Climate-related Financial Disclosure

Aviva Canada
2023

About Aviva Canada

Who we are

Aviva Canada is one of the leading property and casualty insurance groups in the country, providing home, automobile, lifestyle, and business insurance to over 2.5 million customers.

A subsidiary of UK-based Aviva plc, Aviva Canada has more than 4,500 employees focused on creating a bright and sustainable future for our people, our customers, our communities, and our planet.

Our Canadian heritage

Aviva's origins can be traced back to England more than 300 years ago. We have deep roots in Canada too. In 1835, the first Canadian-based Aviva heritage company – Canada Accident Assurance Company – was formed.

Over the 20th century, many Aviva Canada predecessor insurance companies merged, combined their strengths and changed their names. On May 5, 2003, the CGU Insurance Company of Canada became Aviva Insurance Company of Canada.

Through our evolution, we've always provided customers with peace of mind while maintaining a vision of being a trusted and valued home, auto and business insurer.

It all starts with our customers

Make the most out of life, plan for the future. Have the confidence that if things go wrong, we'll be there to help put them right.

It takes Aviva.

About this project

This report has been prepared in accordance with the Taskforce on Climate-Related Financial Disclosures (TCFD).

Throughout the report, references to Aviva refer to Aviva plc which includes Aviva Canada, and references to Aviva Canada refer to activities and/or metrics related specifically to the Canadian business and its operations.

This report complements Aviva Canada's Sustainability Highlights and Public Accountability Statement, providing a summary of Aviva Canada's sustainability and Environmental, Social and Governance (ESG) performance for the fiscal year January 1 to December 31, 2023.

2023 Sustainability Highlights
2023 Public Accountability Statement

Read more

Aviva plc Climate-related Financial Disclosure 2023 and Annual Report & Accounts 2023

Our reporting approach

The content of this report is focused on the requirements of Aviva Canada's stakeholders, relevant regulations, and sustainability rating and benchmarking providers. It focuses on the concepts and key performance indicators (KPIs) that reflect Aviva Canada's most material climate issues and has been prepared in accordance with the Taskforce on Climate-related Financial Disclosures (TCFD).

Aviva believes clearly stated ambitions and performance information are essential for enhancing the quality, reliability and comparability of climate reporting. Aviva is committed to reporting data to improve our climate disclosures for internal decision-making and disclosing meaningful data for our external stakeholders.

As an investor, Aviva also relies on this type of information from others to inform our investment and underwriting strategies and support our disclosures. As part of this commitment, the Metrics and targets section of this report covers material frameworks and methodologies which we consider important in terms of communicating our approach to calculate emissions.

Climate metrics include current estimates of emissions and forward looking metrics such as ambitions, targets, climate scenarios and climate projections and forecasts. See the Cautionary statements section for the challenges and limitations related to measurement of emissions to determine the impact of climate change on Aviva.

Find out more on www.aviva.ca

How to navigate this report

Throughout the Strategy section of this report, we use a colour coding system to highlight our strategic focus areas:

- Influencing
- Decarbonizing our investment portfolio
- Insuring the transition
- Decarbonizing our operations and supply chain

Remember to use your browser's bookmarks and tools to navigate

To search this document: PC use Ctrl+F; MAC use Command +F

Contents

A glossary explaining key terms used in this report is available on: www.aviva.com/climate-goals-glossary

Foreword

Aviva Canada's Climate-related Financial Disclosure report brings together our disclosure in accordance with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD). Aviva Canada has set out how we have complied in the TCFD compliance summary.

This report should be read in conjunction with the Cautionary statements.

Aviva Canada's 2023 Climate-related Financial Disclosure report was approved by the Canadian Board on July 25, 2024.

Assurance approach

Aviva Canada appointed PricewaterhouseCoopers LLP ('PwC') to provide independent assurance over certain climate metrics, indicated with AR for reasonable assurance in this report.

This indicates that the data was subject to external independent reasonable assurance by PwC. For the results of that assurance, see the assurance report on page 60.

As a reminder

Aviva Canada includes all subsidiaries, joint ventures and associates, as defined in the Climate Reporting Policies on page 34.

All financial figures are expressed in Canadian dollars unless otherwise stated.

The Company's registered office:
10 Aviva Way, Suite 100
Markham, Ontario L6G 0G1

Chief Executive Officer's message

Read more:

Our climate strategy page 5
TCFD compliance summary page 10
Our climate metrics page 33
Cautionary statements page 62

As an insurer, the nature of our business places us squarely in the path of climate change and its repercussions.

We often talk of the economic impact—the more than $3 billion in insured losses incurred due to natural disasters in 2023 alone—and rightfully so. But I must also emphasize the human impact. Every dollar lost represents someone's home, someone's memories, someone's life turned upside down.

We take this to heart and look to our sustainability ambition as part of our responsibility to help create a better tomorrow for our customers. Sustainability also remains a key strategic priority for Aviva Canada, as we are well positioned to both contribute positively to the transition to a low-carbon economy and seize opportunities to harness the growth potential of climate-conscious initiatives.

As part of this journey, we have placed clear, transparent reporting at the center of our endeavours and welcome the regulatory changes on the horizon which will markedly impact our climate-related reporting endeavours beyond 2025.

> Aviva Canada is committed to leveraging our influence and resources, to collaboratively help tackle climate challenges and seize opportunities that lie ahead.

Tracy Garrad
Chief Executive Officer

Disclosures such as this are critical to building a shared understanding of our current challenges and the action that will be required to create a Net Zero future.

We are also clear and transparent about the challenges that lay ahead as we face a world that is not changing as quickly as we need it to. Yet, we are not idle. Since announcing our Net Zero by 2040 ambition in 2021, we continue to make good progress against our targets.

Some of our 2023 report highlights include a cumulative investment of $975 million in sustainable assets compared to 2019 baseline; 50% operational carbon emissions reduction compared to 2019 baseline; and, 26% Scope 1 and Scope 2 weighted average carbon intensity reduction in credit and equities (shareholder compared to 2022).

In 2023, we also secured Aviva's first Canadian partnership offering long-term, nature-based climate solutions that are set to improve climate resilience through stewardship and restoration activities alongside verified carbon removal. This is a critical component of our Net Zero strategy as we continue to intensify our focus on biodiversity's pivotal role in facilitating the transition and in addressing the interconnected crises of climate breakdown and biodiversity loss.

In our communities, we are working to enable Canadians—including our customers, brokers, and suppliers—to embrace climate readiness through products and services that support a low-carbon future.

As stewards of both financial and environmental improvement, we remain resolute in our pursuit to support a resilient, sustainable future, and draw energy from like-minded collaborators, and an increasing share of customers looking for sustainable choices. Together, we are driving meaningful progress towards a sustainable, resilient future for Aviva Canada and the communities we serve.

Our climate strategy summary

Our ambition is to be the leading insurer in Canada - the top choice for our customers, brokers and our people.

We focus on climate action, building stronger communities and running ourselves as a sustainable business

Aviva plc have an ambition to be Net Zero by 2040. The current approach is:

Reducing carbon emissions
Seeking to reduce the carbon emissions in its operations, across supply chain, and through investments and insurance underwriting propositions

Protecting and restoring biodiversity
Seeking to protect and enhance biodiversity through nature-based solutions

How Aviva plc are addressing the climate challenges in short term based on our current understanding:

Reducing operational emissions
We are moving at pace to reduce Aviva plc's operational emissions that we directly control

Read more about decarbonizing our operations and supply chain on P21

Influencing supply chain
We are working with our suppliers to promote science-based targets (SBTs) and our target is to achieve this with 70% of Aviva plc's supplier by spend by end of 2025

Read more about decarbonizing our operations and supply chain on P21

Reducing the carbon intensity of investments
Aviva plc are aiming for a 25% reduction in the intensity of equity and credit portfolio emissions for Scope 1 and Scope 2 by 2025 (December 31, 2024) from a 2019 baseline

Read more about decarbonizing our investment portfolio on P18

The external environment

There are positive and negative factors impacting the journey to Net Zero.

More extreme weather events[1]

The impacts of climate change are driving extreme weather events across the globe. The summer of 2023 was the Northern Hemisphere's hottest in recorded history. Canada experienced its worst ever wildfire season[1] doubling its previous record for carbon emissions from wildfires and torrential rains in Libya destroyed one quarter of the city of Derna.

The latest Emissions Gap Report published by the United Nations Environment Programme highlights that we are not on track to meet the target set out by the Paris Agreement. Urgent, rapid, and transformative action is required to cut greenhouse gas (GHG) emissions across industries to prevent the frequency and severity of extreme weather events.

Government policy uncertainty

There is uncertainty of government policy in the US and increasingly elsewhere, and this has been evidenced by the decision by some insurers in 2023 to exit the Net Zero Insurance Alliance.

Geopolitical environment

The global geopolitical instability is impacting energy policies and causing supply chain disruption (e.g. auto parts) with potential second and third order impacts on national and corporate journeys towards Net Zero. Geopolitical tensions have raised the issues of energy security, which could increase investment in renewable sources.

Stagnation in climate readiness of leading nations[2]

There has been slow progress towards Net Zero globally and without increased focus from governments on policies and technologies to reduce carbon emissions across the global economy our, and other corporate entities, climate ambitions, are increasingly challenging. The **Aviva Climate Ready Index** published in October 2023, shows the climate readiness of the G7 plus Ireland. It is based on eleven weighted factors across four pillars (emissions & migration, environment & adaption, economy & business and society & community), and showed patchy progress compared to 2022.

Companies face increasing risk of accusation of greenwashing

Perceived lack of action towards ambitions is more likely to result in accusation of greenwashing.

Consumer sentiment

Consumer sentiment has continued to strengthen in favour of sustainability causes, influencing brand loyalty and purchasing decisions. There are increases in those opting for low-carbon emissions or shared modes of transport. Per Aviva Canada's 'How we live report', released August 2023, 58% of Canadians said they will choose brands or services provided by companies that are demonstrably taking action on climate change.

50% renewables share of global electricity by 2030, up from 30% today[4]

As the global economy develops, new risks are emerging, requiring new risk management solutions.

For example, as countries look to decarbonize over the coming decades, the transition towards renewable energy will create new risk needs such as coverage for offshore wind-farms and car insurance for electric vehicles.

Sustainable fund investment remains resilient

Sustainable fund flows in 2023 remain positive but at a lower level than 2022[5]. European flows, which cover the largest market also account for the largest proportion of growth.

+1.48°C

warmer, 2023's global temperature was than pre-industrial average[1]

1 in 10 homes

are in high risk areas for flooding and are already considered uninsurable, calling for urgent government intervention and customer education.[3]

Regulatory momentum is accelerating

There is a trend for increased availability of information related to sustainability reporting with an increasing number of markets subject to mandatory sustainability regulations.

1. Source: European Union's Copernicus Atmosphere Monitoring Service (2023), Reuters September 2023
2. Source: Aviva Climate Ready Index - Oct 2023
3. Source: Insurance Bureau of Canada (IBC), Taskforce report, August 2022
4. Source: International Energy Agency World Energy Outlook (2023)
5. Source: Morningstar Global Sustainable Fund Flows: Q4 2023 in Review

Playing our role in the transition

Aviva is committed to playing its role in supporting the low-carbon transition of economic sectors in line with science and under consideration of associated social impacts.

We have made this commitment with a view to acting in the best interests of our customers, the long-term continuity of our business model and with respect to the wider environment in which we operate.

We recognize that while we have control over the decarbonization of Aviva's operations, when it comes to decarbonizing the economy in which we operate and invest, Aviva is one part of a far larger global financial ecosystem.

It is for this reason that we have committed to do everything within our power to create the right conditions to become a Net Zero carbon[1] emissions company by 2040, while also recognizing that we do not have full control over the delivery of this ambition.

Government action on policy and development of new technologies are of fundamental importance to create the conditions for success. Without good progress on these issues, achieving our climate ambition becomes increasingly challenging.

This is reflected in the terms of the Net Zero Asset Owners Alliance[2], including the reference to such a pledge being made on the "expectation that governments will follow through on their own commitments to ensure the objectives of the Paris Agreement are met[3]".

To give ourselves the best chance of meeting our ambition, we must take action to drive the decarbonization of the economy. Our approach to influencing and advocating is set out in this report. Some critical examples laid out by Aviva are detailed on the right.

1. We often use the shorthand of carbon, but our targets are for greenhouse gases in general and measured in carbon dioxide equivalent (CO_2e)
2. https://www.unepfi.org/wordpress/wp-content/uploads/2022/07/AOA-COMMITMENT-DOC-2022.pdf
3. Terms from the Net Zero Asset Owners Alliance

Overhaul of global governance structures

Each element of the international financial architecture should have included within its mandate the delivery of the Paris Agreement and should have to report on a transition plan. These individual reports should in turn be aggregated into a global transition plan.

National governments' contributions

Major economies need to step up their level of ambition, namely, to adopt Net Zero targets on a shorter timeline.

Governments and regulators need to adopt fiscal measures that reward economic activity supporting sustainable outcomes and penalize economic activities harming sustainability goals. Examples include:

- Adoption of carbon taxes or emissions trading schemes, which would require the true price of carbon emissions to be captured on companies' balance sheets and in their cashflows, ensuring that this flows through to valuations;
- Removal of fossil fuel subsidies; and
- Adoption of clean energy subsidies.

Regulators need to drive further improvements in sustainability disclosures in particular to support an understanding of how companies plan to pivot their businesses to thrive in the transition to a low-carbon economy, as well as the specific policy interventions that are needed to enable the transition of each sector.

Market participants collaborating to find solutions to shared problems

Market participants need to come together to accelerate a market for high-quality carbon credits and offsets.

Technological improvements are needed in Carbon Capture and Sequestration (CCS) and Direct Air Capture (DAC) to scale up their contribution to emissions reductions.

Investors need to encourage companies and sovereigns to raise their level of ambition to adopt Net Zero targets on a shorter timeline, as well as to deliver on those targets.

Measurement of emissions

Aviva's climate-related financial targets and metrics are measured and determined using the accounting guidance provided within the Green House Gas (GHG) emissions Protocol.

GHG emissions are split into three scopes:

- 'Scope 1' – direct emissions from company sources;
- 'Scope 2' – indirect emissions released in production of energy used by the company; and
- All 'other emissions' that are a consequence of a company's activities across its value chain

These 'other emissions', also known as 'Scope 3' - grouped into 15 categories, include the emissions associated with both investments and underwriting activities of Aviva.

The principle of measuring Scope 3 emissions helps companies to understand the extent to which their overall business impacts climate change, capturing upstream and downstream activities across its entire value chain.

This ensures that companies are aware of, and ultimately take action to influence the reduction of the emissions of the goods and services they procure, and the goods and services they sell. A financial services institution such as Aviva, seeks to also measure the attributed total emission footprint that comes from investing in and underwriting companies, projects and government bonds i.e. their Scope 1, Scope 2 and Scope 3.

The Scope 3 emissions of its customers, investees, and suppliers, commonly known as "Scope 3 of 3", provides a more comprehensive picture of its overall emissions footprint, and its climate transition risk. However, this view is complex to produce from an accounting perspective, primarily due to limited and unsophisticated data. As these are attributed emissions and not directly emitted, they are difficult to estimate and track, and existing disclosures by customers, investees and suppliers are limited. There is also significant double counting of emissions when Scope 3 of 3 is included.

Current GHG emissions accounting guidance does not yet provide a definitive basis on how Scope 3 of 3 emissions should be treated, particularly for measurement and target-setting across investments and underwriting.

Currently Aviva categorizes its emissions footprint on its level of influence over its Scope 3 emissions, depending on, for example, whether assets are included in shareholder funds where we have greater influence or included in our policyholder funds, and for emissions from underwriting activities, the line of business and how it is distributed. The absolute emissions are currently included in our reported metrics when emissions can be reliably measured.

Aviva will continue to address challenges related to accounting of Scope 3 of 3 emissions through its macro and micro stewardship activities, engaging with customers and developing products and solutions to enable emissions reduction among its customers, advocacy for data quality improvements and more certainty towards the accounting guidance.

Ultimately the insurance industry, like other sectors, is grappling with data availability and quality.

Our 2023 climate highlights

We have made progress towards our climate ambitions in 2023, across our climate focus areas.

Reducing Aviva Canada's operational emissions

- During 2023, we confirmed that 100% of the 2022 electricity used by Aviva Canada's operations was from certified renewable sources achieving RE100[1] earlier than previously planned.
- Light sensors were installed in our Oakville office and light harvesting was turned on in our Markham office to reduce energy consumption.
- At the end of 2023, 13% of our c.198 vehicle fleet was comprised of EV/PHEV vehicles.

Influencing our supply chain

- Aviva Canada hosted our first Net Zero Supplier Summit in April 2023, with representation from 78 supply chain partners, to update on our Net Zero agenda and to provide opportunities for education and collaboration.
- We developed and piloted our Net Zero Supplier Accelerator program with 10 suppliers in Q2-Q3 2023. This education program supports our suppliers to measure their organizations' emissions and prepares them to make a commitment to the Science-Based Targets initiative (SBTi).

Charge for Change

- The infrastructure required to support EV adoption can be cost prohibitive for many small, under-served communities, creating a barrier to the widespread adoption of EVs across Canada. To help remove this barrier, we launched our $3 million Charged for Change program in late 2022. In April 2023, seven Ontario municipalities were announced as recipients of the first year of funding, sharing in over $735,000, for Level 2 EV charging infrastructure. This funding is expected to deliver over 35 new EV charging heads in more than 15 sites across Ontario. The second year of the Program launched in November 2023 and was expanded across Canada.

Working with our partners

- Since 2021, we have pledged more than $3 million in WWF-Canada's Nature and Climate Grant Program, helping local groups and Indigenous communities restore degraded lands and shorelines across Canada.

Nature Based Carbon removal partnership with Wild + Pine

- In 2023, we announced the first nature-based carbon removal partnership in Canada in which Aviva plc pledged c.$6.2 million to Edmonton-based Wild + Pine, who develop verified carbon removal assets through afforestation to achieve climate goals. The partnership will run for 12 years and aims to help restore landscapes and improve biodiversity in the region.

The partnership will work on a project called StoneWoods Forest Carbon which covers c.520 hectares of land in Alberta. It is estimated by Wild + Pine that the project aims to sequester nearly c.275,000 tonnes of carbon over c.60 years while supporting regional biodiversity, including enhancing valuable habitat for many local species.

