Pūrongo Āhuarangi
ACC Climate Report

For the year ended 30 June 2024

He Kaupare. He Manaaki. He Whakaora.
Prevention. Care. Recovery.

Karakia

Whāia, whāia

Whāia te tika

Whāia te pono

Whāia te aroha

Mō te oranga tāngata

Kia puta ki te whai ao,

Ki te ao mārama

Haumi e, hui e, taiki e.

Our karakia can be interpreted as follows:

Striving to do what is right

Undertaking to act justly

Being considerate of everyone

That it may improve the lives of all.

Ngā kōrero o roto
Contents

1. Overview

2. Governance

3. Corporate Operations

4. Investments

5. Appendices

Nā te Poari | **From the Board**

We are pleased to present the 2024 ACC Climate Report. As members of the health and investment sectors in Aotearoa New Zealand, we recognise the significant implications of climate change for the communities we serve and the health systems we operate within.

This year we collaborated with organisations from across the health sector to produce the first climate change scenarios for the health sector. The scenarios were released in March 2024 and are intended to help health organisations in New Zealand build and evaluate their own adaptation strategies.

The work is a powerful reminder that the health and wellbeing of our communities is intrinsically linked to the environment. Climate change poses significant risks, including increased frequency of extreme weather events that may impact the type of injuries New Zealanders experience. Addressing these challenges requires a coordinated and informed approach. We hope that by sharing our insights and actions, we help contribute to a safer, more sustainable future for all people in Aotearoa New Zealand.

Dr Tracey Batten
Board Chair

Dated 18 September 2024

David Hunt
Deputy Board Chair

Dated 18 September 2024

He whakamārama

Overview

Ara pūrongo | **Reporting approach**

Statement of alignment

The disclosures in this report are made in alignment with the Aotearoa New Zealand Climate Standards (NZCS) issued by the New Zealand External Reporting Board (XRB).

ACC is not a 'climate reporting entity' as defined by the Financial Markets Conduct Act 2013.

ACC reports in alignment with the NZCS based on the 'Ministerial Enduring Letter of Expectations to Crown Financial Institutions in Relation to Responsible Investment' issued in October 2021[1]. This letter established principle-based expectations for responsible investment by Crown Financial Institutions (CFIs) consistent with global best practice investment standards and commitments of the Paris Agreement.

This disclosure includes information that is required by the Carbon Neutral Government Programme (CNGP) which is additional to the requirements of NZCS (please refer to the following section for information about the CNGP).

Reporting structure

ACC's greenhouse gas (GHG) emissions fall into two categories:

- Corporate operations emissions are GHG emissions which relate directly to our organisational operations.
- Investment portfolio emissions are GHG emissions associated with ACC's investment portfolio's underlying holdings.

Reduction planning, risks and the approach to strategy are different for each source. This report presents disclosures separately for the investment fund and corporate operations.

Adoption provisions

This is the first year of reporting in alignment with NZCS. ACC has applied adoption provisions 1 to 4 from NZCS 2 Adoption of Aotearoa New Zealand Climate Standards for the disclosures about our corporate operations. Adoption provisions 5 and 6 have been applied for the Investment fund disclosures.

ACC will continue to evolve our climate reporting to reflect advances in our own adaptation planning and in response to ongoing developments in reporting standards, frameworks and protocols.

[1] Ministerial Enduring Letter of Expectations to Crown Financial Institutions in relation to Responsible Investment.pdf

Tā mātou takohanga āhurangi | ACC's climate responsibilities

ACC is the Crown entity set up under the Accident Compensation Act 2001 to deliver Aotearoa New Zealand's accident insurance Scheme ('the Scheme'). The purpose of the Scheme is to deliver injury prevention initiatives and no-fault personal injury cover for everyone in Aotearoa New Zealand.

To read more about ACC's work and enterprise strategy, Huakina Te Rā, please go to our Annual Report 2024.

Te Tiriti o Waitangi | The Treaty of Waitangi

ACC recognises climate responsibility and action as an expression of stewardship, and an important aspect of partnership under Te Tiriti o Waitangi | The Treaty of Waitangi.

Public Sector Target 9 – Reduced net greenhouse gas emissions

In April 2024, the Government released nine targets to focus the public sector on achieving improved results in health, education, law and order, work, housing and the environment.

Target 9 requires public sector agencies to meet New Zealand's 2050 net zero climate change targets with total net emissions of no more than 290 megatonnes from 2022 to 2025 and 305 megatonnes from 2026 to 2030.

The targets for ACC are defined by the CNGP and Crown Responsible Investment Framework (CRIF).

Carbon Neutral Government Programme (CNGP)

As a participant in the CNGP, ACC is currently required to:

- Measure, verify and report GHG emissions annually.
- Set gross GHG emissions reduction targets for 30 June 2025 and 30 June 2030.
- Implement GHG emissions reductions plans.

The CNGP stipulates minimum gross reduction targets of 21% by 30 June 2025 and 42% by 30 June 2030. ACC has applied these against the benchmark year of 2018/19. Please refer to the Metrics and targets section for corporate operations for further detail about ACC's reduction targets.

The CNGP applies to GHG emissions arising from ACC's corporate operations.

Crown Responsible Investment Framework (CRIF)

In 2021, ACC worked closely with The Treasury and the other CFIs to develop the CRIF. Under the framework, CFIs have committed to transitioning the carbon intensity of investment portfolios to net-zero emissions by 2050. ACC has set targets to reduce the carbon intensity of its investment portfolio by 60% by 2025 and 65% by 2030 (against the benchmark year of 2018/19).

ACC's commitment to the principles outlined in the CRIF is in line with the 'Ministerial Enduring Letter of Expectations to Crown Financial Institutions in Relation to Responsible Investment (December 2021)'[2]. In the letter the Government set out its expectation for ACC (and the other CFIs) to provide reporting aligned with the NZCS.

[1] Ministerial Enduring Letter of Expectations to Crown Financial Institutions in relation to Responsible Investment.pdf

Ngā mahi whakahaere

Governance

Ngā mahi whakahaere | **Governance**

Board oversight of climate responsibilities

ACC's Board has ultimate responsibility for the oversight of climate responsibilities including meeting operational and investment emissions reduction targets and adaptation planning to ensure ACC can continue to deliver treatment, rehabilitation, and injury prevention initiatives for all people in New Zealand.

Board members are accountable to the Minister of ACC for the performance of their duties. The Board's governance role is directed by the provisions of the Crown Entities Act 2004 and the Accident Compensation Act 2001. The Board is supported in climate oversight by the Risk, Assurance and Audit Committee and the Board Investment Committee.

