greenhouse gas emissions as well as projected profits from green revenues arising from developing new technologies and patents. In addition, it captures the financial impact of physical risks from extreme weather (e.g. flood, windstorm and wildfires) as well as chronic effects (e.g. the impact of rising sea levels and temperature), although we recognise that the most extreme physical effects will only be felt in the second half of the century. Our UK Life and UK GI businesses have also participated in the PRA's 2019 Insurance Stress Test. This included a climate stress test covering both physical and transition risk. Aviva also recognises that there is a growing trend in climate-related litigation and has assessed its potential exposure accordingly.

1 Scope 1 -natural gas, fugitive emissions, oil and company owned cars; Scope 2 – electricity, and Scope 3- business travel, grey fleets, waste and water. More details of this analysis can be found on www.aviva.com/social-purpose.
2 RE100's purpose is to accelerate change towards zero carbon grids, at global scale. Aviva has signed up to the commitment pledging to purchase or generate 100% of our global electricity from renewable sources by 2025

Metrics and targets

In addition to Climate VaR, Aviva uses a variety of other metrics to manage, monitor and report its alignment with global or national targets on climate change mitigation and the associated potential financial impact on our business. Whilst recognising the limitations of the metrics and tools used (e.g. the scope of emissions or sectors covered) and that some are backward looking, we believe they are still valuable in supporting our climate-related governance, strategy and risk management.

- We track our investment in green assets and low carbon infrastructure. We have already invested £6 billion in green assets (i.e. £3.8 billion in low carbon infrastructure and £2.2 billion in green and sustainable bonds).
- We use carbon foot-printing and weighted average carbon intensity data (tCO_2e/£m sales) to assess our assets exposure to a potential increase in carbon prices in shareholder funds and we continue to report on our operational carbon footprints.
- We use Carbon Delta's portfolio warming potential metric to assess our shareholder funds' alignment with the Paris target. This warming potential methodology captures Scope 1[1] emissions as well as revenues from low-carbon technology to provide a forward-looking perspective. We would like to extend this analysis to our whole portfolio over time.
- We use Notre-Dame University's Notre Dame-Global Adaptation Index (ND-GAIN) to measure and monitor our sovereign holdings exposure to climate change. ND-GAIN measures a country's vulnerability to climate change and its readiness by considering: economic, governance and social readiness.
- We build the possibility of extreme weather events into our pricing to ensure it is adequate and monitor actual weather-related losses versus planned weather losses by business (net of reinsurance). Catastrophic event model results are supplemented by in-house disaster scenarios. Our general insurance business exposure is limited by being predominantly in Northern Europe and Canada. We require our general insurance businesses to protect against all large, single catastrophe events in line with local regulatory requirements, or where none exist, to at least a 1-in-250-year event.

We are working closely with peers, academics, professional bodies, regulators, governments and international agencies to further develop our tools and approaches. For example, we are a member of the United Nations Environment Programme Finance Initiative insurance pilot and the PRA-FCA Climate Financial Risk Forum as well as the UN Net Zero Asset Owners Alliance.

1 Scope 1- All direct emissions from the activities of an organisation or under their control, including fuel combustion onsite such as gas boilers, fleet vehicles and air-conditioning leaks