Insuring the transition

- Commercial lines has solutions for customer groups across solar, wind, hydro, battery storage and other renewables.
- Our parametric rain-day and rain-season solutions went live with select brokers.
- Launched our sustainability property endorsement to incentivize build back better and carbon reduction.
- Our EV proposition, introduced in 2022, offers features and benefits to personal insurance customers to make EV adoption easier and has contributed to a 93% increase in EV insurance compared to 2022.
- We launched a water leak detector pilot and a home energy assessment pilot with employee group plan customers.

1. RE100 is the global corporate renewable energy initiative bringing together hundreds of large and ambitious businesses committed to 100% renewable electricity.
2. Reported on an Aviva plc basis, which includes Aviva Canada.

$975m
Cumulative investment in sustainable assets compared to 2019 baseline

50%
Operational carbon emissions[2] reduction compared to 2019 baseline

26%
Scope 1 and Scope 2 weighted average carbon intensity reduction in credit and equities (shareholder compared to 2022)

TCFD compliance summary

The TCFD outlines 11 recommendations for organizations to include in their climate reporting. The table below directs to the relevant section where these recommendations are covered in this report for Aviva Canada. While we have complied with the 11 recommendations at the Aviva plc level (Refer to **Aviva plc's Climate-related Financial Disclosure 2023**), Aviva Canada continues to work towards developing the methodology of our climate scenario analysis in addition to expanding the scope of our metrics and targets and enhancing our disclosures. In addition to the TCFD Final Report, we have also considered the TCFD Annex (issued October 2021).

Table 1: TCFD recommended disclosures

TCFD pillars	TCFD recommended disclosures	Section the disclosures are included in
Governance Disclose the organization's governance around climate-related issues and opportunities.	a. Describe the Board's oversight of climate-related risks and opportunities.	• Governance - Our Boards's climate roles and responsibilities (see page 28)
	b. Describe management's role in assessing and managing climate-related risks and opportunities.	• Governance - Our management's climate roles and responsibilities (see page 30)
Strategy Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's business, strategy and financial planning where such information is material.	a. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long-term.	• Our climate strategy, risks and opportunities (see page 14)
	b. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	• Our climate strategy (See page 12) • Our strategic focus (see page 15)
	c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	• Scenario analysis is currently reviewed at the Aviva plc level. Refer to Aviva plc's Climate-related Financial Disclosure 2023 - page 13.
Risk management Disclose how the organization identifies, assesses and manages climate-related risks.	a. Describe the organization's processes for identifying and assessing climate-related risks.	• Risk management - Our process for identifying and assessing climate-related risks (see page 26)
	b. Describe the organization's processes for managing climate-related risks.	• Risk management - Our process for monitoring and managing climate-related risks (see page 26)
	c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	• Risk management - Our process for integrating climate-related risks into risk management (see page 25)
Metrics and Targets Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	• Decarbonizing our investment portfolio (see page 18) • Decarbonizing our operations and supply chain (see page 21) • Metrics and targets - Overview of our metrics (see page 33)
	b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas emissions (GHG) and the related risks.	• Metrics and targets - Operational emissions (see page 38) • Metrics and targets - Financed emissions (see page 40)
	c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	• Strategy - Our climate strategy (see page 5 and page 12) • Strategy - Our science-based targets (see page 23) • Metrics and targets - Overview of our metrics (from page 33)

Sustainability is one of Aviva's four strategic priorities

Contents

Our climate strategy

The ways in which the insurance industry could be affected by the climate crisis are diverse and are interconnected with other sustainability issues. Our strategic response focuses on the transition, physical and litigation risk factors and related opportunities.

Climate-related risks

We assess the transition, physical and litigation risks universe before applying materiality. The material, climate-related impacts are defined by Aviva as follows:

- **Transition risks** relate to the business impact resulting from the transition to a low-carbon economy. This may entail extensive policy, legal, technology, and market changes designed to mitigate climate change. As a result, depending on the nature, speed and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organizations.
- **Physical risks** relate to the business impact arising from acute, abrupt and disruptive impacts such as more frequent and intensive storms, extreme heat and cold, floods, droughts and fires, as well as chronic gradual impacts such as higher than average temperatures, rises in sea levels and the spread of vector-borne diseases. The risk includes the effects directly resulting from events, such as damage to property, and those that may arise indirectly through subsequent events, such as the disruption of global supply chains or resource scarcity.
- **Litigation risks** relate to the business impact that could arise from parties who have suffered loss and damage from climate change and seek to recover losses from others who they believe may have been responsible. Where such claims are successful, those parties against whom the claims are made may seek to pass on some or all of the cost to insurance firms under third-party contracts.

In this section we have summarized the material climate-related risks that we are or could be exposed to and the time horizons over which they could manifest.

Climate-related opportunities

We have also summarized the material climate-related opportunities that we are or could become exposed to and the time horizons over which they could manifest.

Transition opportunities to the low-carbon economy are expected to manifest in the short, medium and long-term, therefore it is vital to ensure we are equipped to respond to these opportunities, to provide long-term value to our shareholders.

Our Climate Transition Plan

The initial iteration of our Climate Transition Plan was published in March 2022. This provided information on our climate ambitions and how we could address climate risks and opportunities.

We regularly review our transition activities towards our ambition and expect to publish the next iteration of our Climate Transition Plan in 2025. This will take into account the latest view of methodology and data quality.

Our climate strategy

Time horizons

The materiality and horizons over which climate-related risks and opportunities affect our business depend on the specific insurance products, geographies and investments being considered. For example, Aviva Canada, as a property and casualty insurance business, considers risks in the underwriting and pricing processes and in setting the reinsurance strategy based on a relatively short time horizon (one to three years).

Aviva recognizes that the increased severity and frequency of weather-related losses have the potential to negatively affect our profitability. Consequently, large catastrophic losses are already explicitly considered in our economic capital modelling to ensure resilience to such catastrophic scenarios.

Embedding climate-related planning into the Aviva business planning process

Aviva Canada develops three-year business plans, on an annual basis, to ensure our climate strategy is appropriately translated into operational and financial plans to secure delivery of our short term ambitions and set the path towards our medium term and long term strategic ambitions.

In developing these plans, Aviva Canada will consider the external market context, undertake rigorous prioritization of initiatives, including understanding and evaluating commercial and financial implication and trade-offs, and assess key risks and opportunities.

Draft business plans go through a series of robust local and group level review, and are supported by an opinion from the Chief Risk Officer. The business plan is presented to the Board in November for review and approval.

Aviva uses the following time horizons to classify climate-related opportunities and risks, aligned to our strategy and business plans:

- **Short term - 0 to 3 years:** Risks and opportunities deemed material to our three-year business and financial planning cycle are viewed as short term.
- **Medium term - 3 to 10 years:** Risks and opportunities deemed material to our 2030 ambitions are viewed as medium term.
- **Long term >10 years:** aligned with the SBTi guidance for financial institutions.

Our climate strategy

	Short to medium term	Medium to long term
Climate-related Risks		
Transition risks	**As an Asset Owner:** • Reduction in returns from company investments in highly carbon-intensive companies and sectors, where those companies are not taking action to transition to a low-carbon economy.	**As an Asset Owner:** • Reduction in returns from sovereign holdings where countries are exposed to the transition to a low-carbon economy and are not able to mitigate or adapt and build resilience to these. **As an Insurer:** • Disruption to the general insurance market, for example a move to electric and autonomous vehicles and sharing economy that impact product design and demand as well as affordability of insurance products in some cases.
Physical risks	**As an Insurer:** • Disruption to the general insurance market due to changes in extreme weather that impact product design and demand as well as affordability of insurance products in some cases.	**As an Asset Owner:** • Reduction in returns from company investments due to extreme weather events as well as chronic effects that could impact many different types of companies and sectors, especially those not taking sufficient action to build resilience and adapt to climate change. • Reduction in returns from sovereign holdings where countries are exposed to the physical effects of climate change and are not able to mitigate or adapt and build resilience to these.
Climate-related Opportunities		
Physical opportunities		**As an Asset Owner:** • Enhanced returns on company investments which are resilient to the physical effects of climate change.
Transition opportunities	**As an Asset Owner:** • Enhanced returns on company investments aligned with the transition to a low-carbon economy. **As an Insurer:** • Develop climate-conscious general insurance products and services that support the transition to a low-carbon economy and reward customers for environmentally responsible actions and help to build resilience to climate change.	**As an Asset Owner:** • Enhanced returns on investments in companies developing technological solutions to help mitigate, build resilience and adapt to extreme weather events and chronic effects. • Enhanced returns from sovereign holdings where countries are committed to the transition to a low-carbon economy and are resilient to physical effects of climate change.

Climate-related risks and opportunities and their potential impacts and related metrics depend on access to accurate, verifiable, reliable, consistent and comparable climate-related data. The insurance industry, like other sectors, is grappling with data availability and quality. Aviva is using its influence to source reliable data on time to enable accurate measurement of emissions.

Our strategic focus

To deliver on our climate ambition, we use our influence across our focus areas.

More information about our strategic approach for these areas is set out in the following pages of this section.

Influencing

We use our influence to help drive and lead change across our focus areas.

Decarbonizing our investment portfolio

The emissions from our investment portfolio represent the largest proportion of our overall carbon footprint. As an asset owner we are taking action towards decarbonization.

Insuring the transition

We are developing products and services supporting the transition to Net Zero.

Decarbonizing our operations and supply chain

We are taking action to reduce the environmental impact of our operations and supply chain.

Embedding climate change awareness in our culture

All our employees set a personal sustainability goal as part of the annual goal setting process.
We support our employees in taking action on climate change, including offering sustainability-focused volunteering opportunities.

Influencing

We use our influence to help drive and lead change across our focus areas.

We are committed to pushing for a better tomorrow

At Aviva, we are proud of our leadership role in society and acting on our values. We can control Aviva's operations, but also have influence through the assets that we have stewardship over, alongside the innovations and customers we support via our insurance.

What are we doing to drive the required change?

The climate crisis is a collective problem that necessitates collective action in its solutions. For Aviva, this means we need to lead the way and bring our employees, industry peers and communities on the journey with us. Some of the key actions include:

- Reducing operational emissions.
- Embedding awareness of climate change into our culture.
- Signed up to SBTi initiative and achieved validation of our SBTs in December 2022.
- Switching our company vehicle fleet to electric vehicles and installing EV charge points.
- Committed to improve biodiversity through our Terra Carte Pledge[1] and Finance for Biodiversity Pledge.

We set out here three activities we are particularly proud of:

A. Insurance to enable the transition

Insurance is a key pillar that the financial system is dependent on, giving Aviva some influence on company behaviour and activity. We continue to keep our commitment to not underwrite insurance for companies making more than 5% of their revenue from coal or unconventional fossil fuels, unless they have signed up to SBTi.

B. Influencing systemic change

Aviva takes its responsibility to influence systemic change, to nudge us all towards a just transition. We are doing this globally in many ways, from the innovative financial products we offer in the market, through using our voice in alliances including Glasgow Financial Alliance for Net Zero (GFANZ), Net Zero Asset Owner Alliance (NZAOA), Forum for Insurance Transition to Net Zero (FIT), The Institutional Investors Group on Climate Change, Transition Pathway Initiative and Climate Action 100+.

In Canada, our CEO continues to be a member of the Sustainable Finance Action Council's (SFAC) main Steering Committee. Aviva Canada is also a member of their Disclosure Technical Expert Group. SFAC's primary focus is supporting the introduction and enhancement of climate-related financial disclosures in Canada's private and public sectors and integrating sustainable finance into standard industry practice. In March 2023, SFAC released its Taxonomy Roadmap Report, featuring a framework to establish standardized and science-based definitions of climate-compatible investments in Canada. We believe it's a critical step in securing Canada's competitiveness through the transition to Net Zero.

Further, while the implementation of the new climate reporting requirements will not be without challenge, including availability and robustness of methodology and data, we support the government's move toward mandating federally regulated financial institutions and federally regulated pension plans to issue climate related financial disclosures, per the B-15 requirements, announced by the Office of the Superintendent of Financial Institutions (OSFI) in 2023.

C. Climate Resiliency and Biodiversity

We work with a range of industry and external partners to support our customers and communities across Canada to build greater resilience in the face of climate risk, including:

Institute for Catastrophic Loss Reduction (ICLR)
ICLR is a research hub and produces practical solutions to improve the integrity and function of our physical spaces, to mitigate the risk of damage from natural catastrophes. For example, installing high wind rated shingles can protect your roof from wind storm damage. We continue to work closely with the Institute to share their research and also to encourage the implementation of their recommendations to help customers reduce the likelihood of future losses.

Insurance Bureau of Canada (IBC)
We play an active role in IBC's climate work, focused on large-scale public-policy solutions that can ultimately assist Canadians to minimize climate risk and personal impact. Aviva Canada chairs the IBC's Natural Catastrophe Committee and together with IBC, we have urged the federal government to move forward with a flood insurance pool and national adaptation strategy.

Climate Proof Canada
We are a member of Climate Proof Canada, the IBC-led coalition of stakeholders focused on climate adaptation/resiliency. Climate Proof Canada's members include insurers, environmental NGOs and research groups, municipal representation and Indigenous participation. We were successful in securing a commitment to climate resiliency and advocated

Influencing

for Canada's creation and release of a National Adaptation Strategy that was announced in 2022. We continue to advocate for the federal government to fund the strategy and keep focused on achieving the objectives and targets laid out in the strategy.

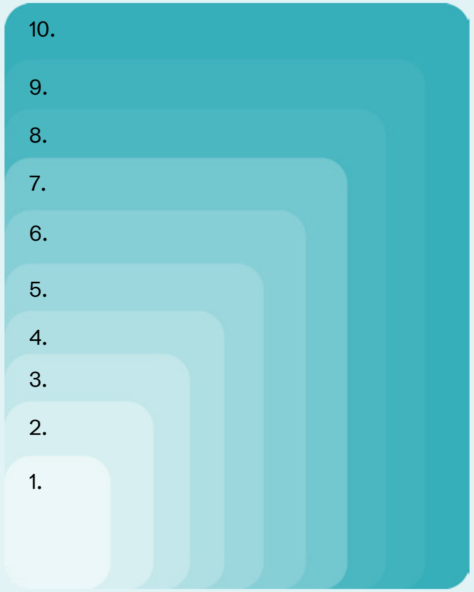
WWF-Canada
Our $3 million investment in WWF-Canada's Nature and Climate Grant Program helps communities and Indigenous organizations restore degraded lands and shorelines and improve habitats. Throughout 2023, we have been collaborating with WWF Canada to help promote protection of biodiversity and nature as a key feature in business agendas by sharing our journey so far and encouraging others on the way.

D. Divesting where necessary

We believe that thermal coal and unconventional fossil fuels should not be part of a low-carbon future and our Aviva Group ESG Investment Baseline Investment Exclusion Policy reflects this. As such, where companies make more than 5% of their revenue from thermal coal mining or power generation or more than 10% of their revenue from unconventional fossil fuel extraction[2] and have not signed up for science-based targets (SBTs)[3], they will not be invested in.

Aviva plc's exposure to thermal coal mining and power generation companies as well as unconventional fossil fuel companies[2] on our Stoplist at the end of 2023 is negligible.

Figure 1: Aviva plc current view of our spheres of influence.



This is our current view of potential spheres of influence and how we might be able to use our influence.

1. Customers and end beneficiaries

We provide insurance coverage to enable the use of green assets such as solar panels and electric vehicles. We can use exclusion lists and choose not to work with high-carbon emitters who are not transitioning.

2. Our business and its influence

Aviva can influence our suppliers and use our purchasing power to demand change.

3. Influence with our peers

Within the alliances we operate we can collaborate and seek to influence collectively companies we invest in and policy decisions.

4. Real asset and infrastructure

As an investor and insurer of infrastructure we can support green innovation as well as excluding fossil fuel projects from our investments and insurance boundaries.

5. Investee and insured companies

We can use our influence as shareholders to vote for climate action. As a major insurer we can choose what we insure and influence our peers to follow suit.

6. International Financial Institutions (IFIs) Issuers

Aviva can partner with issuers to provide multilateral development funding for climate action projects.

7. Sovereign debt

We aim to work with sovereigns e.g. to help encourage participation in international alliances.

8. International Financial Architecture (IFA)

We aim to advocate for systemic rewiring of the IFA to provide specific mandates to all regulators and standards setters to play their role in creating and stewarding an international financial transition plan for Net Zero.

9. Civil society

Advocating for change will gather attention, civil society can demand more

10. Planetary boundary

We are advocating for planetary considerations within regulation and financial markets.

1. Terra Carta is the guiding mandate for the Sustainable Markets Initiative, providing a proposed set of principles to 2030 that puts Nature, People and Planet at the heart of global value creation. More details available at https://www.sustainable-markets.org/terra-carta/
2. The unconventional fossil fuel extraction is limited to companies involved in Arctic Oil and Oil Sands
3. Thermal coal mining and unconventional fuel extraction companies have 18 months from submission to have their SBTs validated, otherwise we will divest and add them to the Stoplist

Decarbonizing our investment portfolio

The emissions from our investment portfolio represent the largest proportion of our overall carbon footprint. As an asset owner, we are taking action towards decarbonization.

The emissions from our investments are captured as part of Scope 3 category 15 reporting under the Greenhouse Gas (GHG) Protocol and is a challenging area of emissions reporting due to lack of mature methodologies and availability and quality of emissions data. As the largest share of our total GHG emissions, we continue to focus on changes in this area while we further develop our reporting capability to support our disclosure.

As an asset owner, we are able to influence the transition to lower carbon economies through our responsible investment approach.

We seek to evolve our investments with a pathway towards Net Zero and therefore consistency with the 1.5°C Paris ambition.

The stark probability of the world reaching the 1.5°C threshold by 2030 means the challenges will be greater and we alongside others in the global economy have to double down on our efforts.

Our success is reliant on governments, companies and society collectively taking action.

Measuring decarbonization success

We are aiming to reduce the carbon intensity of Aviva Canada's investments (currently investee Scope 1 and Scope 2 emissions from credit and equities) by 60% by 2030 from a 2019 baseline.

By the end of 2023, the Scope 1 and Scope 2 weighted average carbon intensity by revenue of our credit and equities (shareholder and with-profits portfolio) reduced by 30% against a 2019 baseline.

We are involved in investments as an Asset owner

As an asset owner, we set the investment strategy to meet customer and shareholder expectations and choose the asset managers to deliver these outcomes.