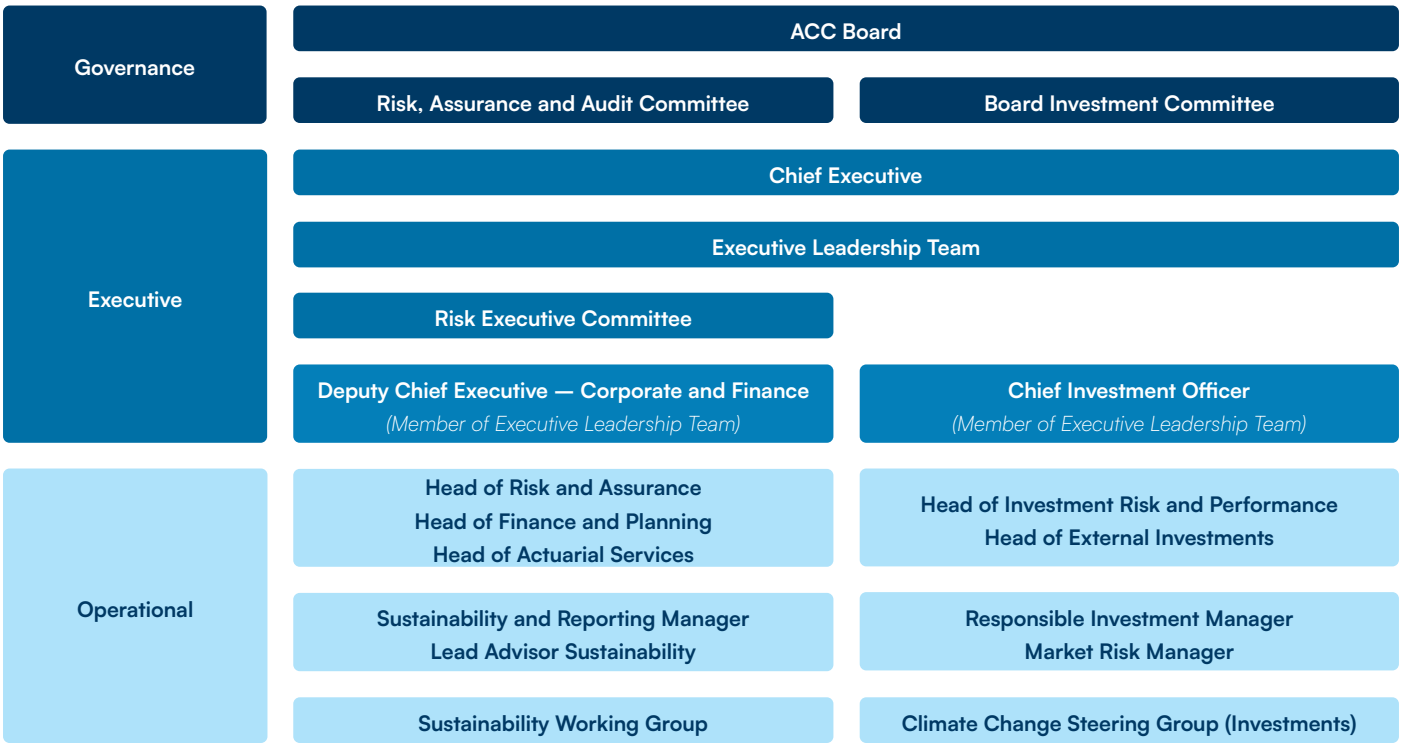
Please refer to the Annual Report 2024 for the profile of the ACC Board.

Ensuring the Board has the appropriate skills and competencies

The climate governance competencies of Board members are considered at the time of appointment and reviewed annually. Members of the ACC Board are appointed by the Minister for ACC. Under the Crown Entities Act 2004, the Minister must be satisfied that each Board member has the appropriate knowledge, skills, and experience to help ACC achieve its objectives and perform its functions. These objectives and functions include climate responsibilities for both ACC's investment and corporate operations, as set out in the ACC Board Governance Manual. The matrix of skills held by the Board is assessed as part of the annual performance review process. Climate governance responsibilities are evolving and training is undertaken to maintain professional currency across all required areas.

Delegation of climate responsibilities to management

The Board delegates the day-to-day management and leadership of ACC to the Chief Executive. The assignment of climate-related responsibilities to management level positions is shown in the organisational chart below.



ACC's climate governance and management processes

Position / Committee	Climate-related Responsibilities	Process and frequency of information	Next steps
ACC Board	• Seeks to ensure ACC's compliance with the law, accountability documents and relevant Crown expectations. • Seeks to ensure that ACC creates an environment that promotes the highest standards of safety and wellbeing, both for its employees and the communities it serves. • Seeks to ensure ACC investments are ethical, giving particular consideration to environmental, social and governance issues. • Oversees implementation of the Carbon Neutral Government Programme.	• The ACC Board meets 8-10 times annually. • The annual climate disclosure is reviewed by the Risk Assurance and Audit Committee (RAAC) and provided to the Board for final approval (Frequency: Annual). • The Board responds to climate-related risks or opportunities escalated by RAAC for Board decision or action (Frequency: As required). • The Board receives updates by exception about how the investment fund emission reductions are tracking against target.	• Inclusion of operations climate performance in the quarterly performance reporting provided to the Board by management (Frequency: Quarterly, from September 2024).
Risk Assurance and Audit Committee (RAAC)	• Receives reporting from management about ACC's climate risk. • Constructively challenges management's proposals and decisions on all aspects of ACC's management of its climate risk • Seeks to ensure compliance with legislative and public sector requirements. • Considers the assurance management report prepared by the external auditor. • Reviews significant variance from carbon reduction targets or projected results and constructively challenges management's emissions reduction planning. • Considers the views of the Board Investment Committee on investment- related matters relevant to ACC's climate risk management and emissions reduction.	• RAAC meets quarterly, with out-of-cycle meetings to meet requirements. • The annual climate disclosure is provided to RAAC by the Deputy Chief Executive (DCE) of Corporate and Finance (Frequency: Annual). • Climate-related risks or opportunities requiring governance consideration are referred to RAAC by the Risk Executive Committee (REC) and escalated to the Board for decision or noting if necessary (Frequency: As required).	• From December 2024, quarterly climate performance reporting to be provided to RAAC by the management level Risk Executive Committee (prepared by DCE Corporate and Finance and Sustainability and Reporting Manager). • Integration of the updated climate-related risks and opportunities into the risk framework to provide for reporting of emerging risk.
Board Investment Committee (BIC)	• Annually reviews the ethical investment policy which covers our climate-related responsibilities. • Monitors the performance of ACC's portfolio emissions against targets. • Maintains oversight of the investment portfolio to ensure alignment with environmental, social and governance-related exclusions, including climate-related exclusions.	• The BIC meets seven times per year, with the provision for out-of-cycle meetings to meet requirements. • The BIC receives quarterly climate-related reports from senior investment management that consider how the pathway is tracking against ACC's interim carbon targets.	• Continuation of climate performance reporting provided to the BIC by management (Frequency: Quarterly).