It takes a range of levers to decarbonize

The first two levers within our investments portfolio decarbonization strategy focuses on reducing our exposure to the most harmful practices through policy and risk management processes, with the final two levers focus on grasping the opportunities arising from transition.

We use the levers across four main areas:

- Divesting where necessary and applying portfolio constraints for high carbon emitting sectors and individual names;
- Allocating capital towards sustainable investment strategies with specific decarbonization outcomes;
- Financing the transition: providing funding to support development of new technology and processes to deliver the transition to low-carbon; and
- Providing products and services for our customers.

Insuring the transition

We are developing products and services supporting the transition to Net Zero.

The insurance landscape will undergo significant changes in the next 30 years, as the transition to a low-carbon economy unfolds. This expected shift outlines an emerging business opportunity. By continuing to grow our understanding of transition pathways across sectors and associated risks, we aim to provide products and risk solutions that support the inevitable transition.

Transition to renewables

One of the biggest challenges is reducing society's reliance on fossil fuels. Aviva no longer offers insurance coverage to firms directly involved in fossil fuels, including:

- The construction of any coal-fired power stations;
- Power generation risks that generate power from coal;
- Any new fossil fuel mining or extraction projects;
- Companies with more than 5% of their revenues directly generated from extracting fossil fuels using conventional methods; and
- Offshore oil and gas rigs and platforms.

Our transition away from fossil fuels is dependent on low-carbon innovations and we can support facilitating new technology through our insurance offerings.

Renewable energy presents complex project risks through solar and wind infrastructure, leading us to expand the technical expertise in our team to ensure we are providing a risk-engineered approach to our product offering. To support this work, in 2023 we took to market, commercial solutions for customer groups across solar, wind, hydro, battery storage and other renewables. We will continue to build on our strategy and are exploring partnerships with brokers in this space along with having dedicated underwriters and expertise. Growing our book will support enabling companies in these industries to support our larger mandate around climate transition.

Further, our EV proposition, introduced in 2022, which includes up to a 10% discount has contributed to a 93% increase in insuring EVs, compared to 2022. We also encourage policyholders who have experienced a total loss to upgrade from a gas-powered vehicle to an EV by offering a subsidy to purchase an EV as part of the settlement.

Transition to more sustainable buildings

In 2023 we have expanded our underwriting appetite in Canada to include engineered timber[1] in commercial developments. Working with contractors, brokers and owners from the design stage, we are helping to increase the resilience and repairability of buildings by using leading risk management strategies to safeguard them from water damage and fire.

We launched two pilots supporting our customers making buildings more sustainable:

- Providing complimentary leak detectors to select customers to prevent water damage claims; and
- Offering employee group plan customers a subsidy for completing a home energy assessment.

Supporting our customers with the risks of extreme weather

While the transition takes place, our customers face increased frequency and intensity of extreme weather events and we continue, where possible, to work with our customers to help them prepare e.g. offering coverage to install risk mitigation devices after a claim, and to 'build back better'.

In 2023, our parametric insurance cover pilot (supported by CelsiusPro) for excess rain was launched with select broker users, with initial offerings of 'Rain Day' and 'Rain Season'. While the former covers against excess rain days during the risk period, the latter offering covers against an excess in cumulative rainfall during the risk period.

We launched Sustainable Property Endorsement with enhanced Build Back Better coverages and reimbursement for getting certification of environmental performance.

We have also started a refresh of our specialist partners network to encourage customers and brokers to identify more efficient, resilient and environmentally friendly loss prevention strategies.

Carbon footprinting of underwriting portfolios

We continue to seek to measure the attributed total emission footprint that comes from underwriting companies using the PCAF Insurance Associated Emissions standard.

We were one of the 16 members of the PCAF Insurance-Associated Emissions Working Group that developed the standard. When methodologies and data are suitability developed and robust, we will provide disclosure in the future.

We will continue to address the challenges in this measurement through advocacy for data quality improvements and more certainty towards the accounting guidance.

Insuring the transition

Claims Management

Claims management executes on the Aviva plc Net Zero operations and Net Zero supply chain ambitions through our Sustainable Claims Management program. We know that we can't achieve these targets on our own, so our program focuses on decarbonizing the claims process through internal collaboration, and engagement of our supply chain and customers.

In 2023, we implemented our supplier engagement strategy, hosting our first annual Net Zero Supplier Summit and piloting our Net Zero Supplier Accelerator program. The Summit brought together over 180 attendees with representation from 78 of Aviva Canada's supplier partners to learn about why they should take Net Zero action and hear from industry leaders in the field of sustainability. The summit featured an additional session for our auto and property suppliers to discuss their unique challenges in reducing emissions and how Aviva Canada can support them on this. Over the two days, 85 individuals from 55 claims supplier organizations participated in the event.

Recognizing that climate action is relatively new for many of our claims suppliers, we engaged seven early-adopters to participate in the pilot program of our Net Zero Supplier Accelerator program. The goal of the program is to provide the education and support our suppliers need to do the hard work of measuring their organizations' emissions, set science-based targets through SBTi and create an action plan to meet those targets. Following the success of the pilot, we plan to roll the program out more broadly in 2024.

Looking to provide our customers with the opportunity to make sustainable choices during their claim, we offered a sample of eligible customers the option to choose to have Aviva Canada make a donation to plant trees in lieu of them taking a rental vehicle during their auto repair. Customers in Alberta in particular demonstrated interest in choosing trees over a rental as they identified with the need to combat deforestation caused by the 2023 wildfire season.

Overall, the devastating impact of climate change on our customers did not let up in 2023 with the widespread floods and wildfires experienced across Canada, resulting in 16 catastrophic events and 7,900 claims.

To respond to the increased frequency and severity of weather-related catastrophes, we formed a dedicated catastrophe response team within our claims operation. This team understands the unique challenges of dealing with claims resulting from catastrophes and were there, on the ground to support our customers when their lives had been turned upside down by these events.

1. Engineered timber, also called Mass timber, Cross Laminated Timber (CLT) and Glulam, are wood products that have been manufactured and bonded together to form a composite material, panel or building system

Additional links

Aviva expands underwriting appetite to include engineered timber for commercial buildings

Decarbonizing our operations and supply chain

We are taking action to reduce the environmental impact of our operations and supply chain.

Our supply chain includes suppliers to Aviva's operations and suppliers who provide goods and services in support of the claims process.

Operations

We are reducing our environmental impact in many ways, including through energy efficiency via use of technology and digital communications, and minimizing the carbon intensity of our vehicle fleet. We aim to have Net Zero operations by 2030 and have now achieved our 2025 commitment to use 100% renewable electricity by 2025 (aligned to the RE100 commitment[1]).

We are also working with our supplier partners to help decarbonize our supply chain.

Renewable energy and emission reductions

During 2023, we confirmed that 100% of the 2022 electricity used by Aviva's operations was from certified renewable sources.

Therefore we have achieved RE100 earlier than previously planned. We will continue to explore available renewable energy supply options including investment in self-generation projects, direct power purchase agreements with generators, peer-to-peer energy trading and working with our existing supply partners to drive market innovation.

We have an SBTi target to reduce Aviva's Scope 1 and Scope 2 operational emissions by 90% by the end of 2030 from a 2019 baseline.

Clean energy

We plan to install solar panels at our Oakville, Ontario office in 2024. This will provide our Oakville office with self-generated renewable electricity.

Data-driven abatement

We are currently working to further identify and abate the emissions across our estate that are more challenging to eliminate. We are working with our landlords to co-invest in energy efficiency, renewables and emission reduction projects.

We are continuing decarbonization initiatives to determine actions needed to identify and reduce emissions from our buildings to reduce energy wastage.

Continual improvements are being made in the day-to-day management of our offices to reduce energy consumption.

In 2023, light sensors were installed in our Oakville office and light harvesting was turned on in our Markham office to reduce energy consumption.

Building blocks

In December 2023, we moved into our new Vancouver, BC office space at 475 Howe Street.

This new office has a LEED Platinum certification which translates to 50% reduction in energy consumption and 85% reduction in carbon emissions for a building of comparable size.

The building features include, hydronic heating and cooling, geo-exchange thermal regulators, solar thermal panels, triple-glazed curtain wall envelope and windows and solar shade louvers.

Vehicle Fleet

We have committed to moving our vehicle fleet to electric EV or plug-in hybrid electric vehicle (PHEV) by the end of 2027 in Canada, via EV100[2]. In Canada, 13% of the vehicles in our vehicle fleet (of c.198) are now EV/PHEV. Our EV100 ambition is that all new vehicles will be PHEV or battery-powered electric vehicle (BEV) and we will be replacing the diesel/petrol/self-charging hybrid vehicles as necessary, with either a PHEV or BEV as part of our individual lease renewal or new order process.

We have 87 electric vehicle charging points at seven office locations. Through ongoing collaboration with our landlords we are looking to increase the numbers of charging stations at our offices.

1. RE100 is the global corporate renewable energy initiative bringing together hundreds of large and ambitious businesses committed to 100% renewable electricity
2. EV100 is Climate Action's global initiative to accelerate the transition to EVs

Decarbonising our operations and supply chain

Supply Chain Engagement

Engaging with suppliers, including those suppliers who support our claims management processes, on reducing emissions is key to achieving our ambitions. Aviva Canada hosted our first Canadian Net Zero Supplier Summit in April 2023 with over 180 attendees, and representation from 78 of our supply chain partners. The Summit served to give an update on our Net Zero agenda, drive action and provide opportunities for education and collaboration. We further demonstrated our commitment to supplier engagement by collaborating with an external sustainability consultant to design an education program to enable our suppliers to measure their companies' emissions and make a commitment to the SBTi. This program was successfully piloted to 10 suppliers between Q2-Q3 2023.

Accounting for homeworking

Our operational carbon emissions methodology calculates the emissions produced per employee, which includes the emissions from homeworking to reflect our hybrid operating model. As this methodology is still nascent and is based on a number of assumptions we have not included these emissions in Aviva's operational carbon footprint.

This year we have used UK Government Department for Energy Security and Net Zero (DESNZ) emission factors; applying them to our Canadian business in the absence of comparable local factors. We estimate these emissions equate to 971 tonnes of CO_2 equivalents (tCO_2e) for our business. The primary driver for the increase in homeworker emissions in the period was the transition to using the DESNZ emissions factors, which incorporates higher assumed energy usage from homeworking relative to the methodology applied in the prior period.

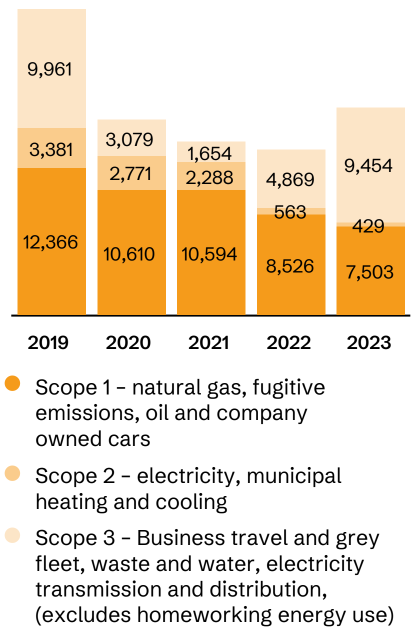
Reducing our environmental footprint

In 2019, Aviva Canada eliminated single-use plastics from our operations. However, due to COVID-19 through 2021 and 2022, we reintroduced a limited amount of single-use plastic for health and safety reasons. In 2023 we've made progress towards eliminating single-use plastic from our offices. An initiative that had significant impact was installing water dispensing machines in all our Canadian offices, saving c.150,000 water bottles (500ml) We also rolled out a waste bin removal project which removed over 100 bins from our offices. This initiative helped to consolidate and reduce waste in our buildings.

Operational emissions

Scope 3 emissions have increased compared to 2022 principally as a result of business travel increasing. In an effort to decrease air travel emissions, we partnered with VIA Rail Canada to promote and incentivize rail travel as a sustainable business travel option on routes between Montreal, Ottawa, and Toronto.

Figure 2: Aviva plc absolute operational carbon emissions tCO_2e.



Improving offsetting transparency

Aviva has been carbon neutral in our business operations since 2006, through the purchase and retirement of carbon reduction credits from the voluntary carbon market. We are continuing to maintain the carbon neutrality of our operations through use of reduction credits (representing the residual carbon dioxide equivalent that is avoided from being emitted into the atmosphere) through to 2030.

Nature-based carbon removal partnerships

Nature-based solutions work with nature to remove carbon from the atmosphere by improving habitats and biodiversity. Globally, Aviva plc has pledged c.£100 million to supporting nature-based carbon removal projects.

In 2023, as part of Aviva plc's first nature based carbon-removal partnership in Canada, Aviva plc pledged c. $6.2 million to our work with Wild + Pine, who develop verified carbon removal assets through afforestation to achieve climate goals.

The partnership will run for 12 years and aims to help restore landscapes and improve biodiversity in the region. The partnership will work on a project called StoneWoods Forest Carbon which, covers c.520 hectares of land in Alberta. It is estimated by Wild + Pine that the project aims to sequester nearly c.275,000 tonnes of carbon over c.60 years while supporting regional biodiversity, including enhancing valuable habitat for many local species.

Our science-based targets

We use SBTs, which were validated by the Science-Based Targets initiative in December 2022, to support tracking our progress against our ambitions. Our SBTs, along with our progress in 2023 are set out below.

Climate focus area	Aviva plc science-based target	Metric	Progress against target
Decarbonizing our supply chain	Aviva plc, commits to 70% of its suppliers by spend, covering purchased goods and services, setting SBTi validated targets by the end of 2025	% of suppliers by spend covering purchased goods and services that have validated SBTs	At December 31, 2023 35% of suppliers by purchased spend had validated SBTs
Decarbonizing our investment portfolio	Aviva plc commits to 33% of its corporate equity, bonds and loans portfolio by invested value setting SBTi validated targets by the end of 2025	% coverage corporate equity, bonds and loans by SBTi approved companies (weighted average)	At December 31, 2023 37% of corporate equity, bonds and loans portfolio had validated SBTs
Decarbonizing our investment portfolio	Aviva plc commits to reduce its real estate investment portfolio GHG emissions 57% per square metre within its real estate by 2030 from a 2019 baseline	% reduction in real estate portfolio GHG emissions per square metre (m^2) from 2019 baseline	At December 31, 2022[1] there was a 20% reduction compared to the 2019 baseline
Decarbonizing our investment portfolio	Aviva plc commits to continue providing electricity generation project finance for only renewable electricity until the end of 2030	Number of non-renewable electricity generation project finance projects financed (baseline is nil)	Nil non-renewable electricity generation project finance projects financed up to December 31, 2023
Decarbonizing our operations	Aviva plc commits to reduce absolute Scope 1 and Scope 2 own operational emissions by 90% from a 2019 baseline by the end of 2030	% reduction in absolute Scope 1 and 2 emissions from 2019 baseline	At December 31, 2023 there was an 50% reduction in Scope 1 and Scope 2 emissions compared to the 2019 baseline

The targets and coverage percentages related to decarbonizing our investment portfolio include all in-scope external customer assets managed under discretionary mandates. The target setting process for our SBTs led to us including external assets under discretionary mandates, alongside the assets recognized in the Group's Statement of Financial Position. Due to data limitations and methodology gaps we are currently unable to report on financed emissions associated with investments managed under discretionary mandates. Therefore progress reported above has been calculated excluding these mandates from the baseline and the 2023 results.

In addition to these targets, Aviva plc also have targets as part of our membership of the Net Zero Asset Owners Alliance (NZAOA). Progress against these targets is outlined in note 7 of the Aviva plc Climate-related Financial Disclosure 2023 report.

1. Reflects the 2022 carbon intensity per square metre compared to the 2019 baseline.

Our approach to climate risk is embedded in our risk management framework

Contents

Risk management

A rigorous and consistent risk management framework is embedded across Aviva.

Aviva's risk management framework sets out how we identify, measure, monitor, manage and report on the risks to which our business is, or could be, exposed to (including climate and other sustainability related risks). As such we ensure climate considerations are part our risk processes, including risk opinion and Own Risk and Solvency Assessment (ORSA); and all relevant functions meet Aviva's standards and frameworks, including climate-related controls.

Our process for integrating climate-related risks into risk management

Aviva considers climate change to be a significant risk to our strategy, business model, customers and wider society. Its impacts are already being felt.

Therefore, we are acting now through our Sustainability Ambition to mitigate and manage its impacts both today and in the future. Through these actions, we continue to build resilience to climate-related transition, physical and liability risks.

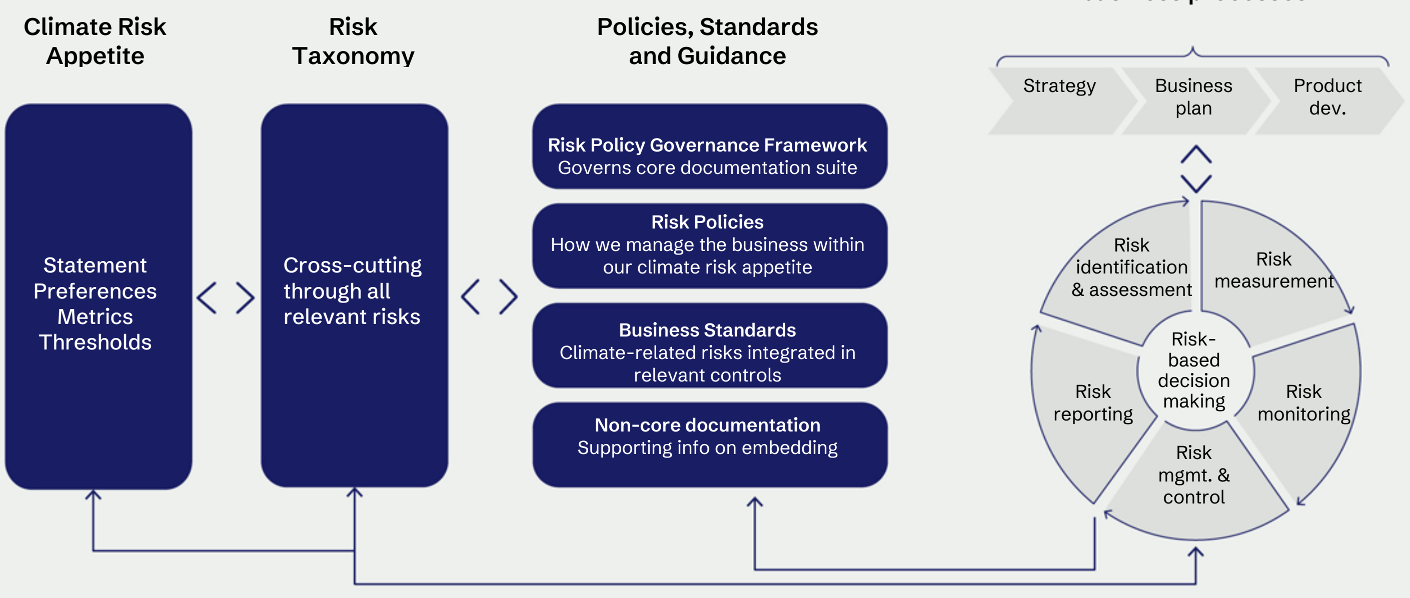
Climate and other sustainability risks are part of our risk policies[1] and our business planning instructions. Through this framework (see figure 1), we identify, measure, monitor, manage and report on climate-related risks.