Position / Committee	Climate-related Responsibilities	Process and frequency of information	Next steps
Risk Executive Committee	• Monitors the performance of ACC's enterprise-wide risk management against ACC's risk appetite and metrics with specific focus on non-investment operational, legal, and financial risks, ensuring any significant organisational-wide emerging risks are identified, understood, and acted upon, while maintaining an alignment with and oversight of investment risks.	• Climate-related risks or opportunities requiring governance consideration are escalated to Risk Executive Committee (Frequency: As required). • Climate-related risks or opportunities are escalated to RAAC as necessary (Frequency: As required).	• From December 2024, quarterly climate performance reporting to be provided to Risk Executive Committee by DCE Corporate and Finance and Sustainability and Reporting Manager.
Climate Change Steering Group (CCSG)	• Develops the investment strategy to align the ACC Investment Fund with a net-zero emissions world. • Develops climate change reporting to support achievement of ACC's investment emissions reduction targets and meet external climate reporting commitments relating to the Investment Fund.	• Core members: Chief Investment Officer, Head of External Investments, the Responsible Investment Manager and the Market Risk Manager. • The CCSG meets weekly to discuss progress, challenges, strategy and reporting development. • The CCSG prepares a quarterly investment emissions reduction update for the BIC and the Board.	
Sustainability Working Group	Connects key internal stakeholders to: • Gather input and track progress for climate work programmes and initiatives. • Evaluate emerging topics of relevance to ACC's climate responsibilities. • Support the implementation of approved climate polices and initiatives across the organisation.	• Core members: DCE — Corporate and Finance, Sustainability and Reporting Manager, Lead Advisor Sustainability — Climate Change, Responsible Investment Manager. • Representatives from Legal, Actuarial, Investments, Strategy, Engagement and Planning, Risk and Assurance, Finance and Planning. • Monthly meetings.	• Representation of additional organisational functions as the sustainability work programme progresses from risk assessment to risk monitoring and adaptation planning.

Strategic and operational decision-making: Incorporating climate considerations

ACC monitors claims data to understand emerging trends. This provides for early detection of changing requirements for injury prevention, treatment, and rehabilitation initiatives. Information is disseminated to the accountable parts of the organisation and included, as relevant, into management and governance reporting. Although these existing systems can be reasonably expected to provide evidence of physical and transitional climate impacts on injuries or rehabilitation trajectories, they will show us the impact as it begins to unfold rather than in advance. In 2023 ACC began work to create a forward view of climate risks and opportunities. Please refer to the Risk management section for more information.

ACC's commitment to climate responsibility in investments is integrated into the ACC Ethical Investment Policy which is adhered to by internal and external investment managers. This policy is updated annually and approved by the Board. ACC's investment fund (the Fund) is being transitioned to net-zero.

Metrics and targets

ACC's emissions reductions targets align to our responsibilities under the CNGP and CRIF. Climate targets are included in ACC's Service Agreement. Progress to targets is reported regularly to management and the Board (refer to the table above).

Remuneration

Climate-performance metrics for corporate operations are not linked to remuneration for the ACC Board or Executive.

Portfolio managers are rewarded on their portfolio performance against portfolio benchmarks. Carbon budgets are placed on ACC's investment portfolios and low carbon benchmarks are used to measure performance against these portfolios.

Ngā mahi rangatōpū
Corporate operations

Ngā mahi whakatūpato | **Risk management**

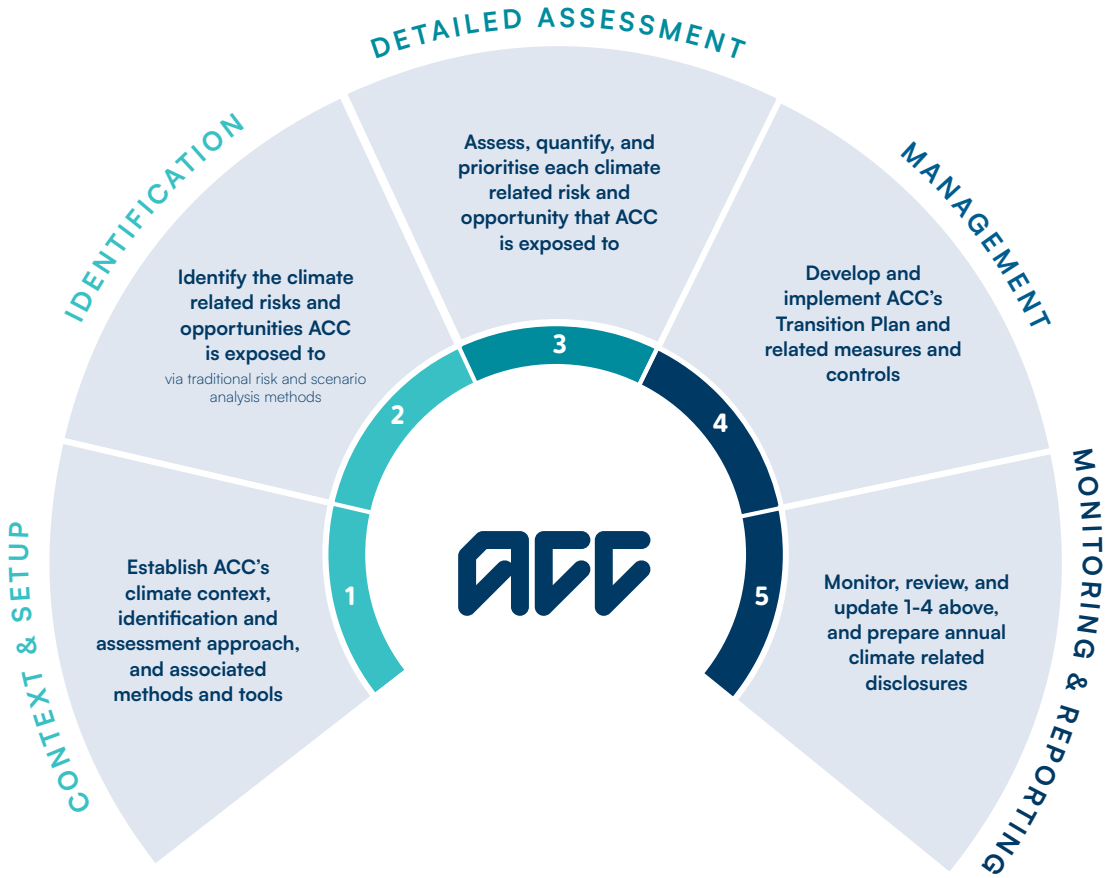
This section describes ACC's **processes** and **roadmap** for identifying, assessing, and managing climate-related risks. Information about our exposures to climate impacts is presented in the Strategy section of this disclosure.

Overview

In 2023, ACC began a 3-year programme of work to understand the climate risks and opportunities that the organisation may be exposed to in the short, medium and long term. Climate risk is already included in our enterprise risk framework, and our existing monitoring of claims data helps us watch for climate-related impacts on injuries and rehabilitation. The current work programme extends this approach by developing a forward view that will help enable early adaptation and planning. The work will lead to a formal climate adaptation plan for ACC.