Aviva Canada's Sustainability Ambition is reflected in our business plan as well as our risk management and risk appetite frameworks. Climate considerations are part of decision-making and are also included in our Senior Management Annual Bonus plan.

In 2023, we continued to build our climate risk capability, further integrating it into our risk management and risk appetite frameworks. We've developed guidance, metrics, and targets, to support better understanding and monitoring as well as ensure climate-related risks and opportunities are embedded in our day-to-day decision making in line with our climate risk appetite. This includes updates to our risk policies (including our risk management and risk appetite frameworks as well as our ORSA policy), relevant business standards (such as asset liability management, strategy, and sustainability), guidance, and instructions to reflect climate-related risks, opportunities and implications on multiple parts of our business.

1. Including our Risk Management Framework, Financial Risk Policy, GI Risk Policy, Operational Risk Policy, Risk Appetite Framework as well as our ORSA policies

Figure 1: Aviva's Risk Management Framework



Risk management

Our process for identifying and assessing climate-related risks

We use our risk identification process to identify potential exposure to climate-related transition and physical risks that arise due to external factors such as new climate policies or increase in average temperatures.

We then conduct exposure analysis to understand how these risks will impact our most material exposures. We map emerging risks and trends on our emerging risk spectrum according to the nature and size of their impact to assess their materiality, which dictates the prioritization for management action and reporting necessary. This is primarily a qualitative assessment informed by quantitative indicators.

We are already taking the impact into account in our internal model for some risk drivers over a one-year time horizon. We are also acting now through Aviva's Sustainability Ambition to mitigate and manage its impacts both today and in the future. Through these actions, we continue to build resilience to climate-related transition, physical and liability risks.

Our process for monitoring and managing climate-related risks

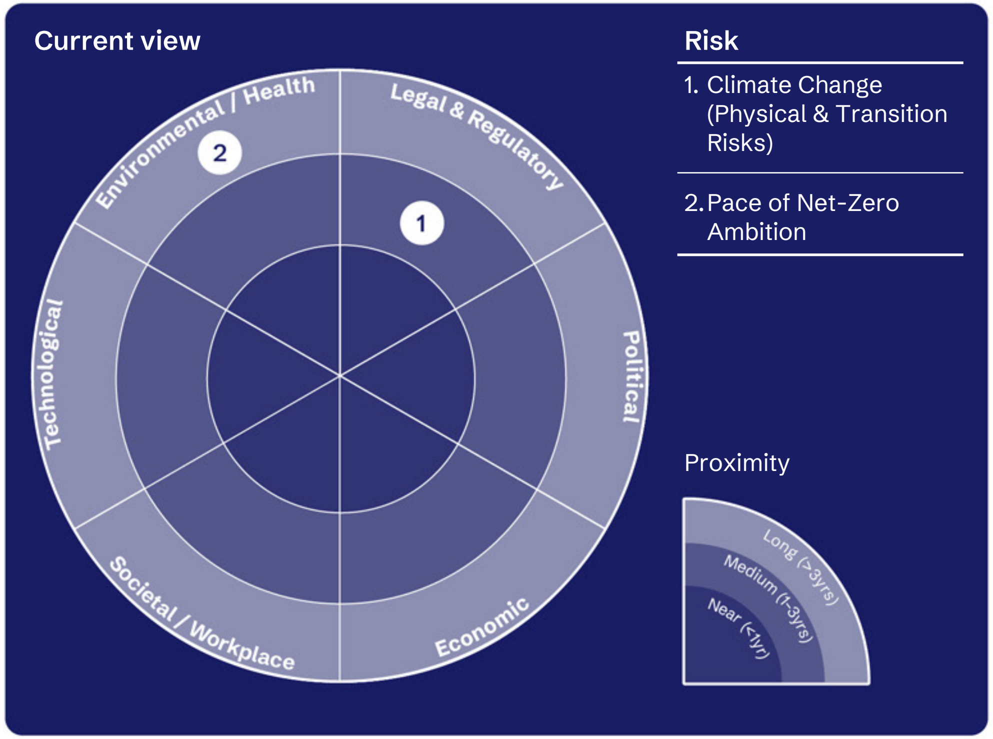
We use a variety of metrics to monitor and manage alignment with targets on climate change mitigation and the potential financial impact on our business, including operational carbon emissions, financed emissions, investment in sustainable assets, and weather-related losses. These measures allow Aviva to identify, measure, monitor, manage and report on the climate-related risks to which our business is, or could be, exposed to.

The Aviva Canada Board is ultimately responsible for risk oversight. It approves Aviva Canada's risk appetites annually and monitors the establishment and operation of prudent and effective controls in order to assess and manage the risks associated with the operations. The Risk Committee is responsible for assisting the Board in its oversight of risk profile, reviewing non-financial risk appetites and effectiveness of the risk management framework. The Risk Committee also reviews and recommends to the Board for approval, the Company's exposure in managing financial and non-financial risks from sustainability and climate change.

Our process for reporting climate-related risks

The Chief Risk Officer (CRO) of Aviva Canada sets the aggregate climate Red, Amber, Green (RAG) status each reporting period based on overall progress made to date as well as the trend to achieve targets, not purely based on a quantitative assessment of individual metrics. There is regular monitoring for metrics supporting the climate risk appetite and actions are outlined, should these be required, to maintain climate risk within appetite.

Figure 2: Risk Spectrum



Governance for climate risk is embedded in Aviva’s governance framework

Contents

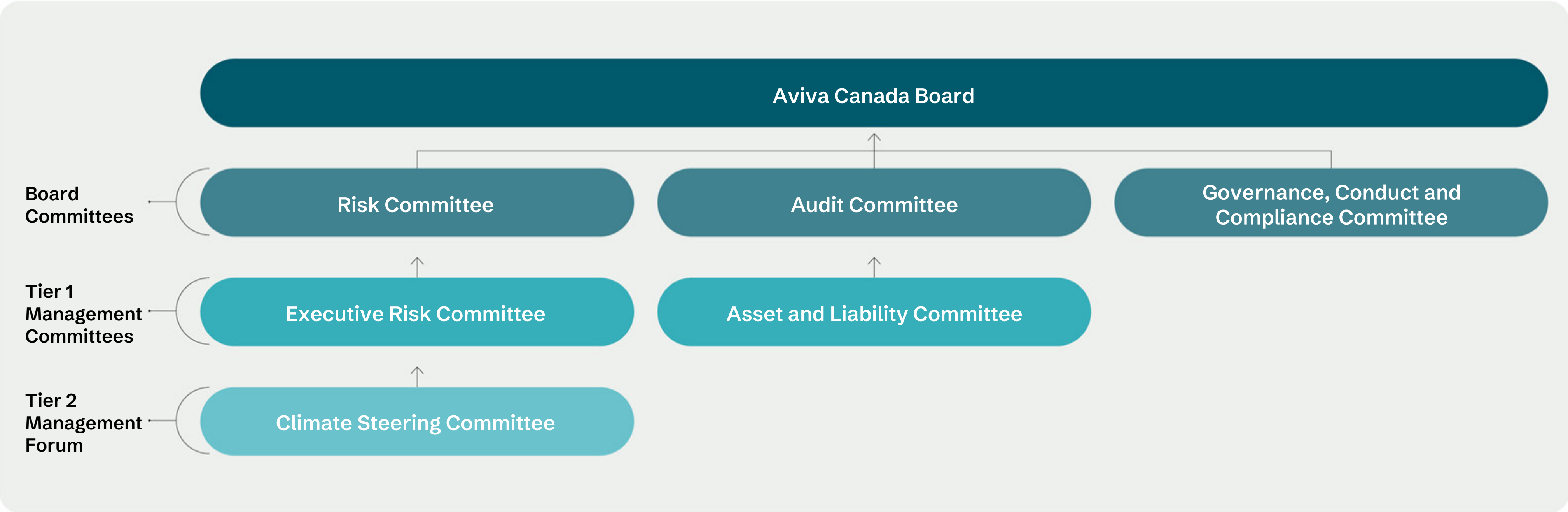
Governance

A strong system of governance throughout Aviva Canada is essential to achieving our purpose and delivering our strategy.

Aviva Canada endeavours to have a strong system of governance, with effective and robust controls and we are embedding the consideration of climate change across our organization. We have integrated climate into our risk appetite framework, defined our climate risk preference and incorporated climate risks into our business plans, to facilitate risk-based decision-making.

The governance is proportionate to the nature, scale and complexity of the operations across our business. It allows the Board and its committees, management committees and senior leadership to integrate climate-related risks and opportunities into our strategy, decision making and business processes.

In 2023, through effective collaboration across Aviva as well as clear roles and responsibilities, we continued to build our climate and other sustainability risk capability and methodology to further identify risks and opportunities and improve our risk management and risk appetite frameworks. The governance structure, primary committees and their respective roles and responsibilities are summarized below. Our sustainability team provides advisory services internally.



Governance

Roles and responsibilities of our Aviva Canada Board and Committees

Board and Sub-Committees

Board

The Aviva Canada Board is responsible for promoting the long term success of the Company for the benefit of the members as a whole.

It provides leadership of Aviva Canada within a framework of prudent and effective controls which enables risks (including climate-related risks and opportunities) to be assessed and managed and so would oversee financial risks from climate change within the overall business strategy and risk appetite.

Risk Committee

The Risk Committee reviews and recommends to the Board for approval the Company's exposure in managing financial and non-financial risks from sustainability and climate change.

Audit Committee

The Audit Committee assists the Board in its oversight of financial reporting and controls over financial reporting including climate-related financial and non-financial disclosures.

Management Committees

Climate Steering Committee

This Climate Steering Committee's purpose is business-wide delivery of our climate ambition, which includes identifying, assessing, and managing climate-related risks and opportunities. Key responsibilities include:

a. Review and drive consistent progress against strategic deliverables and key performance indicators (KPI's).

b. Provide strategic direction on the delivery of the Net Zero ambition.

Monitor the program delivery performance; including outcomes and benefits, deliverables, costs, execution progress, risks/issues, dependencies and escalations.

Asset and Liability Committee

The Asset and Liability Committee (ALCO) supports the Chief Financial Officer to ensure we optimize opportunities to make best use of capital while ensuring there is appropriate oversight in relation to the management of financial and insurance risks. ALCO's mandate includes responsibility to review and approve climate-related financial disclosures.

Executive Risk Committee

The purpose of the Executive Risk Committee (ERC) is to provide oversight, challenge, support and advice on the risk profile and exposures of Aviva Canada in line with the applicable risk appetite framework and regulatory requirements that includes providing formal oversight of Aviva Canada's risk appetites and risk strategy and the effectiveness of the supporting control framework.

In line with the requirements of the Risk Management Framework Policy, the committee sets, monitors, and reviews Aviva Canada risk appetites (including Climate).

Governance

Management's climate roles and responsibilities

Chief Executive Officer (CEO) is accountable for:

- Compliance with legal, regulatory, corporate governance, social, ethical, and environmental principles.
- Ensuring that climate-related risks and opportunities, as well as, where relevant, other sustainability risks are considered as part of the investment, underwriting, product design, pricing and claims processes through clearly defined roles and responsibilities in regard to climate risk.
- Identifying and managing the financial risks from climate change and the development and oversight of Aviva's Sustainability Ambition execution.

Chief Financial Officer (CFO) is responsible for:

- Advising the Board on our exposure to the financial risks arising from climate change – including how these risks impact our strategy and business model – and assisting the Board with monitoring these risks.
- Assisting the Board with developing and maintaining an appropriate approach to disclosure and regulatory reporting of the financial risks from climate change.
- Producing and monitoring the key measures within the climate risk appetite (quarterly) and against plan.

Chief Risk Officer (CRO) is responsible for:

- Annual review and approval of climate risk appetite, alongside other financial and non-financial risk appetites. Review and challenge, where appropriate, the risk monitoring processes put in place by the management and the conclusion drawn from these processes to ensure that these will provide sufficient insight to effectively manage the risks within the business.
- Ensuring climate-related risks and opportunities are identified, measured, monitored and managed through our risk management framework and in line with our risk appetite.
- The embedding of climate-related risks and opportunities is integrated into our business as-usual activities across our three lines of defence. Leadership teams across Aviva Canada are responsible for managing those areas of the business which may affect or be affected by climate change.

Regulatory developments

There is a significant regulatory development that will impact our climate-related reporting in 2025 and beyond.

The Office of Superintendent of Financial Institutions (OSFI) published the Climate Risk Management (Guideline B-15) in March 2023.

The guideline outlines OSFI's expectations for Federally Regulated Financial Institutions (FRFIs) to manage climate-related risks and develop resilience and provides principles-based expectations related to the management of climate-related risks with the aim of FRFIs developing greater resilience and management of these risks. The guideline is effective for Aviva Canada for the fiscal year 2025.

As such, it impacts our reporting, monitoring and management of climate-related risks.

OSFI expects FRFIs to achieve three outcomes by complying with the guideline:

- understand and mitigate against potential impacts of climate-related risks to its business model and strategy;
- have appropriate governance and risk management practices to manage identified climate-related risks; and
- remain financially resilient through severe, yet plausible, climate risk scenarios.

The guidance emphasizes the importance of understanding, managing, and mitigating the potential impacts of climate-related risks on FRFIs' business models and strategies to ensure financial and operational resilience. It also highlights the need for continuous improvement in governance, risk management practices, and financial disclosures related to climate risks.

For regulatory developments affecting Aviva globally, refer to Aviva plc Climate-related Financial Disclosure 2023

Our metrics assess climate-related risks and opportunities

Contents

Our climate metrics

Overview of our metrics

We use the following core metrics to measure the potential financial impact of climate-related risks and opportunities on our business and to measure our Scope 1, Scope 2 and Scope 3 emissions, as well as to track overall progress including against our ambitions and initiatives, recognizing that they may have different boundaries. See note 8 for our reporting criteria for these metrics.

As noted in Table 1, we're disclosing three local Aviva Canada metrics: Weighted average carbon intensity by revenue (WACI-R), Investment in sustainable assets and Weather-related losses. Operational carbon emissions and Financed emissions, while disclosed, are presented on an Aviva Group-wide basis.

Table 1: Core climate metrics

Decarbonization area	Climate Metric	Overview	Physical/Transition Risk or Opportunity	Scope	External Data Provider (where relevant)	Note Number
Operations	Operational carbon emissions	Measure the operational carbon emissions in tCO_2e. This covers Scope 1, Scope 2 and certain categories of Scope 3.	Transition	Aviva Group-wide, including subsidiaries	Department for Energy Security & Net Zero (DESNZ), International Energy Agency (IEA)	Note 4
Asset Owner	Financed emissions[1]	Attributed emissions and intensity data of our investments. This covers Scope 3 category 15 - Scope 1 and 2 of the investee companies.	Transition	WACI-R: Aviva Canada General insurance business Financed emissions: Aviva Group-wide including subsidiaries	MSCI[1]	Note 5
Asset Owner	Investment in sustainable assets	Measure Aviva's investment in assets and funds which meet the sustainable asset definition.	Opportunity	Aviva Canada General insurance business	Climate Bonds Initiative (CBI)	Note 6
Underwriting activities	Weather-related losses	Actual weather-related losses versus expected losses by year and business unit and weather impact on Aviva's Combined Operating Ratio (COR).	Physical	Aviva Canada General insurance business	N/A	Note 7

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These metrics are used in various processes from monitoring risk appetite to business planning to measuring progress against our Net Zero ambition. While recognising the limitations of the metrics (e.g. scope of coverage, data availability and extended time horizons as well as the uncertainty associated with some of the underlying assumptions), we believe they are valuable in supporting our climate-related governance, strategy and risk management. We utilize internal data, as well as external data sources and providers, to produce the climate metrics. Further information on the reporting policies for each metric is included in the reporting criteria, see note 8.

All percentages and totals are calculated on unrounded numbers so minor rounding differences may exist.

Climate reporting policies

Aviva Canada (the Company) has adopted climate reporting policies aligned to those of Aviva plc (the Group), a public limited company incorporated and domiciled in the United Kingdom (UK).

The principal reporting policies adopted in the preparation of the climate metrics are set out below. These policies have been consistently applied to all years presented, unless otherwise stated. The metrics provided cover the 2023 financial year (January 1, 2023 to December 31, 2023). Unless otherwise noted, the amounts shown in the Climate-related Financial Disclosure are in millions of Canadian Dollars ($m).

Comparatives

Comparative numbers included are consistent with our Climate-related Financial Disclosure 2022 except as outlined in note 1, which describes the changes to comparative information.

Emissions are reported using the most recent data available. Typically this means that both estimated and reported emissions will be based on data that is at least one year in arrears, for example the majority of our 2023 financed emissions will be based on 2022 information reported by investees in 2023. Comparative information will continue to reflect this lag in the data.

Reliance on third parties for data

Climate metrics are more uncertain than, for example, historical financial information. Climate metrics often place significant reliance on estimates of emissions, and even where reported emissions are available this data is often itself based on underlying estimates. Metrics are therefore susceptible to variation year on year. These limitations apply to Scope 1 and Scope 2 metrics for our investments but are compounded for Scope 3 emissions of our investments and underwriting. Scope 3 information is less widely reported, less consistent, and is typically subject to even greater levels of estimation uncertainty and lower data quality scores. In addition, reporting at a portfolio level introduces significant double-counting of emissions.

Note 8 outlines the source of data used to calculate the climate-related metrics included within this report, noting that the data source varies by asset class and metric type.

Consolidation principles

Aviva plc subsidiaries are those entities over which the Group has control. Associates and joint ventures are entities over which the Group has significant influence but not control, consistent with the definitions used for financial reporting purposes.

Consolidation procedure

Where material, comparative information is re-presented to reflect changes in the Group's reporting perimeter as a result of acquisitions and disposals of subsidiaries, joint ventures and associates.

Associates and joint ventures are included within financed emissions metrics at Aviva's ownership share.

The metrics include the amount invested through our shareholder, with-profits and policyholder funds, excluding amounts attributable to external unitholders.

Due to the developing nature of climate data and reporting, it is not currently possible to report climate metrics for all of the in-scope assets in the Groups's portfolio. A coverage percentage is provided which outlines how much of the total in-scope assets are currently measured within the climate metrics.

Materiality

Climate-related financial disclosures, include a range of topics that we believe are relevant to our businesses and that are of interest to our investors and other stakeholders. we apply materiality based on the applicable rules and regulations governing Aviva plc public reporting in the UK, including consideration of our interactions with our stakeholders, society, the economy and the natural environment throughout our value chain.

In our climate-related disclosures, we have been guided by the same approach to materiality, to which we have applied additional consideration of short term, medium term and longer-term time frames that reflect the time horizon of our climate ambitions, alongside broader considerations, including but not limited to, the nature of the disclosure, metric and the level of estimation involved.

These time frames are longer than those time frames customarily used in some of Aviva plc's other disclosures, including annual and interim financial reports submitted to the London Stock Exchange ("LSE") in the UK.

This approach to materiality means that this report, and many of our climate-related disclosures, including with respect to climate-related risks and opportunities, include certain information not included in LSE filings. Statements made in this report and in our other disclosures use a greater number and level of assumptions and estimates than many LSE filings. These assumptions and estimates are subject to change, particularly when projected over the longer time frames used. In applying materiality we take a holistic view taking into account both quantitative and qualitative factors when determining the information that is important in communicating our sustainability and climate strategic ambitions to stakeholders.

Climate reporting policies

In addition, our climate risk capabilities and Net Zero transition strategy and plan remain under development, and the data underlying these and market practice in relation to such disclosures will evolve over time.

As a result, we expect that certain disclosures made in this report are likely to be amended, updated, recalculated and re-presented in the future.

Greenhouse gas emissions

The GHG Protocol establishes a comprehensive global standardized framework to measure and manage GHG emissions. This framework underpins the measurement of emissions in the TCFD metrics. GHG emissions used for the TCFD metrics are aligned to the GHG Protocol. This includes the seven greenhouse gases covered by the United Nations Framework Convention on Climate Change (UNFCCC)/Kyoto Protocol, carbon dioxide (CO_2), methane (CH4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). We do not include biogenic carbon dioxide[1] emissions (CO_2) in our reporting.

The GHG Protocol requires reporting by scopes:

Scope 1 emissions
Direct emissions from company-owned assets and controlled sources e.g. emissions from Aviva offices.

Scope 2 emissions
Indirect emissions released in production of electricity, steam, heating or other energy purchased by the company

Scope 3 emissions
Indirect emissions produced along a company's entire value chain

Reporting criteria

The reporting criteria for the metrics included in notes 3 to 7 are included in note 8.

Independent assurance

AR Indicates that this metric was subject to independent reasonable assurance by PricewaterhouseCoopers LLP ('PwC')

For the results of that assurance, see the assurance report on page 60 as well as Aviva plc 2023 Reporting Criteria Independent Assurance section.

1. Emissions from a stationary source directly resulting from the combustion or decomposition of biologically based materials other than fossil fuels

Our climate metrics

Note 1 - Changes to metrics and comparative amounts

As outlined in tables 1 though 3, we have included the updates made to comparatives since those published in Aviva Canada's Climate-related Financial Disclosure 2022 and Aviva plc Climate-related Financial Disclosure 2022.

Operational emissions

Aviva plc has adopted International Financial Reporting Standard (IFRS) 17 Insurance Contracts from January 1, 2023. As a result the Group's revenue-based operational intensity measure has been updated to include revenue from insurance contracts and participating investment contracts on an IFRS 17 basis. Previously calculated based on gross written premiums (GWP), it is now calculated based on insurance revenue and fee and commission income ('total income'). Comparatives have been re-presented to be on a consistent basis.

Table 1: Changes to Aviva plc operational emissions comparatives

Metric name	As previously published 2022	Re-presented 2022
Operational emissions impacts[1]:	tCO_2e/GWP	tCO_2e/Total income
Scope 1 and Scope 2 market-based revenue intensity	0.48	0.50
Total market-based revenue intensity	0.74	0.77
Scope 1 and Scope 2 location-based revenue intensity	0.86	0.90
Total location-based revenue intensity	1.12	1.17

1. The operational emissions revenue intensity metrics reflect the impact of changing the denominator from GWP to total income

Financed emissions

Consistent with including more asset classes where methodology and data allows, Aviva plc have expanded the financed emissions metric to include additional asset classes this year, including infrastructure debt, commercial real estate mortgages, equity release mortgages and direct real estate. Absolute emissions and carbon intensity is presented for each asset class for 2023 and the comparatives for 2022. Total absolute financed emissions for 2022 have been re-presented to include these new asset classes in the total.

Table 2: Changes to Aviva plc 2022 absolute emissions comparatives

Metric name	As previously published 2022	Re-presented 2022
Financed emissions impacts (in thousands):		
Absolute emissions[2]	7,010 attributed tCO_2e	7,879 attributed tCO_2e

2. The increase in absolute emissions of 869 thousand tCO_2e reflects the inclusion of additional asset classes

Weighted average carbon intensity by revenue (WACI-R)

The WACI-R metric previously published in Aviva Canada's 2022 Climate-related finance disclosure, has been re-presented as a result of improved data coverage. This was due to additional emissions data for investments not previously available for historic periods.

Table 3: Changes to Aviva Canada 2022 WACI-R comparatives

Metric name	As previously published 2022		Re-presented 2022	
Financed emissions impacts:				
	Data Coverage %	tCO_2e/USD\$m	Data Coverage %	tCO_2e/USD\$m
WACI-R	87 %	50	89 %	84

Note 2 - Exchange rates

The pounds sterling exchange rate is presented for conversion from Aviva plc's base currency to Canadian dollar. The US dollar exchange rate is presented as certain climate input data uses a US dollar basis. The rates used are set out in table 4 below.

Table 4: Exchange rates

	2023	2022	2023	2022
	United Kingdom (£GBP1 equals)		United States ($USD1 equals)	
Average rate	**1.68**	1.61	**1.35**	1.30
Year end rate	**1.69**	1.64	**1.33**	1.35

Our climate metrics

Note 3 - Scope 3 emissions reporting

Scope 3 emissions are indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions. We are engaged with regulators, industry bodies, alliances and companies across multiple sectors to develop consistent and standardized frameworks and approaches to calculate Scope 3 emissions. Aviva does not engage in all activities linked to the categories as defined under Scope 3 and furthermore, we are at varied degrees of maturity in terms of establishing methodologies and basis to calculate Scope 3 emissions. Table 1 below sets out Scope 3 emissions by category . We have also included Table 2 which sets out total Aviva plc operational emissions (including Scope 1 and Scope 2) and financed emissions.

Table 1: Scope 3 emissions by category

	Categories	Relevance	Section reference category included in
Upstream Activities	1. Purchased goods and services	Applicable	Not reported - methodology under development
	2. Capital goods	Applicable	Not reported - methodology under development
	3. Fuel and energy related activities	Applicable	Note 4 - Operational emissions
	4. Upstream transportation and distribution	Not applicable	Not applicable
	5. Waste generated in operations	Applicable	Note 4 - Operational emissions
	6. Business travel	Applicable	Note 4 - Operational emissions
	7. Employee commuting	Applicable	Note 4 - Operational emissions (partial reporting)
	8. Upstream leased assets	Not applicable	Not applicable
Downstream Activities	9. Downstream transportation and distribution	Not applicable	Not applicable
	10. Processing of sold products	Not applicable	Not applicable
	11. Use of sold products	Not applicable	Not applicable
	12. End-of-life treatment of sold products	Not applicable	Not applicable
	13. Downstream leased assets[1]	Not applicable	Not applicable
	14. Franchises	Not applicable	Not applicable
	15. Investments	Applicable	Note 5 - Financed emissions[1]

Table 2: Aviva plc emissions summary

		2023			2022 (re-presented)[2]		
tCO_2e shown in thousands	Note	Scope 1 & Scope 2	Scope 3	Total	Scope 1 & Scope 2	Scope 3	Total
Operational emissions[1]	4	**15**	**9**	**25**	16	5	21
Financed emissions[1,3]	5	**—**	**8,788**	**8,788**	—	7,879	7,879
Total operational and financed emissions reported by Scope		**15**	**8,797**	**8,813**	16	7,884	7,900

Footnotes for note 3:
1. Operational carbon emissions and Financed emissions are reported on an Aviva plc basis, which includes Aviva Canada.
2. The 2022 comparative results have been re-presented from those previously published to include additional asset classes. See note 1 for further details.
3. Financed emissions include Scope 1 and Scope 2. This is included under Scope 3 in the table above as it relates to Scope 3 category 15.

Our climate metrics

Note 4 - Operational carbon emissions

Operational carbon emissions are reported on an Aviva plc basis. Aviva's reported environmental data follows the World Resources Institute and World Business Council on Sustainable Development's GHG Protocol Corporate Standard.

Reporting criteria

This note should be read in conjunction with the Climate reporting policies and note 8.

Approach and methodology

Aviva takes the operational control approach to operational carbon emissions reporting. This means we account for 100% of emissions from operations over which we have operational control (Aviva plc and its subsidiaries).

Aviva's operational GHG emissions includes Scope 1 and Scope 2 from owned sources and selected Scope 3 non-owned emissions (categories 3, 5, 6 and 7).

As we do not have operational control over our joint venture based in China, emissions are excluded from operational emissions and have been included in Scope 3, category 15, in our financed emissions.

Scope 1 – Operational carbon emissions from owned sources. This includes natural gas, oil, company car mileage, and fugitive emissions (gases accidentally released into the atmosphere) from air-conditioning.

Scope 2 Location-Based – Operational carbon emissions from non-owned sources (i.e., power plants) using an average emissions intensity for the grids on which energy consumption occurs. This includes purchased electricity, municipal heating and cooling.

Scope 2 Market Based – Operational carbon emissions where Aviva have contractual arrangements for renewable electricity, for example, through power purchase agreements, certified renewable energy through a supplier tariff or the purchase of specific contractual instruments as relevant.

Scope 3 - Operational carbon emissions from non-owned sources. These are: business travel (air, rail, grey fleet, and rental cars), water, electricity transmission and distribution and landfill waste. See 'Note 3 - Scope 3 emissions reporting'.

Scope 3 emissions related to business travel have increased in 2023, as in person interactions are higher.

Key estimates and assumptions

The consideration and materiality of Scope 3 categories requires judgement. We consider certain Scope 3 categories to not be applicable to Aviva, as we do not engage in these activities. Our reporting for each category is set out in note 3.

Operational data (energy, refrigerant gases, travel, water, waste, etc.) are converted to a carbon dioxide equivalent (CO_2e) using externally provided carbon conversion factors such as those provided by the UK government (DESNZ) greenhouse gas reporting: conversion factors 2023 or the International Energy Agency (IEA) on an annual basis.

Targets

We aim to have Net Zero operations by 2030 and are committed to continuing to use 100% renewable electricity in Aviva's operations (aligned to the RE100 commitment). Our 2022 electricity was verified by the CDP as being from certified renewable sources, achieving our goal three years ahead of schedule.

Aviva have a SBTi target to their reduce Scope 1 and Scope 2 operational emissions by 90% by end of 2030 from a 2019 baseline.

The table sets out our GHG emissions on an absolute CO_2e basis in accordance with the Streamlined Energy and Carbon Reporting (SECR) for our Group-wide operations.

Analysis

Aviva's operational carbon emissions associated with Scope 2 are now additionally reported using the market-based methodology of the GHG Protocol, and aligning with the science-based targets methodology.

Scope 2 market-based methodology allows companies to benefit from their actions in sourcing certified electricity generated from renewable sources, rather than simply taking the grid average carbon emissions for the country or region.

Scope 3 emissions have increased compared to 2022 principally as a result of business travel increasing.

Market-based Scope 1 and Scope 2 emissions intensity ratios have decreased due in part to management action around energy efficiency, and reduction in the property portfolio.

Our climate metrics

Table 1: Operational emissions

Operational Emissions for Aviva plc	2023 Total[9]	2022 Total
Emissions (market-based)[2]		
Scope 1 (tCO_2e)[3]	**7,503**	8,526
Scope 2 (tCO_2e)[4]	**429**	563
Scope 3 (tCO_2e)[5]	**9,454**	4,869
Total market-based emissions (tCO_2e)	**17,386**	13,958
Carbon offsets for which credits have been purchased and retired during the year (tCO_2e)[6]	**(17,386)**	(13,958)
Total net market-based emissions (tCO_2e)	**—**	—
Intensity ratios (market-based)[2]		
Scope 1 and Scope 2 - market-based emissions (tCO_2e) / £m Total income[1,3,4]	**0.40**	0.50
Total market-based emissions (tCO_2e) / £m Total income[1]	**0.88**	0.77
Total market-based emissions (tCO_2e) / employee	**0.62**	0.59
Emissions (location-based)[7]		
Scope 1 (tCO_2e)[3]	**7,503**	8,526
Scope 2 (tCO_2e)[4]	**7,873**	7,837
Scope 3 (tCO_2e)[5]	**9,454**	4,869
Total location-based (tCO_2e)	**24,830**	21,232
Intensity ratios (location-based)[7]		
Scope 1 and Scope 2 - location-based emissions (tCO_2e) / £m Total income[1]	**0.78**	0.90
Total location-based emissions (tCO_2e) / £m Total income[1]	**1.25**	1.17
Total location-based emissions (tCO_2e) / employee	**0.89**	0.90
Energy consumption		
Energy consumption (MWh)[8]	**68,345**	71,770

Footnotes for note 4:

1. The 2022 comparative results have been re-presented from those previously published following the adoption of IFRS 17. See note 1 for further details.
2. Market-based: A market-based method reflects emissions from electricity that companies have purposefully chosen
3. Scope 1: Natural gas, fugitive emissions (leakage of gases from air conditioning and refrigeration systems), oil, and company-owned car
4. Scope 2: Electricity
5. Scope 3: Includes certain Scope 3 categories for business travel (category 6) and grey fleet (private cars used for business) (category 6), waste (category 5) and water. Scope 3 emissions have increased compared to 2022 principally as a result of business travel increasing.
6. All residual emissions have been offset. In 2023 and 2022 we offset our residual carbon emissions from our Scope 2 market-based total as this takes account of the reduced emissions from our use of electricity from renewable sources. As at 16th February 2024, the 17,386 Credits purchased in relation to the 2023 market-based emissions footprint were retired.
7. Location-based: A location-based method reflects the average emissions intensity of grids on which energy consumption occurs
8. Includes Scopes 1 and 2 energy MWh used within our occupied buildings
9. These Aviva plc metrics were subject to external independent reasonable assurance by PwC. For the results of that assurance, see the assurance report on page 73 of the Aviva plc: Climate-related Financial Disclosure 2023.

Our climate metrics

Note 5 - Financed emissions

Carbon intensity represents the estimated carbon emissions of our investment portfolio.

This note covers the emissions associated with the credit and equity classes of our investment portfolio.

Reporting criteria

This note should be read in conjunction with the Climate reporting policies and note 8.

Approach and methodology

Emissions intensity metrics are produced for the Aviva Canada's investment portfolio where calculation methodologies are established and data is sufficiently robust. Scope 1 and Scope 2 GHG emissions are used for the investee entity and are sourced from third-party vendors.

Intensity measures - Asset class specific intensity

To calculate asset class intensity, GHG emissions (numerator) are assessed with reference to the nature of the underlying asset (denominator) to determine an appropriate intensity measure.

Credit and equities use weighted average carbon intensity by revenue.

The weighted average carbon intensity metric uses the revenue of the underlying companies and therefore is impacted by revenue volatility in the period.

Key estimates and assumptions

We use reported emissions when those are available and if not, estimated emissions are included. The latest available emissions data has been used to prepare the 2023 metrics, noting that the latest emissions data available generally relates to emissions from around one year prior.

This is due to the nature of financed emissions requiring other companies to report on their own emissions for use within this metric. Comparative figures are not updated for emissions data from periods after the time of initial publication to demonstrate a one year movement in underlying data. Further detail of the key estimates and assumptions by asset class are included below.

Credit and equities

The estimates for listed companies are based on firstly taking into account historic data previously reported by the company if that is available or otherwise estimating based on an industry segment-specific model for over 1,000 industry segments as provided by MSCI[1].

Coverage

Not all organizations publish emissions data or have their emissions data estimated by emissions data providers. When reported or estimated emissions are not available, this reduces the coverage of the metrics. In addition, coverage is reduced for AUM for which methodology is not developed or data limitations exist.

Therefore we present a coverage percentage. As data coverage is less than 100%, we expect absolute emissions to increase as we improve the data coverage over time.

Metric and data quality

A PCAF data quality score, based on the PCAF guidelines, has been calculated to indicate the level of estimation in the data inputs of our financed emissions. The asset class level data quality score is a weighted average which is based on the proportional amount of our holdings. A scale of 1 to 5 is used, with 1 corresponding to verified reported emissions and 5 using estimated emissions. The higher the level of estimation, the more likely that the actual emissions data, when known, would deviate from the estimate provided.

Credit and equities has a score of 2 which indicates a high level of reported data, albeit not verified.

Targets

Aviva Canada has an ambition to be Net Zero by 2040. Towards this journey, we have a near term ambition to reduce the carbon intensity of our investments (currently Scope 1 and Scope 2 emissions from credit and equity assets) by 60% by 2030 from a 2019 baseline.

Our climate metrics

Results

The following tables and figures set out the Weighted Average Carbon Intensity by Revenue (WACI-R) metric.

Figure 1 sets out (WACI-R) of credit and equities in Aviva Canada's shareholder funds.