5-Stage approach

ACC has adopted a 5-stage approach to identifying, assessing, managing, and monitoring climate-related risks and opportunities for its corporate operations. The methodology takes a systematic and bottom-up approach to identifying and assessing physical and transition climate risks. The processes and methods employed at each stage are based on climate-related risk standards and guidelines that represent accepted best practice[3]. This approach is aligned with our existing risk management framework. Due to the scale and complexity of the task, the work programme has been spread across three annual reporting cycles.



Graphic source: onepointfive

[3] Including AS/NZS ISO 31000 and the associated ISO 14090 and 14091, and technical guidance from the Intergovernmental Panel on Climate Change (IPCC) and Task Force for Climate-related Financial Disclosures.

Rationale

ACC uses predictive modelling for actuarial forecasts about funding ratios, new year claim costs and the Outstanding Claims Liability (OCL). While no-one can predict the future with 100% certainty, we take great care to ensure our predictions are as accurate as possible and regularly updated. Modelling the impacts of climate change is different because we do not have initial data to base predictions on. Science-based evidence about climate helps us to form high-level, generalised views. However, until climate impacts begin to present in our claims data or in other research or data sets, we will need to use starting assumptions to consider the impact on claims.

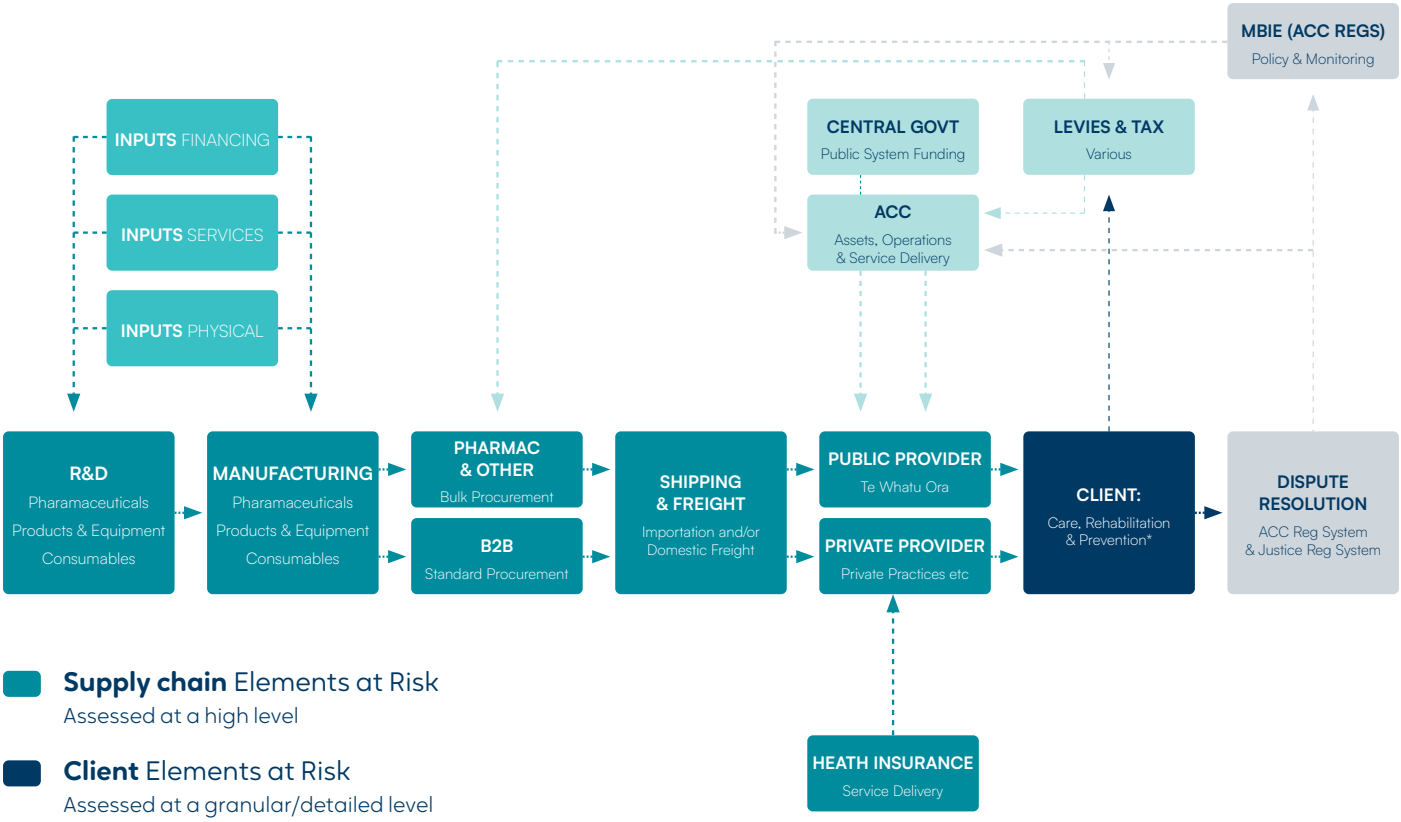
Use of traditional risk identification methods and a systematic, bottom-up methodology allows us to form a preliminary view. Although the early years of our planning will be assumption-based, this methodology creates an initial framework that can be refined and updated as research and data become available.

Process for identifying and assessing climate-related risks and opportunities

Overview

Assessing climate risks for ACC is challenging because injuries are caused by wide ranges of factors and occur in many different settings. We have placed initial focus on key areas of the value chain with high exposure to physical and transition climate drivers, or significant potential financial and non-financial impacts for ACC.

In this reporting cycle, ACC assessed its client segments, supply chain, assets, sites and operations because we consider these to be the most material areas of exposure. Each element was screened for exposures to climate hazards and risks using NIWA's RCP[4] 8.5 climate projections, and a range of current and anticipated transition drivers.



Graphic source: onepointfive

[4] Representative Concentration Pathways (RCPs) are scenarios used to project future levels of greenhouse gases in the atmosphere. These trajectories, adopted by the Intergovernmental Panel on Climate Change (IPCC), outline potential future concentrations of greenhouse gases, rather than emissions. Each pathway represents a different climate change scenario, reflecting varying levels of greenhouse gas emissions over time. The scenarios illustrate the range of possible futures based on the level of greenhouse gases emitted in the coming years.

Healthcare and recovery value chain

The healthcare and recovery value chain plays a crucial role in fulfilling ACC's responsibilities for injury prevention, treatment, and rehabilitation. ACC is analysing the full healthcare and recovery value chain. No specific parts of this value chain have been excluded from analysis.

Climate hazards

A set of relevant climate hazards was derived from NIWA regional projections, Ministry for the Environment (MfE) data and regional climate risk assessments.