Figure 1: Aviva Canada carbon intensity (tCO_2e / USD$m revenue)

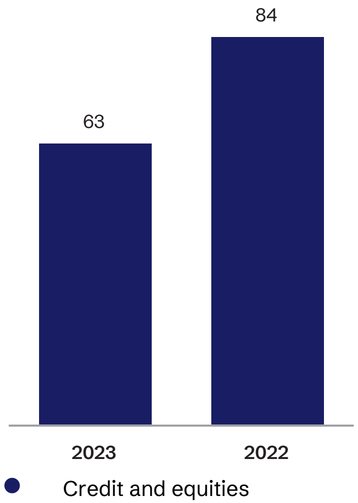


Table 1: Breakdown of Aviva Canada's WACI-R for credit & equities for 2023 (Investee Scope 1 and Scope 2 included, Investee Scope 3 excluded)

Climate Metrics	Unit of measurement	Data coverage %	2023 Amount	Data coverage %[2]	2022 Amount[2]
Invested amount	$billion		5.0		4.1
Weighted Average Carbon Intensity by Revenue (WACI-R)	tCO_2e / USD$m revenue	91 %	AR 63	89 %	84
PCAF data quality score			2		2

Analysis

WACI-R for credit and equities
WACI-R for credit and equities has decreased by 26% to 63 tCO_2e/USD$m revenue in 2023. (2022: 84 tCO_2e/USD$m revenue) It represents a 30% reduction compared to the 2019 baseline. (2019: 89 tCO_2e/USD$m revenue)

The reduction in WACI-R from 2022 to 2023 is primarily due to divestment and the reduction in relative exposure to higher intensity companies.

Sector analysis
Sector analysis is provided for credit and equities in Table 2. This table shows a breakdown of the share of the invested amount and contribution to WACI-R by sector.

The sectors are based on the Global Industry Classification Standard (GICS®) using sector data provided by MSCI[1]. The GICS® structure consists of 11 sectors.

Table 2 shows the top four sectors by WACI-R represent 65% of the portfolio and contribute 86% to WACI-R. The Utilities sector is the largest contributor, representing 8% of the portfolio but contributing to 31% of the weighted average carbon intensity by revenue.

Table 2: Sector breakdown

GICS® Sector[1]	% share of invested amount	% sector contribution to WACI-R
Utilities	6 %	31 %
Industrials	8 %	31 %
Energy	1 %	15 %
Financial	50 %	8 %
All other sectors	35 %	14 %

Our climate metrics

Scope 3 emissions of our investments

The measurement of our Scope 3 emissions of our investments in credit and equities presents significant challenges in relation to complete and accurate measurement across all 15 categories of Scope 3 under the GHG Protocol. The availability of reported Scope 3 investee data is improving over time, however, reported information is not always complete and is typically subject to significant levels of estimation uncertainty. This is acknowledged by third-party data providers, who often override reported Scope 3 information within their data sets when it is not deemed to be credible, replacing it with their own estimates. Such measurement is similarly subject to significant levels of estimation uncertainty, and a correspondingly low data quality score.

In addition to the measurement uncertainty noted, reporting on the Scope 3 emissions of investments at an aggregated portfolio level introduces significant double-counting challenges. Aviva's portfolio is broad and diversified, and it is therefore natural for investee companies to interact with each other and form part of each others' value chains. This leads to instances where the Scope 1 and Scope 2 emissions of one investee might be the Scope 3 emissions of another investee, or instances where multiple investees have the same underlying emissions in their Scope 3.

As a result of the significant estimation uncertainty and inherent double-counting at portfolio level, we do not believe disclosure of aggregated investee Scope 3 emissions at the Aviva Canada level represents decision-useful information for the primary users of our Climate-related Financial Disclosure at this stage. We have therefore not disclosed intensity-based Scope 3 emissions metrics.

Looking Ahead

The key areas for development in 2024 and beyond are:

- Expand the disclosure to incorporate additional asset classes, where data availability and robustness permits, taking into account the latest methodology available from PCAF.
- Acknowledging the data and methodological challenges associated with the Scope 3 emissions of investments, we will continue to develop disclosure approaches to improve the decision-usefulness of portfolio-level Scope 3 information, both with reference to external reporting standards and internal methodologies.

Footnotes for note 5:

1. Certain information ©2024. MSCI ESG Research LLC. Reproduced by permission. Global Industry Classification Standard (GICS®), GICS® and GICS® Direct are service or trademarks of MSCI and S&P Global Market Intelligence.
2. The 2022 comparative amounts have been re-presented from those previously published. Refer to note 1 for further details.

AR This metric was subject to external independent reasonable assurance by PwC. For the results of that assurance, see the assurance report on page 60.

Our climate metrics

Note 6 - Investment in sustainable assets

Aviva Canada measures its investments in the sustainable assets definition as outlined in the reporting criteria.

Reporting criteria

This note should be read in conjunction with the Climate reporting policies and note 8.

Approach and methodology

Our sustainable asset definition is based on the Climate Bonds Initiative (CBI) Taxonomy and Sector Criteria.

Assets are grouped in the following sub-categories:

- Green - assets referencing an external science-based assessment methodology for green credentials or tagged as green in the CBI green bond database;
- Sustainability - assets referencing an external science-based assessment methodology or tagged as sustainability in the CBI social and sustainability bond database, including sustainability-linked debt; and
- Transition and climate-related funds - Aviva transition funds. The objectives and strategy of the fund are considered to determine inclusion in investment in sustainable assets.

Key estimates and assumptions

In forming our definition, green and sustainable have been assessed with reference to current external indicators of green and sustainable credentials.

Investment in Transition and Climate-related funds is presented primarily on an origination basis (34% of the total). Bonds are presented on a market value basis.

Coverage and context

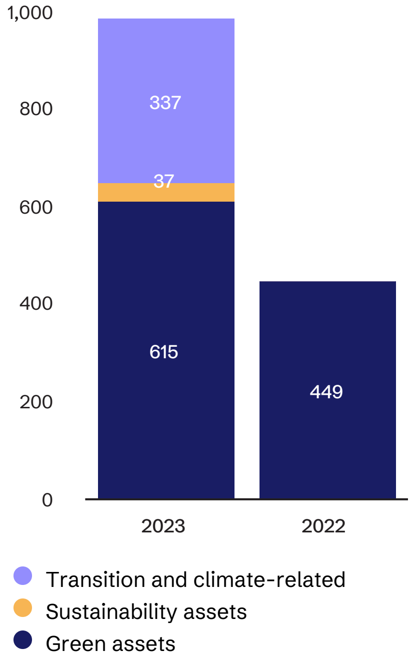
Assets are considered for inclusion in Aviva's investment in sustainable assets, where the definition is met.

Results

Increasing our investment in the transition and the green economy more broadly is a significant opportunity and is recognized as such with a specific sustainable asset target.

The portfolio scope for sustainable assets within this disclosure covers Aviva Canada's own assets. We have an ambition to reach an annual purchase target of $150 million of sustainable assets.

Figure 1: Investment in sustainable assets ($m) AR



Analysis

Aviva Canada's investments in sustainable assets increased to $989 million from $449 million reflecting origination in the year of $540 million:

- Green assets: investment (net of market value movements or divestment) in green bonds contributed $615 million;
- Sustainability assets: New investments in sustainability bonds contributed $37 million; and
- Transition and climate-related funds: Seed investment in Aviva Investors Canadian Core Plus Climate Fund ("CCPCF") contributed $337 million;
- $975m increase in cumulative investment in sustainable assets compared to 2019 baseline of $14m.

Our climate metrics

Note 7 - Weather-related losses

Aviva Canada is dedicated to helping our customers protect their property against devastating weather-related events such as floods, hailstorms, windstorms, wildfires, hurricanes, and tornados. Weather-related events may become more frequent, severe, clustered, and persistent. The speed of this change and the ability of society to adopt mitigation strategies may impact our ability to provide products for our customers at affordable levels over the longer term. We build the possibility of extreme weather events into our pricing to ensure it is adequate and we monitor actual weather-related losses versus expected weather losses across all Aviva businesses. Catastrophic event model results are supplemented by in-house disaster scenarios.

Aviva Canada measures actual weather-related losses against the expected losses (net of reinsurance) and the weather impacts on our financial key performance measure, the Combined Operating Ratio (COR). The COR presentation has been updated for IFRS 17 and now includes the impact of discounting (discounted COR). Aviva Canada considers COR with claims measured on an undiscounted basis (undiscounted COR) to align more closely to the way in which the business is managed. This metric is presented on an undiscounted basis, consistent with previous reporting.

Reporting criteria

This note should be read in conjunction with the Climate reporting policies and note 8 Reporting criteria.

Approach and methodology

This metric has been reported by Aviva Canada for a number of years through our COR reporting.

A catastrophic (CAT) event in Canada is "an event or series of events where the nature or duration is such that ordinary claims handling processes and resources need immediate change and/or strengthening, so that customer service and claims control are maintained. This typically will exceed $5 million or 500 claims." We'll continue to work with our preferred vendor network on expectations for sustainable practices and build those important foundations for the future. Municipalities are also recognizing the need for change and are enhancing building codes to improve resilience in the face of likely increased weather-related events.

Our general insurance business is protected against large, single catastrophe events by reinsurance, purchased in line with local regulatory requirements. These catastrophe reinsurance programs limit Aviva Canada's exposure to $50m for up to a 1-in-500-year event in line with regulatory requirements. In the medium to longer term, there is potential for the premiums we need to charge to cover our risk exposure to increase, to be in line with the intensity and frequency of extreme weather events.

Results and analysis

As can be seen in both Figures 1 and 2, the actual weather-related losses in 2023 are above the expected weather-related losses, based on the long term average (LTA). This is due to a significant number of weather-related events throughout the year.

In Figure 1, when the actual weather-related losses are equal to the LTA, the percentage is equal to 0%. Better than expected performance will result in a negative percentage and worse than expected performance will be a positive percentage.

In Figure 2, when the impact on undiscounted COR is as expected, the percentage is equal to 0%. Better than expected performance will be a negative percentage (hence a reduction in undiscounted COR) and worse than expected performance will be a positive percentage (hence an increase in undiscounted COR).

Our climate metrics

Figure 1: Aviva Canada's actual weather-related losses versus expected losses (by year, net of reinsurance). Source: Aviva Canada

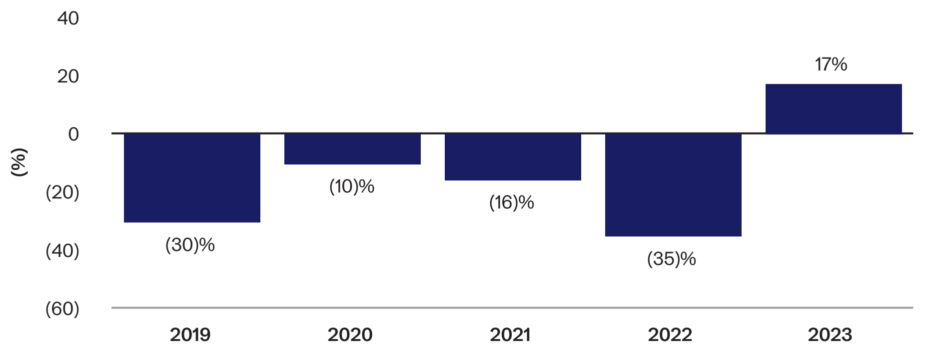
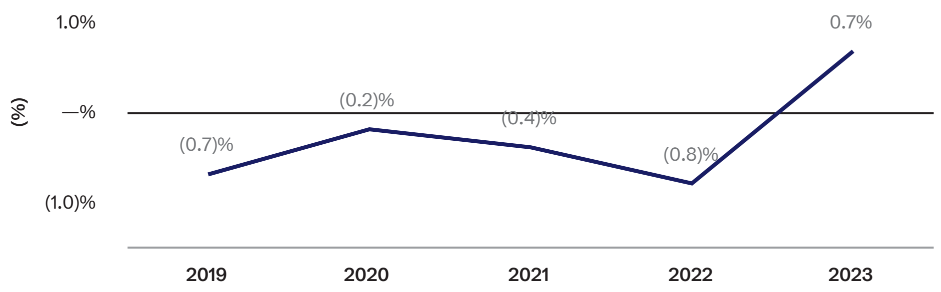


Figure 2: Weather impact on Aviva Canada's undiscounted COR[1] (net of reinsurance). Source: Aviva Canada



Footnotes for note 7:

1. The 2022 comparative results have been restated from those previously published following the adoption of IFRS 17. The weather impact on Aviva's undiscounted COR was previously calculated based on net earned premiums, it is now calculated based on insurance revenue.

Our climate metrics

Note 8 - Reporting criteria

The reporting criteria for each of the TCFD metrics is set out below:

Operational emissions

Operational Scope 1 emissions

Definition	The total quantity of direct GHG emissions from Aviva's operations (Scope 1). Scope 1 covers operational emissions from owned sources. This includes natural gas, oil (diesel oil), company car mileage and fugitive emissions from air-conditioning.
Scope	This is reported for the period January 1 to December 31. We include emissions from Group entities over which we have operational control as outlined in 'Note 4 Operational emissions'.
Units	Tonnes CO_2e (tCO_2e)
Calculation and reporting method	**Combustion of fuel** Natural gas and oil (diesel oil) are the two primary fuels which are used in Aviva's operations. Natural gas is used for heating and cooling our offices and oil (diesel oil) is primarily used in back-up generators. In the UK and Ireland, natural gas consumption data is provided directly from the supplier, except for a few small offices where data is provided by the landlord via a service charge. For other markets, including Canada, data is provided by landlords, including municipal heating and cooling. Where actual data is not available, usually for December measurements due to timing of reporting, data is extrapolated based upon historical consumption figures. Data on oil (diesel oil) usage in the UK, Ireland and India are provided by our service partners who undertake regular checks and provide consumption reports. **Company owned vehicles** Company vehicle (yellow fleet) business mileage is calculated from the expenses system, fuel cards and invoices. The data received is then multiplied with the Department for Energy Security and Net Zero (DESNZ) or International Energy Agency (IEA) emission factors to estimate carbon emissions from company owned vehicles. **Fugitive emissions** Fugitive emission data in the UK and Ireland are provided from supplier reports by our service partners, who undertake regular checks of the air-conditioning units and measure for any leaks. In other markets, where available, this is provided by landlords.
Source	The Group's operational environmental reporting system.

Our climate metrics

Operational emissions continued

Operational Scope 2 emissions

Definition	The total quantity of indirect GHG emissions from purchased energy (Scope 2). Scope 2 emissions cover emissions generated from the electricity used in all the buildings the Group operates, as calculated by the location-based and market-based methodology. **Location based** Operational emissions from non-owned sources (e.g. power plants) using an average emissions intensity for the grids on which energy consumption occurs. This includes purchased electricity, municipal heating and cooling. **Market based** Operational emissions where we have contractual arrangements for renewable electricity, e.g. through Aviva's own on-site generation, certified renewable electricity through a supplier tariff or the separate purchase of renewable energy guarantees of origin (REGOs) or market equivalent, or consumed renewable heat or transport certified through a Government scheme.
Scope	This is reported for the period January 1 to December 31. We include emissions from Group entities over which we have operational control as outlined in 'Note 4 Operational emissions'.
Units	Tonnes CO_2e (tCO_2e)
Calculation and reporting method	In the UK and Ireland, electricity purchased data is provided directly from the supplier, except for a few small offices where data is provided by the landlord via a service charge. For other businesses, including Canada, data is provided by landlords. In India, a small number of office electricity consumption is extrapolated based upon the unit price of a kWh. Where actual data is not available, usually for December measurements due to timing of reporting, data is extrapolated based upon historical consumption figures. **Location based reporting** As per Scope 2 guidance of GHG protocol, the total electricity purchased data is multiplied by the average grid factor from respective country's government database of electricity generation for the reporting period. **Market based reporting** Purchased electricity that we have purposely chosen which is classed as zero carbon, including on-site generation, green tariffs that can be matched to 100% renewable generation, or through purchasing of energy certificates (e.g. renewables obligation certificates (ROC)/REGOs/renewable energy certificates (REC) etc.) is excluded from total electricity. The remainder is multiplied by the average grid factor from respective country's government database of electricity generation for the reporting period.
Source	The Group's operational environmental reporting system.

Our climate metrics

Operational emissions continued

Operational Scope 3 emissions

Definition	The total quantity of indirect operational emissions (not included in Scope 1 and Scope 2) that occur in the value chain including both upstream and downstream emissions (Scope 3). Operational Scope 3 emissions cover operational emissions from business travel (air, rail, grey fleet and rental cars), water, waste, electricity transmission and distribution and homeworking.
Scope	This is reported for the period January 1 to December 31. We include emissions from Group entities over which we have operational control as outlined in 'Note 4 Operational emissions', except for homeworking. Scope 3 home working emissions are calculated for the Group's businesses only (UK, Ireland and Canada).
Units	Tonnes CO_2e (tCO_2e)
Calculation and reporting method	**Business travel** For business travel made via air, rail and hired cars the total distance travelled data is procured from corporate travel management providers on a quarterly basis. The distance travelled for business travel in privately owned vehicles is calculated from the Group's expense systems which reimburse colleagues on a cost per kilometres (km) travelled basis. Travel is measured or converted into km. Air travel is calculated based upon class of service (first, business, economy) and appropriate emission factors are applied to each class. **Water and waste** The data on water consumption in the UK and Ireland is provided directly from our suppliers. In other businesses, data is provided by the landlords. The data on waste generation is provided by our service partners in the UK and Ireland and by landlords in other locations. Water is measured in m^3 and waste is measured in metric tonnes. Emissions factors published by the Department for Energy Security and Net Zero (DESNZ) are applied to total water and waste to estimate CO_2e emissions. **Electricity transmission and distribution** Electricity transmission and distribution (T&D) is the energy it takes to transfer electricity from generator to end-user, measured in kWh and converted to CO_2e. **Homeworking** Emissions from homeworking are calculated using government published emissions factors (DESNZ) multiplied by headcount and office non-occupancy rates. Homeworking emissions are not currently within the scope of external assurance and are not reported within our Streamline Energy and Carbon Reporting table (SECR), but we count in our emissions totals for which we purchase carbon credits to offset.
Source	The Group's operational environmental reporting system.

Our climate metrics

Operational emissions continued

% of CO_2e emissions from Aviva's operations offset annually/carbon offsets (tonnes - CO_2e)

Definition	Operational CO_2e emissions offset from Aviva's operations through the purchase of Gold Standard, Voluntary Carbon Scheme and Carbon Emission Reduction carbon credits from energy efficiency, clean water provision and renewable energy generation projects from the voluntary carbon market.
Scope	This is reported for the period January 1 to December 31. We include emissions from Group entities over which we have operational control as outlined in 'Note 4 Operational emissions'.
Units	Percentage / Tonnes CO_2e (tCO_2e)
Calculation and reporting method	We purchase voluntary emission reductions certified to the Gold Standard, Verified Carbon Standard and Certified Emission Reduction Standard. The carbon credits are delivered from community-based energy efficiency, clean water provision and renewable energy generation projects in developing countries via the voluntary carbon market. Once issued and purchased, the credits are retired to the respective carbon registry, so they cannot be used or sold again. Aviva sources carbon credits from International Carbon Reduction and Offset Alliance (ICROA) accredited companies. In our reporting, there is an estimation in the volume of credits required in the final period of the year. Therefore, our reporting of this metric may include offsets that have been purchased and that Aviva has committed to retire at the reporting date, by communication to the broker.
	$$\text{Percentage of carbon offset achieved} = \frac{\text{Total number of credits purchased}}{\text{Total quantity of operational Scope 1, Scope 2 and Scope 3 emissions}} \%$$
Source	The Group's operational environmental reporting system.

Scope 1 and Scope 2 - location-based emissions (tCO_2e)/ £m Total income[1]

Definition	GHG intensity calculated as total quantity of Scope 1 and Scope 2 (location-based) emissions per £m Total income. Total income represents the sum of Insurance revenue and Fee and commission income as per the Consolidated Income Statement, as disclosed in Aviva plc Annual Report and Accounts.
Scope	This is reported for the period January 1 to December 31. We include emissions from Group entities over which we have operational control as outlined in 'Note 4 Operational emissions'.
Units	Tonnes CO_2e (tCO_2e) / £ million Total income
Calculation and reporting method	This GHG intensity is calculated as: total quantity of Scope 1 and Scope 2 (location-based) emissions divided by £m Total income. A location-based method reflects the average emissions intensity of grids on which energy consumption occurs. Data on Scope 1 and Scope 2 (location-based) operational emissions are calculated based on the method highlighted in the external Reporting Criteria provided for Scope 1 and Scope 2 operational emissions.
Source	Emission data is sourced from the Group's operational environmental reporting system. Insurance revenue and Fee and commission income are financial measures disclosed in the Group's Annual Report and Accounts.

1. Following adoption of IFRS 17 Insurance Contracts, the denominator of this metric has been updated to "Total Income" from "GWP" during the year. Total Income captures the sum of Insurance revenue and Fee & commission income on the IFRS Income statement.

Our climate metrics

Operational emissions continued

Total location-based emissions (tCO_2e)/ employee

Definition	GHG intensity calculated as total quantity of emissions from Scope 1, Scope 2 (location-based) and Scope 3 operational GHG emissions per employee.
Scope	This is reported for the period January 1 to December 31. We include emissions from Group entities over which we have operational control as outlined in 'Note 4 Operational emissions'.
Units	Tonnes CO_2e (tCO_2e) / employees
Calculation and reporting method	This GHG intensity is calculated as: total quantity of Scope 1, Scope 2 (location-based) and Scope 3 operational emissions is divided by total number of employees. A location-based method reflects the average emissions intensity of grids on which energy consumption occurs. The number of employees is based on headcount as at December 31 of the reporting year as provided by our Group HR team. Scope 1, Scope 2 and Scope 3 operational emissions are calculated based on the method highlighted in the external reporting criteria provided for Scope 1, Scope 2 and Scope 3 operational emissions.
Source	The Group's operational environmental reporting system.

Scope 1 and Scope 2 market-based emissions (tCO_2e)/ £m Total income[1]

Definition	GHG intensity calculated as total quantity of Scope 1 and Scope 2 (market based) emissions per £m Total income. Total income represents the sum of Insurance revenue and Fee and commission income as per the Consolidated Income Statement, as disclosed in the Aviva plc Annual Report and Accounts.
Scope	This is reported for the period January 1 to December 31. We include emissions from Group entities over which we have operational control as outlined in 'Note 4 Operational emissions'.
Units	Tonnes CO_2e (tCO_2e) / £ million Total income
Calculation and reporting method	This GHG intensity is calculated as: total quantity of Scope 1 and Scope 2 (market based) emissions divided by £m Total income. Data on Scope 1 and Scope 2 (market based) operational emissions are calculated based on the method highlighted in the external Reporting Criteria provided for Scope 1 and Scope 2 operational emissions.
Source	The Group's operational environmental reporting system. Insurance revenue and Fee and commission income are financial measures disclosed in the Group's Annual Report and Accounts.

Total market-based emissions (tCO_2e)/ £m Total income[1]

Definition	GHG intensity calculated as total quantity of Scope 1, Scope 2 (market based) and operational Scope 3 emissions per £m Total income. Total income represents the sum of Insurance revenue and Fee and commission income as per the Consolidated Income Statement, as disclosed in the Aviva plc Annual Report and Accounts.
Scope	This is reported for the period January 1 to December 31. We include emissions from Group entities over which we have operational control as outlined in 'Note 4 Operational emissions'.
Units	Tonnes CO_2e (tCO_2e) / £ million Total income
Calculation and reporting method	This GHG intensity is calculated as: total quantity of Scope 1, Scope 2 (market based) and operational Scope 3 emissions is divided by £m Total income. Data on Scope 1, Scope 2 (market-based) and Scope 3 operational emissions are calculated based on the method highlighted in the external Reporting Criteria provided for Scope 1, Scope 2 and 3 operational emissions.
Source	The Group's operational environmental reporting system (Scope 1, Scope 2 and operational Scope 3 emissions). Insurance revenue and Fee and commission income are financial measures disclosed in the Group's Annual Report and Accounts.

1. Following adoption of IFRS 17 Insurance Contracts, the denominator of this metric has been updated to "Total Income" from "GWP" during the year. Total Income captures the sum of Insurance revenue and Fee & commission income on the IFRS Income statement

Our climate metrics

Operational emissions continued

Total market-based emissions (tCO_2e)/ employee

Definition	GHG intensity calculated as total quantity of emissions from Scope 1, Scope 2 (market based) and Scope 3 operational GHG emissions per employee.
Scope	This is reported for the period January 1 to December 31. We include emissions from Group entities over which we have operational control as outlined in 'Note 4 Operational emissions'.
Units	Tonnes CO_2e (tCO_2e) / employees
Calculation and reporting method	This GHG intensity is calculated as: total quantity of Scope 1, Scope 2 (market based) and Scope 3 operational emissions is divided by total number of employees. A market-based method reflects the average emissions intensity of grids on which energy consumption occurs. Employees number is based on headcount as at 31 December of the reporting year as provided by our Group HR team. Scope 1, Scope 2 and Scope 3 operational emissions are calculated based on the method highlighted in the external reporting criteria provided for Scope 1, Scope 2 and Scope 3 operational emissions.
Source	The Group's operational environmental reporting system.

Operational carbon emissions – absolute

Definition	Absolute CO_2e data includes emissions from our buildings, business travel, water and waste to landfill as generated during the year.
Scope	This is reported for the period January 1 to December 31. We include emissions from Group entities over which we have operational control as outlined in 'Note 4 Operational emissions'.
Units	Tonnes CO_2e (tCO_2e)
Calculation and reporting method	Data on Scope 1, Scope 2 and Scope 3 operational emissions are calculated based on the method highlighted in the metric description provided in 'Note 4 Operational emissions'.
Source	The Group's operational environmental reporting system.

Our climate metrics

Financed emissions

Definition	Financed emissions metrics cover the greenhouse gas (GHG) emissions which Aviva finance through its investments under Scope 3 Category 15 of the GHG Protocol. Financed emissions disclosures encompass a number of different metrics: • Absolute GHG emissions attributed to an investment; • Economic carbon intensity (ECI), representing the intensity of GHG emissions attributed to investments per £m invested for Aviva plc; • Weighted average carbon intensity (WACI) by revenue, representing the weighted average investee carbon intensity by revenue, whereby each investee's carbon intensity by revenue are its GHG emissions relative to its revenue generated, and the weight is the weight of the investment in the portfolio; and • Real estate (Direct Real Estate & Commercial Mortgages) carbon intensity, representing the total GHG emissions attributed to real estate investments per metre square of attributed floor space.
Scope	Only Scope 1 and Scope 2 emissions of the investee companies are currently measured. The emissions are based on the latest available reported data or estimated data (where reported data is unavailable) in respect of Aviva plc and its subsidiaries, associates and joint ventures based on the Group's holding. Emissions are the portion of investees' emissions attributed to Aviva based on its share of investment or level of funding. We do not include Scope 3 investee emissions, due to concerns about double counting, data quality and level of estimation as discussed in Note 5 of this report. Sovereign emissions currently cover only production emissions (for domestic consumption and export). Consumption emissions (domestically produced and imports) are not currently measured. Financed emissions for our shareholder, with-profits and policyholder funds are calculated currently for the following asset classes: • Corporate bonds; • Listed equities; • Real estate (including Direct Real Estate and Commercial Mortgages); • Equity release mortgages; and • Infrastructure debt (excluding Private Finance Initiative (PFI) investments).
Units	Absolute attributed greenhouse gas emissions: metric tonnes CO_2 equivalent (tCO_2e) Economic carbon intensity: tCO_2e per £m invested[1] Weighted average carbon intensity by revenue: tCO_2e per USD$m investee revenue Real estate carbon intensity: kilograms CO_2 equivalent ($kgCO_2e$) per square metre (m^2)

1. The reference currency of this metric has been updated from $m to £m. See note 1 for further details.

Our climate metrics

Financed emissions

Calculation and reporting method	The methods used to calculate financed emissions are based on the Second Edition of *The Global GHG Accounting and Reporting Standard Part A: Financed Emissions* published by the Partnership for Carbon Accounting Financials (PCAF) on 19 December 2022. Absolute emissions are calculated by attributing a portion of the investee's total emissions to Aviva's relative level of investment. Absolute financed emissions associated with debt and equity investments are attributed by taking the outstanding amount (market value for listed debt[1] and equity, or loaned amount in all other cases) in the investee entity as a portion of the total value of the entity or asset. In the case of listed companies this is the Enterprise Value Including Cash (EVIC), otherwise total debt and equity of the investee is used. For real estate investments, absolute emissions are attributed based on the loan amount outstanding relative to the property value at origination or, in the case of direct real estate investments, the percentage ownership of the property. Economic carbon intensity is calculated by dividing the total attributed absolute emissions by the investment amount (based on current market value). Weighted average carbon intensity by revenue is derived by first calculating the individual company-level absolute emissions per \$m of revenue (tCO_2e divided by \$m revenue) and then calculating a weighted average for the relevant portfolio with a weighting based on investment value. Real estate carbon intensity is calculated by dividing the portfolio level attributed absolute emissions by the total square meter floorspace of the portfolio ($kgCO_2e$ divided by m^2). Sovereign emissions metrics are shown separately from company emissions metrics and should not be aggregated, given the inherent double counting of the same underlying emissions across the two metric categories (as the country-wide sovereign GHG emissions would include company emissions). Financed emissions only covers asset classes for which external calculation methodologies exist and where emissions data is available and meets our required quality thresholds. Our approach to measuring emissions is to use the highest quality data in line with the PCAF standard. As part of the disclosure a breakdown of the PCAF data quality score is provided.
Source	Financed emissions metrics are based on both asset data which is collected from internal Aviva financial reporting systems and emissions data which is collected from various sources and are outlined in more detail below. Reported emission data is sourced as follows: • MSCI[2] for Credit and Equities. MSCI base the data on corporate sources (such as Annual reports, Corporate Social Responsibility reports and company websites), CDP (formerly Carbon Disclosure Project) as well as government databases (when data is not available through direct corporate disclosures). • The Carbon Trust Group (CT) and Aviva Investors for debt provided to infrastructure project finance companies. CT base the data on corporate sources (such as Annual Reports, Corporate Social Responsibility Reports and company websites). • Accenture for direct real estate. Accenture use physical meter readings and invoicing to provide the reported real estate emissions. Estimated emissions data is sourced as follows: • MSCI estimates for credit and equities. Estimates are based on an industry segment-specific intensity model, which uses current and/or historical emissions to estimate the carbon intensity of a given industry segment and applies this estimated intensity to the revenue of the company. • CT provided estimates for infrastructure debt and commercial real estate mortgages. Infrastructure debt emissions are estimated using actual electricity generation and IPCC electricity GHG emissions factors where possible and otherwise are based on the PCAF GHG emission factor database (updated in September 2023) sensitised by asset type and country. For commercial real estate mortgage estimates are based on Department for Energy Security and Net Zero (DESNZ) and PCAF conversion factors and Chartered Institution of Building Services Engineers (CIBSE) (2021) energy intensity factors which use floor area and property type. • Accenture provide estimates for direct real estate where reported data is not available. This is based on Department for Energy Security and Net Zero (DESNZ) conversion factors and Chartered Institution of Building Services Engineers (CIBSE) (2021) energy intensity factors which use floor area and property type. • Energy Performance Certificates (EPCs) for equity release mortgages. This data is provided on the UK Government database for Levelling Up, Housing & Communities for England and Wales and the Scottish Government.

1. Under the PCAF Financed Emissions standard, it is suggested that the outstanding amount for listed debt should represent the book value of the instrument, whereas for data & modelling reasons the current market value is used. The use of market value does not have a material impact on the reported Absolute Emissions.
2. Certain information ©2024. MSCI ESG Research LLC. Reproduced by permission.

Our climate metrics

Monitoring of sovereign holdings

Definition	This metric covers our sovereign or government exposures and determines the ND-GAIN country index (physical risk), sovereign absolute emissions and sovereign emission intensity scores for those sovereigns (transition risk).
Scope	This metric covers sovereign loans within shareholder, with-profits and policyholder funds and is limited to sovereign production emissions (excluding land use, land use change and forestry emissions).
Units	ND-GAIN country index: measured on an index between 0 and 100, with 0 being the lowest score and 100 being the highest score. Sovereign Production Emissions: measured in metric tonnes CO_2 equivalent (tCO_2e). Sovereign Production Emissions Intensity: At asset level, greenhouse gas emissions (tCO_2e) divided by purchasing power parity (PPP) adjusted gross domestic product (GDP) in £ millions[1]. At sovereign portfolio level, weighted average of sovereign production emissions intensity, equivalent to the attributed sovereign production emissions per £m invested (attributed tCO_2e/£m invested amount).
Calculation and reporting method	The sovereign emission intensity is based on the sovereign bond methodology published by Partnership for Carbon Accounting Financials, December 2022. See the financed emissions section above for further details. The University of Notre Dame's Adaptation Initiative (ND-GAIN) country index measures a country's vulnerability and readiness to climate change. Our sovereign holdings with an ND-GAIN country index score below 50 are also measured - these are countries that are highly or moderately vulnerable to climate change. We plot the sovereign intensity and ND-GAIN country index for our most significant sovereign exposures. An overall sovereign absolute emission and intensity metric is also provided for the entire sovereign portfolio.
Source	The metric is based on both sovereign exposure data which is collected from internal Aviva systems and the following external sources: • University of Notre Dame (ND-GAIN country index measure)[2]; • World Bank (PPP Adjusted GDP)[3]; and • PRIMAP-hist (Production GHG emissions)[4].

1. Purchasing power parity adjusted gross domestic product has been updated from $m to £m
2. Copyright © 2023 University of Notre Dame. This index measure is using 2021 data.
3. World Bank data is provided under Creative Common By 4.0 DEED. International Comparison Program, World Bank | World Development Indicators database, World Bank | Eurostat-OECD PPP Programme. © 2024 The World Bank Group, All Rights Reserved. https://datacatalog.worldbank.org/public-licenses#cc-by
4. PRIMAP historical emissions dataset (PRIMAP-hist), is a dataset which combines UNFCCC inventory data with several other published datasets to create a comprehensive set of greenhouse gas emission pathways (Based on "Version 2.5" of PRIMAMP-hist)

Our climate metrics

Investment in sustainable assets

Definition	Our investment in sustainable assets is made up of four sub-categories: green assets, sustainability assets, social bonds and transition and climate-related funds. See the following table for more detail on the sustainable asset definition.
Scope	The investment in sustainable assets covers shareholder, with-profits and policyholder funds. The scope does not include assets in external mandates which are managed by Aviva Investors.
Units	Canadian Dollar ($) in millions
Calculation and reporting method	The investment in sustainable assets is presented at the end of the reporting period and presents assets which are recognized on the IFRS consolidated statement of financial position which meet the sustainable asset definition. The main categories of assets include infrastructure and real estate assets (both direct and debt) as well as listed bonds and loans. In addition, the underlying assets under management (AUM) of funds which fall within the definition are also included. The investment amount is based on the origination value of investments recognized as at December 31,2023. Where origination value is not available, market values are used. To the extent market values are used they will include any movement in the market value in the period and as well as the impact of disposals/drawdowns. All sustainable assets excluding bonds and real estate are valued on an origination basis. Bonds are valued on a market value basis.
Source	The metric is based on asset data collected from internal Aviva systems. In respect of bonds, data from the Climate Bonds Initiative (CBI) is used to determine whether the bonds are green, social or sustainability (including sustainability-linked) assets. In respect of real assets (direct and debt), the respective CBI methodologies for green bond screening and sustainability bond screening will be used to determine if the assets are green or sustainability assets.

Our climate metrics

Sustainable asset definition - split by asset class:

Asset class	Green assets	Sustainability assets	Social bonds	Transition and climate-related funds
Infrastructure assets (direct and debt)	Energy, Transport, Water (including nature-related solutions), Waste, Land Use categories identified as eligible under CBI green bond database methodology (2022) - this includes green energy such as solar electricity, offshore and onshore wind.	Non-electrified passenger rail and ICE-powered urban public transport.		
Real estate (direct and debt)	Categories defined as eligible under CBI green bond database methodology (2022). This category includes properties with EPC ratings of A and above as well as BREEAM of excellent and outstanding.			
Bonds and loans	In CBI green bond database and benefits from an external review[1].	Tagged sustainability in CBI social and sustainability bond database (which includes sustainability and sustainability-linked bonds) and benefits from an external review[1]. Sustainability linked loans which meet the Sustainability-Linked Loan Principles (SLLP) from the Loan Market Association (LMA) and benefits from an external review[1].	Tagged social in CBI social and sustainability bond database and benefits from an external review[1].	
Funds				Climate transition funds[2]. Social transition fund. Natural capital transition fund. Climate/decarbonization venture capital funds[3].