Group 1 Extreme weather, flooding & rainfall	**1.A.** Change in the variability of rainfall ("wetter winters") **1.B.** Change in the variability of rainfall ("dryer summers") **1.C**. Change in snowfall (on average and snow days per year)	**1.D.** Extreme rainfall events **1.E.** Flooding events (fluvial and pluvial) **1.F**. Landslide and soil erosion events **1.G**. Extreme wind and storm events
Group 2 Coastal related hazards	**2.A.** Sea level rise ("SLR") **2.B.** Groundwater rise (attendant to SLR) **2.C**. Salinity intrusion/stress	**2.D.** Coastal flooding (inundation and storm surge events **2.E.** Coastal erosion
Group 3 Increased temp & drought	**3.A.** Higher temperatures **3.B.** Solar radiation **3.C**. Cold nights **3.D.** Frost days	**3.E.** Drought **3.F.** Fire Weather

Graphic source: onepointfive

Transition drivers

Transition drivers include policy changes, legal developments, market shifts, and technological advancements associated with the transition toward a low-carbon future. Our sources for transition drivers were central and local government policies, as well as publicly available information on market and technology trends. Transition drivers include shifts that are already underway or about to occur as well as regulatory changes and market trends that are expected with relative certainty in the near to medium term and can be described in sufficient detail to assess their impacts.

Sites, assets, and functions

This assessment utilized NIWA RCP 8.5 climate projections and Geographic Information System (GIS) platforms based on NIWA projections to determine site-specific climate risks. ACC sites were individually assessed for exposure. Other assets were assessed at the asset class level, depending on criticality and materiality.

Client segments

ACC utilised claims data to identify client and injury categories that represent the highest volume and value of claims. Each client injury category was assessed for material exposure to the identified climate hazards and transition drivers.

Workplace Client Segments

A. Agricultute, Forestry, and Fishing

- A01 Agriculture
- A02 Services to Agriculture, Hunting & Trapping
- A03 Forestry and Logging
- A04 Commercial Fishing

B. Mining (screened at sector level)

C. Manufacturing

- C21 Food, Beverage and Tobacco Manufacturing
- C25 Petroleum, Coal, Chemical & Associated Product Manufacturing
- C27 Metal Product Manufacturing
- C28 Machinery and Equipment Manufacturing
- C29 Other Manufacturing

D. Electricity, Gas, and Water Supply

E. Construction

F. Wholesale Trade

- F45 Basic Material Wholesaling
- F46 Machinery & Motor Vehicle Wholesaling
- F47 Personal & Household Good Wholesaling

Non-Workplace Client Segments

A. Home and Community

- A1 Falls
- A2 Lifting, carrying, straining
- A3 Slipping, Skidding on foot
- A4 Twisting Movement
- A5 Animal Related
- A6 Assault
- A7 Ladder
- A8 Sensitive Claims

Each screened by reference to key locations — e.g. for falls:

- Home (58.3%)
- Other (13.33%)
- School (0.34%/4.14%)
- Road or Street (6.83%)

B. Sport and Recreation

- B1 Summer Outdoor team sports
- B2 Winter Outdoor Team Sports
- B3 Indoor Team Sports
- B4 Other Indoor Sports and Rec
- B5 Outdoor Adventure (Sport and Rec)
- B6 Outdoor Individual (Sport and Rec)
- B7 Water bases (Sport and Rec)

Each screened by reference to key sports (i.e. those that have 3000+ claims per annum) — e.g. for B2:

- Rugby Union
- Soccer
- Netball* (also played indoors)
- Hockey
- Rugby League

C. Road

- C1 Car
- C2 Motorcycle
- C3 Pedestrian
- C4 Cycling and E-bike
- C5 Bus
- C6 Truck
- C7 E-scooter

Potential exposures

A preliminary set of potential climate-related risks and opportunities (exposures) was developed using matrix-based workbooks. Internal stakeholders considered what exposures could arise for each site or client segment or the supply chain under each of the climate hazards and with consideration to any relevant transition drivers. Each long-listed exposure was assessed by the internal stakeholders for plausibility and the potential for material impact.

The currently identified exposures are presented in the Strategy section. These exposures are a starting set that provides the basis for the next phases of climate risk evaluation for ACC. These exposures will evolve as the work programme continues and additional information becomes available.

ACC emphasises that these exposures are not derived from data or evidence about the impact of climate on injury. Therefore, they should be viewed as a framework for our climate risk evaluation process, rather than evidence-based risks.

Although the work is not derived from data about the impact of climate on injury, the method used to identify exposures is aligned to the ISO 31000 and ISO 14091 Standards. See the Rationale section above for more information about the reason for this approach.

Conservative approach

The exposures were identified using NIWA climate projections based on RCP 8.5. This is often referred to as a hothouse scenario. ACC also notes that all the exposures have the potential to be improved by adaptations in safety-related behaviours and systems, and the built environment. The exposure set therefore represents a conservative framework for starting analysis.

Next stages

ACC will complete a closer evaluation of exposure to climate hazards for each of our sites, the client segments and supply chain. The currently identified exposures will be assessed using:

- The ACC climate scenarios based on RCP 2.6, 4.5 and 8.5, which will be developed in the next reporting cycle.
- Updated data on critical operations and services at exposed and/or vulnerable sites, including those that cannot be performed remotely.
- Available information about adaptation measures that are likely to be implemented (such as roading improvement) and the potential effect of transition drivers.
- Updated data and climate-related reports from key supply chain participants that are expected to become available as more entities begin voluntary TCFD reporting and mandatory reporting requirements are implemented in new jurisdictions.

Quantification

During the next phases of evaluation of climate risk and opportunities ACC will consider quantification of exposures and how this information is to be factored into financial reporting and planning.

This will include actuarial review of implications for the outstanding claims liability (OCL) and the new year claims costs. Current claims data indicate that existing severe weather events have not significantly affected the OCL. NIWA projects that climate hazards will increase more slowly before 2040. Therefore, ACC is comfortable with taking the necessary time to conduct a thorough and robust assessment.

Scenario analysis and transition planning

ACC will develop climate scenarios in the next reporting cycle. This will be followed by a transition plan for ACC's corporate operations. This aligns with best practice guidance from the TCFD and the XRB, which suggests that scenario analysis should be based on a robust and thorough understanding of risk.

During 2023/24, ACC collaborated with private and public health sector organisations to produce the first climate change scenarios for the health sector. ACC will use insights from the health sector climate change scenarios and other sector-level scenarios (including the construction and property sector, and transport sector scenarios) to develop our own scenario analysis in the next reporting cycle.

Integration of climate risks into ACC's overall risk management process

Exposure to climate change is recognised as a strategic risk within ACC's enterprise risk framework. Following final assessment of climate risks and opportunities in the next reporting cycle, ACC will integrate operational climate risks into the risk registers of the relevant business groups, units, or sites. These risks are assessed at least quarterly. Where indicated, ACC's climate reporting metrics will be updated to track risks. This information is incorporated into quarterly reporting to the Risk Executive Committee and escalated as necessary to the Risk, Assurance and Audit Committee and wider Board.