1. An external review is an assessment carried out by an independent third party and includes third party assurance, second party opinions (SPOs), verification under the Climate Bonds certification and bond ratings by a rating agency. This assessment will consider the green, social or sustainability credentials of the issuance against an internationally recognised framework (such as the Green Bond Principles).
2. Climate transition funds include only Aviva Investor funds; Climate Transition European Equity Fund (CTEF), Canadian Core Plus Climate Transition Pooled Fund, Climate Transition Global Equity Fund (CTGE), Climate Transition Global Credit Fund (CTGC) and Climate Transition Real Assets Fund (CTRA)
3. This includes the Clean Growth Fund (CGF), EIP Deep Decarbonization Frontier Fund LLP and Environmental Technologies Fund (ETF). These funds are not managed by Aviva Investors and hence we only recognise our direct investment.

Our climate metrics

Weather-related losses

Definition	Aviva's physical risk is measured through the weather-related loss metric. The impact of weather on our Combined Operating Ratio (COR) as well as the actual weather losses impact versus expected losses is calculated. COR is a financial measure of General Insurance (GI) underwriting profitability calculated as total underwriting costs (including claims) in our GI entities expressed as a percentage of net earned premiums. A COR below 100% indicates profitable underwriting. Weather events in the following business units are classed as catastrophe (CAT) events: • UK: flood, wind and storm surge and freeze; • Ireland: flood, wind and storm surge and freeze; and • Canada: flood, windstorm, hail and wildfire.
Scope	This metric is only applicable to the General Insurance (GI) businesses in UK, Ireland and Canada. Weather-related losses in UK and Ireland include both attritional and CAT weather-related claims, while weather-related losses in Canada only considers CAT claims.
Units	Actual weather-related losses versus expected losses: percentage (%) Weather impact on Aviva's Combined Operating Ratio (COR): percentage (%)
Calculation and reporting method	The expectation for weather-related losses is based on the long-term average (LTA). The LTA takes into account the volume of business written and the reinsurance structure in place during the relevant accident year. Actual weather-related losses are based on paid, reported and incurred but not reported (IBNR) weather-related claims for the relevant accident year. The weather losses, both actual and expected, are presented net of the reinsurance programmes in place.
Source	The metric is based on actual and forecast claims and reinsurance data obtained from the financial consolidation system.

Our climate metrics

Temperature alignment

Definition	The temperature alignment metric assesses Aviva's temperature alignment with the Paris Agreement target of limiting global warming to well below 2°C, preferably to 1.5°C above pre-industrial levels, in respect of our investments. Implied Temperature Rise (ITR) and internal analysis are used to calculate an overall temperature alignment score.
Scope	Temperature alignment is calculated for the following asset classes: • ITR: companies (credit, equities and direct real estate); and • Internal analysis: sovereigns and green infrastructure (only infrastructure debt (or direct investments) classified within the green asset sub-category per the sustainable asset metric).
Units	Degrees Celsius (°C)
Calculation and reporting method	The metric is calculated based on the following inputs: • ITR: This measure is used for our listed equities, listed corporate bonds and loans and direct real estate. ITR takes into account the property or investee companies' current emissions and reported emissions reduction targets, projecting an absolute emissions time series for each company until 2070 for Scopes 1, 2 and 3 emissions. This is based on the methodology published by MSCI[1] in September 2022. • Internal analysis: The temperature alignment score for our sovereign exposure is based on an analysis of individual governments' actions and how they compare against the Paris Agreement target, taking into account independent analysis conducted by organizations such as Climate Action Tracker. A temperature score is applied to green infrastructure based on internal analysis. • All the above inputs are then aggregated based on proportional weighting in the overall portfolio to determine an overall temperature alignment score in degrees Celsius. For the purpose of this aggregation, where an asset class has below 100% data coverage, the weighted score for the assets where data is available is assumed to apply to the entire asset class.
Source	The metric is based on asset data which is collected from internal Aviva systems as well as ITR data provided by MSCI[1]. In addition, data extracted from the Climate Action Tracker website is used to calculate the temperature alignment score for our sovereign exposure. The market benchmark data is based on MSCI All Country World Index (ACWI) Investable Market Index (IMI).

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Our climate metrics

Climate Value at Risk (Climate VaR)

Definition	The Climate VaR metric is a forward-looking estimate of the impact on our portfolio under different climate scenarios.
Scope	Climate VaR is calculated for the following asset classes: • Listed equities; • Listed corporate bonds; • Sovereigns; • Real estate (direct and commercial real estate mortgages); • Equity release mortgages; • Infrastructure debt; and • Insurance liabilities (both general insurance and life insurance).
Units	The results of the outputs are only disclosed qualitatively at present given current limitations which include scope and data availability, as well as uncertainty associated with some of the underlying assumptions.
Calculation and reporting method	The Intergovernmental Panel on Climate Change (IPCC) has identified potential future scenarios with respect to climate change. Each scenario describes a potential trajectory for future levels of greenhouse gases and other air pollutants. From these scenarios, we have considered those that can be mapped to the following temperature rises by 2100 and levels of economy-wide mitigations required: • 1.5°C (aggressive mitigation); • 2°C (strong mitigation); • 3°C (some mitigation); and • 4°C (no further mitigation). We calculate a Climate VaR for these four scenarios to provide a wide range of possible outcomes, reflecting different emission projections and associated temperature rises. Quantifying the impacts of climate change is an emerging practice, with inherent uncertainty in the approach taken as a range of scenarios are assessed. We employ numerous judgements in the execution of our methodology. For example, we apply uplifts to VaR impacts to allow for the indirect impacts of physical risk (e.g. lower economic growth, lower productivity and supply chain disruption), as well as the effects of feedback loops, where these uplifts are subject to significant degrees of estimation uncertainty at higher temperatures. It is challenging to obtain consistent emissions data across our entire portfolio. As this becomes accessible, it will improve our ability to more accurately estimate the Climate VaR. The current methodology implicitly assumes that the anticipated costs of climate change are not priced into asset valuations, whereas in reality it is anticipated that the current fair value of assets would have some consideration of climate risk priced in. The methodology also does not allow for the effects of tipping points being breached at higher temperatures. Furthermore, a static balance sheet approach with no management actions has been employed. An expert panel reviews and challenges the methodology and assumptions made in the selection, development and modelling of the financial impacts across scenarios. As such, there remain uncertainties around the quantification of climate-related risks and opportunities by our Climate VaR methodology.
Source	The metric is based on both asset and insurance liability data which is collected from internal Aviva systems as well as Climate VaR proportional impacts calculated and provided by MSCI[1] for bonds, equities and real estate holdings. Data from the Cambridge Institute of Sustainable Leadership's (CISL) Climate Wise Transition Risk Framework[2] is used to model transition risk exposures for infrastructure assets. Data from the University of Cambridge Bennett Institute for Public Policy[3] is used to model the physical risk exposures for sovereigns. We also leverage our existing catastrophe modelling capability to model the physical risk exposures for general insurance liabilities.

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2. The ClimateWise Transition Risk Framework helps investors and regulators manage risks and capture emerging opportunities from the low carbon transition. It has been developed through the ClimateWise Insurance Advisory Council, building on the recommendations from the TCFD.
3. https://www.bennettinstitute.cam.ac.uk/wp-content/uploads/2020/12/Rising_Climate_Falling_Ratings_Working_Paper.pdf

Independent practitioner's reasonable assurance report on the select performance metrics as presented in the Aviva Canada 2023 Climate-related Financial Disclosure

To the Board of Directors of Aviva Canada Inc. ("Aviva Canada")

We have undertaken a reasonable assurance engagement of the select performance metrics detailed below ("the select performance metrics") of Aviva Canada during the period from January 1, 2023 to December 31, 2023 as presented in Aviva Canada's 2023 Climate-related Financial Disclosure ("the Report").

Our reasonable assurance engagement was performed on the following select performance metrics:

Select performance metrics	2023	Page Number
Weighted average carbon intensity of credit and equities	63 tons CO2e/ USD$M revenue	41
Investment in Sustainable Assets	$989 M CAD	43

Aviva Canada's responsibility for the select performance metrics

Aviva Canada is responsible for the preparation of the select performance metrics in accordance with the applicable criteria established in Exhibit 1 (the applicable criteria). Aviva Canada is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation of the select performance metrics that are free from material misstatement, whether due to fraud or error.

Our responsibility

Our responsibility is to express a reasonable assurance opinion on the select performance metrics based on the evidence we have obtained. We conducted our reasonable assurance engagement in accordance with Canadian Standard on Assurance Engagements (CSAE) 3000, *Attestation Engagements Other than Audits or Reviews of Historical Financial Information.*

This standard requires that we plan and perform this engagement to obtain reasonable assurance about whether the select performance metrics are free from material misstatement.

Reasonable assurance is a high level of assurance, but is not a guarantee that an engagement conducted in accordance with this standard will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users of our report. The nature, timing and extent of procedures performed depends on our professional judgment, including an assessment of the risks of material misstatement, whether due to fraud or error, and involves obtaining evidence about the preparation of the select performance metrics in accordance with the applicable criteria.

Our engagement included, among others, the following procedures performed:

- Making enquiries of management to obtain an understanding of the overall governance and internal control environment, and risk management processes relevant to the select performance metrics;
- Evaluating the appropriateness of quantification methodology and reporting policies used, and the reasonableness of estimates made by Aviva Canada;
- Analytical reviews and trend analysis of the select performance metrics;
- Sample testing the underlying source data to supportive evidence; and
- Evaluating the overall presentation of the select performance metrics in the 2023 Climate-related Financial Disclosure.

We believe the evidence we obtained is sufficient and appropriate to provide a basis for our opinion.

Independent practitioner's reasonable assurance report on the select performance metrics as presented in the Aviva Canada 2023 Climate-related Financial Disclosure

Our independence and quality management

We have complied with independence and other ethical requirements of the relevant rules of professional conduct / code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Canadian Standard on Quality Management 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, which requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Significant inherent limitations

Non-financial data is subject to more limitations than financial data, given both the nature and the methods used for determining, calculating, sampling or estimating such data. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgments.

Emissions data used to calculate the weighted average carbon intensity of credit and equities are subject to significant inherent limitations given the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

Opinion

In our opinion, Aviva Canada's select performance metrics during the period from January 1, 2023 to December 31, 2023 are prepared, in all material respects, in accordance with the applicable criteria.

Purpose of select performance metrics and restriction on use of our report

The select performance metrics have been prepared in accordance with the applicable criteria for management to report to the Board of Directors. As a result, the select performance metrics may not be suitable for another purpose. Our report is intended solely for Aviva Canada.

We neither assume nor accept any responsibility or liability to any third party in respect of this report.

PricewaterhouseCoopers LLP

Chartered Professional Accountants

Toronto, Ontario

July 25, 2024

Exhibit 1

Select performance metrics and criteria

1. Weighted average carbon intensity of credit and equities

- **Scope**: Aviva Canada's public equities and corporate bonds exposure to carbon-intensive companies, expressed in tons CO_2e/USD$M revenue for the year ended December 31, 2023. (currently including investee Scope 1 and Scope 2 GHG emissions)
- **Methodology and assumptions:** The reporting criteria in which Aviva Canada's weighted average carbon intensity of credit and equities is calculated is based on the following reporting criteria:
  - The Global GHG Accounting and Reporting Standard Part A: Financed Emissions.Second Edition developed by the Partnership for Carbon Accounting Financials (PCAF)

2. Investment in Sustainable Assets

- **Scope:** Aviva Canada's investment in sustainable assets, expressed in CA$millions as at December 31, 2023.
- **Methodology and assumptions:** Refer to Aviva's Reporting criteria for Sustainability key performance indicators for the year 2023, available at: **https://www.aviva.com/sustainability/reporting/**.

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Cautionary statements

Climate-related cautionary statement

Climate metrics
The climate metrics, projections, forecasts and other forward-looking statements used in this document should be treated with special caution, in particular as they are more uncertain than, for example, historical financial information, and given the wider uncertainty around the evolution and impact of climate change.

Climate metrics include:

- Estimates of historical emissions and historical climate change; and
- Forward-looking climate metrics, such as ambitions, targets, climate scenarios and climate projections and forecasts.

Our understanding of climate change effects, data, metrics and methodologies and its impact continue to evolve. Accordingly, both historical and forward-looking climate metrics are inherently uncertain and, therefore, could be less decision-useful than metrics based on historical financial statements. Below we provide a non-exhaustive list of some of the challenges associated with using climate metrics in more detail.

1. Methodologies for estimating and calculating GHG emissions or emissions intensities and other climate-metrics vary widely
There is a lack of standardisation and comparability with many diverging frameworks and methodologies for calculating climate metrics.

In particular:

- Some methodologies use company-specific historical emissions data while others result in estimation of emissions based on sectoral or geographical data or averages. Of those that incorporate emissions ambitions and targets, there are different criteria for the types of ambitions and targets that can and cannot be used.
- Methodologies vary in their use of Scope 1, Scope 2 and/or Scope 3 GHG emissions. Some use only Scope 1 data, while others use Scope 1 and Scope 2 and yet others take Scope 1, Scope 2, and Scope 3 GHG emissions into account.
- Certain methodologies take cumulative historical GHG emissions into account while others incorporate point-in-time assessments of emissions intensity.

There is a risk that climate metrics may result in over or under estimations

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2. Climate metrics are complex and require making extensive judgements and assumptions
Climate metrics and data are based on underlying assumptions made about climate change policies, technologies and other matters that are uncertain or not yet known.

Any material change in these variables may cause the assumptions, and therefore, the climate metrics and data based on those assumptions, to be incorrect.

In particular:

- Temperature scenarios generally include a set of assumptions that incorporate existing or planned global or regional policies, or business-as-usual sociodemographic projection, and projections for technological progress (including negative emissions and sequestration technologies), none of which may happen as contemplated.
- Some assumptions attempt to compensate for existing data gaps, such as past emissions trends or comparable and reliable company specific ambitions and targets. These assumptions may prove to be incorrect and not accurately represent the actual data.

Design issues specific to financed emissions raise challenges, particularly around allocating emissions to the wide range of invested assets and financed activities.

Financed emissions from owning one percent of a company might include one percent of that company's emissions; a portfolio can rapidly double count if aggregate financed emissions include each underlying company's own Scope 3 upstream and downstream emissions.

The calculation becomes significantly more complex with other activities, such as when a financial institution serves as a counterparty or is one of multiple underwriters of a financing.

There is a risk that the judgement exercised, or the estimates or assumptions used, may subsequently turn out to be incorrect.

3. There is a lack of complete, standardized, accurate, verifiable, reliable, consistent and comparable climate-related data
Climate-related risks and opportunities and their potential impacts and related metrics depend on access to complete, standardized, accurate, verifiable, reliable, consistent and comparable climate-related data. The insurance industry, like other sectors, is grappling with data availability and quality.

Cautionary statements

In particular:

- Climate-related data may not be generally available from counterparties or customers or, if available, it is generally variable in terms of quality and, therefore, may not be complete, standardized, accurate, verifiable, reliable, consistent or comparable.
- Companies may rely on aggregated information based on high-level sector data developed by third parties that may be prepared in an inconsistent way using different methodologies, interpretations or assumptions.
- Data is less readily available for some invested asset types and there may also be data gaps, particularly for private companies, that are filled using "proxy" or other data, such as sectoral average, again developed in different ways.
- There is no single, global, cross-sector data provider that adequately and consistently covers the needed scope for data to analyse emissions and assess physical and transactional risks across operations and investment portfolios.
- While regulators and standard-setters mandate additional disclosure of verified climate-related data by companies across sectors, there are potential gaps between needed and available data.
- The availability of climate, industrial classification, energy use and efficiency data, including information used as a proxy for that data (e.g. EPC rating) depends on a variety of public, private and civic sector sources. Historically, climate data was largely environmental and weather data was produced by government agencies, however, the challenge is finding the relevant sources, if they exist, and then validating, cleaning and standardising the data in an accessible form or format.

Further development of reporting standards, scientific understanding of climate change and global and regional laws could materially impact the metrics, ambitions and targets contained within this report and may mean that subsequent reports do not allow a reader to compare metrics, ambitions and targets on a like for like basis. Certain disclosures are likely to be amended, updated, recalculated and restated in future reports.

There are many uncertainties, assumptions, judgements, opinions, estimates, forecasts and non-historic data surrounding the climate metrics, data, models and scenarios used to create them; and the measurement technologies, analytical methodologies and services that support them remain in an early stage.

Accordingly, the quality and interoperability of these models, technologies and methodologies is also at a relatively early stage.

Significant data gaps in sectors, sub-sectors and across invested asset classes are impeding not only climate risk management, but also the development of mitigation and adoption of strategies, as well as aspects of operations and credit risk and investment analysis that depend on data-informed processes.

In summary, the information in this report is subject to significant uncertainties and risks which may result in the group being unable to achieve the current plans, expectations, estimates, ambitions, targets or projections.

Some of the information in this document has been or may have been obtained from public and other sources and Aviva has not independently verified it. Aviva makes no representation or warranty regarding its completeness, accuracy, fitness for a particular purpose or non-infringement of such information.

Other forward-looking statements

This document contains, and we may make, other verbal or written 'forward-looking statements' with respect to certain of Aviva's plans and current goals and expectations relating to its future financial condition, performance, results, strategic initiatives and objectives.

Forward-looking statements include, without limitation, projections, estimates, commitments, plans, approaches, ambitions and targets (including, without limitation, sustainability commitments, ambitions, goals and targets). Statements containing the words 'believes', 'intends', 'expects', 'projects', 'plans', 'will', 'seeks', 'aims', 'may', 'could', 'outlook', 'objective', 'predict', 'likely', 'target', 'goal', 'guidance', 'trends', 'future', 'estimates', 'potential' and 'anticipates', and words of similar meaning, are forward-looking.

By their nature, all forward-looking statements involve risk and uncertainty. Accordingly, there are or will be important factors that could cause actual results to differ materially from those indicated in these statements.

Factors that could cause actual results to differ materially from those described in these statements include (but are not limited to):

- Regulatory measures addressing climate change and broader sustainability-related issues; and
- The development of standards and interpretations, including evolving requirements and practices in sustainability reporting; and the ability of the Aviva Group, together with governments and other stakeholders to measure, manage, and mitigate the impacts of climate change and broader sustainability-related issues effectively.

A detailed description of other relevant factors is contained within Aviva's most recent annual report available on its website at **https://www.aviva.com/reports.**

Cautionary statements

Due to such uncertainties and risks, readers are cautioned not to place undue reliance on such forward-looking statements. Forward-looking statements in this report are current only as of the date on which such statements are made and we do not undertake to update our forward-looking statements except as required by applicable law and do not provide any representation, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statements will actually occur.

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