Climate-related impacts on injuries: a responsible approach

ACC handles two million new claims annually. We anticipate that climate-related factors will affect claims in the future. These factors have the potential to impact injury types, claim volumes, and access to treatment and rehabilitation services. ACC's exposure to climate risk is extremely broad because it is comprised of the individual exposures of everyone in New Zealand to climate-related injury in their work and personal lives. Because injuries are caused by a wide range of factors, and occur in many different settings, it is challenging to understand how climate change will influence injuries in Aotearoa New Zealand.

As part of the public sector and health system within Aotearoa New Zealand, ACC has a responsibility to contribute to national planning for climate adaptation. Despite the inherent uncertainty, we recognise that by beginning climate modelling, we can collaborate more effectively across the health and wider public sector. This planning contributes to the exchange of ideas and helps to strengthen the critical thinking that underpins adaptation planning.

ACC's operational climate-related risks and opportunities

The following tables summarise the preliminary set of climate exposures for ACC.

As outlined in the Risk management section these exposures are a starting set that provides the basis for the next phases of climate risk evaluation for ACC. These exposures will evolve as the work programme continues and additional information becomes available.

ACC emphasises that these exposures are not derived from data or evidence about the impact of climate on injury. Therefore, they should be viewed as a framework for our climate risk evaluation process, rather than evidence-based risks.

The exposures were identified using NIWA climate projections based on RCP 8.5. This is often referred to as a hothouse scenario. ACC also notes that all the exposures can be improved by adaptations in safety-related behaviours and systems, and the built environment. The exposure set therefore represents a conservative framework for starting analysis.

Time horizons

The time horizons are currently identified as:

- Short-term: 2024-2035
- Medium-term: 2036-2050
- Long-term: 2051-2080

Direct physical risks to ACC sites, assets and operations

The following table summarises key physical climate-related risks that ACC's sites, assets, and operations are currently exposed to or reasonably expected to be exposed to over the short, medium, and long term under NIWA climate projections based on RCP 8.5.

Physical Risk 1: Risk of disruption to ACC operations (critical and noncritical) and delivery of services

Time horizon	Short to medium term	
Exposure	Low to moderate	
Description	Projected increases in severe weather events (e.g., wind, storm, rainfall, flooding, and coastal inundation) could disrupt ACC operations and customer services at specified leasehold sites. Potential impacts include: • Compromised weather-tightness • Acute and gradual water ingress • Flood-related damage • Temporary loss of access and use of affected sites	
Elements at Risk	• 31 branch/office sites • 4 hubs in Hamilton, Wellington, and Dunedin (with critical non-remote services) • 2 data centres which host critical non-remote services	• 13 sites exposed to pluvial and fluvial flooding • 3 sites exposed to coastal flooding and storm surge • 1 site exposed to pluvial, fluvial, and coastal flooding
Potential Impacts (Prior to management and adaptation response)	Projected increases in rainfall, wind, and storm intensity could impact ACC sites in various ways: • Temporary disruptions to operations and services (e.g., minor physical damage or brief access loss). • Long-term disruptions to non-remote services (e.g., extensive damage or required relocation). However, the likelihood of a single event significantly disrupting multiple critical sites is low due to their geographical spread and inherent resilience.	While impacts from rainfall, wind, and storm events will vary, flood events have the potential to cause more extensive and pervasive damage, leading to greater disruption of operations at affected sites.

Physical Risk 2: Risk of a cumulative increase in Opex costs

Time horizon	Short to medium term
Exposure	Low to moderate (especially over the medium to long term)
Description	Exposure of ACC leasehold sites to rising temperatures, increased solar radiation, wetter winters, and drier summers can lead to: 1. Greater reliance on energy-intensive HVAC systems, reducing efficiency and increasing energy use. 2. Lower staff productivity, especially during hotter months due to decreased thermal comfort. 3. Higher building maintenance costs and investments in mitigation and adaptation, leading to increased lease costs. These factors collectively could impact operational expenses over time, (subject to any site relocations).
Elements at Risk	• 31 branch/office sites • 4 hubs in Hamilton, Wellington, and Dunedin (with critical non-remote services) • 2 data centres which host critical non-remote services **Reduced staff productivity is unlikely to apply. However, data centres may be subject to additional cost Opex costs arising from the impact of the listed hazards on cooling
Potential Impacts (Prior to management and adaptation response)	Over the short to medium term it is expected that ACC will migrate all sites to buildings that meet specific standards for operational emissions and climate resilience (in line with existing planning). NIWA projects that climate hazards will increase more slowly before 2040, making ACC sites less vulnerable to these hazards in the near term. However, moving to low-carbon, climate-resilient buildings has the potential to increase lease costs, impacting operational expenses (Opex). The rising demand for green buildings, driven by the need to reduce emissions, may further amplify these costs.

Watch and brief: Compromised building performance

In addition to the above exposure, ACC recognises the potential for more general compromises in building performance. Key issues include:

- Wet and warm winters: Higher humidity levels can compromise thermal performance and HVAC efficiency.
- Increasing temperatures: More hot days can hinder internal climate regulation and thermal comfort.
- Solar radiation: Increased wear on roofs, facades and flashing can affect weather tightness and thermal performance.

While these potential impacts are noted, they are not yet considered material exposures as they can be managed or mitigated.

Indirect physical risks: Client level

The following tables summarise key indirect climate-related risks that ACC's funding and service delivery model is reasonably expected to be exposed to over the short, medium, and long term as a result of physical impacts that may arise at the client level under NIWA climate projections based on RCP 8.5.

Road-related injury

Physical Risk (PR)	PR3: Increased exposure to rainfall hazards in winter months PR4: Increased damage and deterioration to roads PR5: Effect of hotter and dryer summers on driver behaviour
Time horizon	Medium to long term
Exposure	Moderate to high (in the medium to long term)

Description	Road users may see more accidents due to:
	• PR3: Increased winter rainfall leading to decreased visibility, traction, longer stopping distances, and more flood and debris hazards.
	• PR4: More road damage from climate hazards, especially on open roads, increasing accident risks.
	• PR5: Hotter, drier summers potentially contributing to:
	  • higher average speeds due to factors such as the perception that road conditions are safer
	  • increases in sun glare and other distractions, pedestrians, cyclists, motorcycles, and alcohol and drug consumption.

Elements at Risk	All road users across the following transport mode categories (car, motorcycles, freight/heavy vehicles, pedestrian, cycling (including E-bikes), other powered and active modes).
Potential Impacts (Prior to management and adaptation response)	Potential accident impacts from PR3-5 will vary by transport mode. Before detailed assessments, here are general observations: • **PR3:** Wetter winters will increase exposure to visibility, traction, and congestion hazards, potentially leading to more frequent but less severe low-speed accidents (e.g., rear-end, side-swipe, lane merging) on urban roads due to higher traffic volumes and inter-modal conflicts. • **PR4:** Increased lower-grade road damage (e.g., potholes, cracking) has the potential to raise the number and severity of single-vehicle accidents on open roads, especially where speeds are higher. • **PR5:** Hotter, drier summers may increase vehicle speeds, traffic volumes, and hazards like sun glare, potentially leading to more severe single-vehicle crashes and open road collisions, as well as more cycle and pedestrian accidents during peak hours.

Work-related injury

Physical Risk (PR)	PR6: Changes in the type, frequency, and prevalence of workplace hazards PR7: Changes in the type, nature, and volume of certain workplace activities PR8: Increasing disruption, and instances of stress and fatigue
Time horizon	Medium to long term
Exposure	Expected to vary between risks and industry
Description	Industries may face an increase in accidents due to rising climate hazards, which can: • **Alter workplace hazards** (PR6): Changing the type, frequency, and prevalence of hazards that workers are exposed to on a day-to-day basis • **Change workplace operations and conditions** (PR7): Introducing new activities or altering existing ones, affecting hazard profiles. • **Create hotter or wetter conditions** (PR8): Leading to increased workloads, disrupted productivity, dehydration, fatigue, and discomfort, which can impair motor functions and cognition (concentration and decision-making), and lead to compromises in safety protocols.
Elements at Risk	Industries considered to have greater exposure are those where a large portion of the workforce spends significant time outdoors, exposed to the elements or engages predominantly in physical activities, making their safety more susceptible to climate influences. The following industries are highlighted: • Agriculture, Services to Agriculture, Hunting & Trapping, Forestry and Logging • Commercial Fishing • Mining • Electricity, Gas, and Water Supply • General Construction, Construction Trade Services • Accommodation, Cafes and Restaurants • Road Transport, Air and Space Transport, Services to Transport • Sport and Recreation
Potential Impacts (Prior to management and adaptation response)	PR6, PR7 and PR8 have the potential to both increase and decrease accident events. Detailed industry assessments are needed for precise impacts. Here are some general examples: • **PR6:** Wetter winters increase wet condition hours, raising fall and impact accidents. Dryer summers lead to more time on uneven, eroded ground, increasing accidents. Wind, rain, and floods create specific hazards during and after events. • **PR7:** Acute events add remediation work hours, increasing potential for accidents. Higher temperatures may change land, crop, and livestock management, introducing new hazards and increasing exposure to existing ones. • **PR8:** Warmer months, especially hot days (over 25°C), increase accident risks due to compromised safety management. Cooler months see more fatigue and stress-related errors from wetter conditions leading to productivity catch-up efforts.

Home and community injury

Physical Risk (PR)	PR9: Increasing prevalence of fall, slip, trip, and related/ ancillary hazards PR10: General increase in activity during warmer and drier summers, and following acute events PR11: Increasing instances of dehydration and fatigue (home and community)
Time horizon	Short to medium term
Exposure	Expected to vary between risks
Description	Exposure to specified climate hazards in home and community settings may lead to a net increase in the number and/or severity of common accident events due to: • **Increased Fall, Slip, and Trip Hazards** (PR9): Wetter winters and drier summers have the potential to raise the prevalence of falls, slips, and trips during everyday activities. • **Higher Activity Levels** (PR10): Warmer, drier summers may boost overall activity, particularly in gardening and DIY settings, leading to more accidents. • **Dehydration and Fatigue** (PR11): Increased instances of dehydration and fatigue can impair motor functions (balance, coordination, reaction times) and concentration and decision-making, resulting in more accidents.
Elements at Risk	ACC classifies key activity or location settings for home and community injuries as DIY, gardening, general home activities, general community activities, general school activities, and roads and streets. According to ACC claims data, the most common accident events in these settings, in order of frequency, are: • Falls • Lifting, carrying, straining • Slipping, skidding on foot • Twisting movements • Animal-related incidents and being struck by a person or animal
Potential Impacts (Prior to management and adaptation response)	PR9 to PR11 have the potential to increase common accident events, but climate hazards can also create circumstances that lead to reductions. A detailed assessment at the individual home and community setting level is needed to establish net impacts. Here are some general examples: **PR9 Examples:** • **Wetter winters:** Likely to increase the time people spend in wet conditions, leading to more fall and impact-related accidents. • **Drier summers:** Increased exposure to harder, uneven ground prone to erosion and reduced traction, potentially raising the number and severity of accidents. **PR10 Examples:** • **Drier summers and higher temperatures:** More time spent in outdoor activities (gardening, DIY, events), leading to more accidents. Increased heavy weather events may also boost DIY and gardening activities, further raising accident rates. **PR11 Examples:** • **Dehydration and fatigue:** Likely to increase accidents due to impaired ability to manage safety risks, especially on hot days (over 25°C).

Watch and brief: Home and community injury

Other indirect physical risks were excluded from the table as they were not deemed significant enough at this time, but ACC will monitor them on a precautionary basis. These risks could become significant over the medium to long term due to cumulative impacts.

- Potential increases in assault-related claims in community settings may arise from increased outdoor activity, heightened aggression due to higher temperatures, more people in public spaces (routine activity theory), and increased substance use in warmer weather. Conversely, wetter winters may reduce such claims as rainfall tends to suppress violent and property crimes.
- Over the medium to long term, climate changes might exacerbate other factors that contribute to assault and sensitive claim events, such as mental health strain, crowded living conditions, and economic stress, with a greater impact anticipated in domestic settings.

Sport and recreation injury

Physical Risk (PR)	PR12: Increasing prevalence of fall, slip, trip, collision, and related/ancillary hazards PR13: Climate induces changes to participation rates and times PR14: Changing outdoor sport and recreation conditions PR15: Increasing instances of dehydration and fatigue (sport and recreation)
Time horizon	Short to medium term
Exposure	Expected to vary between risks
Description	A net increase in sport and recreation injuries may occur due to: • **(PR12) Increased fall, slip, trip, and collision hazards:** Wetter winters, drier summers, and more acute weather events can heighten these risks for outdoor activities. • **(PR13) Altered participation:** More rain and acute events in winter may reduce outdoor activity and increase indoor participation, while warmer, drier summers may boost overall participation. • **(PR14) Changed conditions:** Higher temperatures can worsen snow conditions, increasing accident risks, while more rainfall and acute events create hazardous conditions for outdoor and water-based activities. • **(PR15) More dehydration and fatigue:** Compromised motor function and cognition during warmer months could lead to more accidents across all categories.
Elements at Risk	ACC's key sport and recreation categories are: • Outdoor Team Sports (Winter), Outdoor Team Sports (Summer) • Indoor Team Sports, Indoor Sports and Recreation • Outdoor Adventure Sports and Recreation (Including Snow) • Outdoor Individual/Fitness • Water Based Sports and Recreation
Potential Impacts (Prior to management and adaptation response)	PR12 to 15 have potential to increase common accident events. A detailed assessment at the individual sport and recreation category level is required before potential net impacts can be established. In the interim, the following general examples are provided: **PR12:** Wetter winters are expected to increase the time that outdoor sports participants spend in wet conditions where friction, ground stability, visibility, and control are reduced. Dryer summers may increase the number of fall, trip, and slip-related accident events, and severity of impact-related injuries due to changes in ground surface conditions, as well as the effect dry conditions have on the speed of play. **PR13:** Dryer summers and higher temperatures have the potential to increase participation rates and reduce cancelled games and plans. Wetter winters and acute wind, rain and storm events may increase fixture and plan cancellations, increase participation across indoor categories, and reduce snow sport participation due to impacts on snow conditions. **PR14:** Higher temperatures and wetter winters can create hazardous snow conditions. Increased heavy and extreme weather events can expose participants in outdoor adventure and fitness categories to hazards such as unstable terrain, debris, rockfalls, falling trees, insects, and water hazards or participants in water-based sports/recreation to larger waves, rips, and debris. Each of these examples may increase the incidence and/or severity of injuries.

Indirect physical and transition risks: Supply Chain

The following table summarises key indirect climate-related risks that ACC's funding and service delivery model is reasonably expected to be exposed to over the short, medium, and long term as a result of physical and transition related impacts that may arise across the health and rehabilitation supply chain (HRSC).

Physical and Transition Risks	HRSC1: Increased cost of health care and rehabilitation inputs HRSC2: Constrained access to funding HRSC3: Short and long-run supply chain disruptions
Time horizon	Medium to long term
Exposure	Expected to vary between risks
Description	Potential net increase in ACC's operational costs and constrained access to care and rehabilitation services (essential to meeting ACC's core prevention, care, and rehabilitation statutory duties), due to: **HRSC1 Increased cost of healthcare and rehabilitation inputs:** due to passing on costs associated with: • Decarbonising and building resilience across sectors that the HRSC relies on; and • Damage, disruption and lost productivity caused by the physical effects of climate change. **HRSC2 Constrained access to funding:** due to the impact of HRSC1 and increasing adaptation priorities on the availability of taxpayer funding for the health system and private debt and equity sources of funding across the full supply chain. Climate impact on employers and employees may also impact ACC's ability to increase levies over time. **HRSC3 Short and long-run supply chain disruptions:** due to the impact of projected increases in chronic and acute climate hazards, and various (policy, legal and technology) transition drivers, on access to and movement of goods across the HRSC.

Elements at Risk	All key links in the HRSC:
	• Pharmaceuticals, products, and equipment: Including research and development, and manufacturing.
	• Pharmac and direct provider procurement.
	• International and domestic shipping and freight.
	• Public and private care and rehabilitation providers.
	Other exposed components (due to interdependencies):
	• Employers and employees: Affected by the levy-based elements of ACC's funding model.
	• Public sector and public finance systems: Impacted by appropriation-related elements of:
	  • ACC's funding model.
	  • Retrospective funding models of domestic healthcare and rehabilitation providers.

Potential Impacts (Prior to management and adaptation response)	Assessment of the potential impacts from HRSC1-3 on each link in the value chain will be conducted over the next two reporting cycles. In the interim, the following general examples are provided: **HRSC1 Examples**: Investments in decarbonisation and adaptation measures, along with significant operational, technological, and logistical changes, have the potential to rise across the HRSC and its supply chains, leading to increased costs. Damage and disruption from climate effects could add to these costs. These factors could cumulatively increase the cost of rehabilitation entitlements. **HRSC2 Examples:** As climate change effects and transition measures intensify, the need to fund mitigation and adaptation priorities could impact the availability of health funding. In addition, general cost pressures from HRSC1 may reduce the purchasing power of existing allocations and appropriations. **HRSC3 Examples:** Climate hazards could be disruptive for primary sector and water inputs essential for pharmaceutical and medical production, as well as transport and logistics.

Ngā aronui | **Metrics and targets**

This section presents ACC's GHG emissions reduction targets, our progress toward these targets and our initiatives for further reductions. Detailed information about ACC's emissions is reported in the full GHG Emissions Inventory for Corporate Operations at Appendix 1.

The inventory has been prepared in accordance with the Greenhouse Gas Protocol and ISO 14064-1:2018 Standard and meets the requirements set out by the CNGP.

This Metrics and targets section also includes information required by NZCS about vulnerability to climate risks, internal emissions pricing, capital deployment and remuneration.

Table 1: Summarised GHG emissions for ACC by scope and category*

Scope	Category (tCO_2-e)*	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Scope 1	Category 1: Direct emissions (Fleet and Gas)	263	162	98	47	67	238
Scope 2	Category 2: Indirect emissions from imported energy (location-based method) (Electricity)	557	576	583	550	602	308[5]
Scope 3	Category 3: Indirect emissions from transportation (Air travel, accommodation, staff commute, freight, private mileage, rental cars, taxis, working from home)	7,119	5,233	3,543	2,971	4,099	3,864[6]
	Category 4: Indirect emissions from products used by organisation (Transmission and distribution losses, waste to landfill, wastewater, water supply)	288	302	293	340	438	401
	Category 5: Indirect emissions associated with the use of products from the organisation	-	-	-	-	-	-
	Category 6: Indirect emissions from other sources	-	-	-	-	-	-
	Total emissions	8,227	6,272	4,518	3,908	5,206	4,811
	Reduction since base year		23.8%	45.1%	52.5%	36.7%	41.5%

Columns may not add to the total due to rounding. Periods prior to 2021/22 were not subject to assurance procedures by Ernst & Young (EY). All periods have been certified by Toitū Envirocare.

**Note: GHG Emissions for each individual source are presented in Appendix 1.*

Table 2: Emissions intensity

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Gross emissions (tCO_2-e)	8,227	6,272	4,518	3,908	5,206	4,811
Reduction on base year		23.8%	45.1%	52.5%	36.7%	41.5%
FTE	3,354	3,693	3,630	3,828	4,050	4,273
Total expenditure $M 1	732	807	766	818	832	943
Total gross emissions per FTE (tCO_2-e)	2.45	1.7	1.24	1.02	1.29	1.13
Total gross emissions per million dollars of expenditure (tCO_2-e)	11.24	7.77	5.9	4.78	6.26	5.10

Periods prior to 2021/22 were not subject to assurance procedures by EY. All periods have been certified by Toitū Envirocare.

[5] *Electricity emissions have reduced due to lower national emissions factors. Please refer to the Progress to targets section for detail.*

[6] *Air travel emissions have reduced due to the availability of aircraft specific travel data. Please refer to Progress to targets section for detail.*

Emissions inclusions

The 2024 GHG Emissions Inventory includes all mandatory CNGP scope 1, 2 and 3 emissions sources, plus staff commute emissions which are included on the basis that they are material to ACC's corporate operations.

The CNGP requires inclusion of specified mandatory scope 3 emissions and any additional scope 3 emissions that are material to the agency, to the extent possible, acknowledging that developing complete inventories may take several years.

ACC will review remaining scope 3 value chain emissions for potential inclusion into the corporate inventory from 2025 onwards. Where necessary, base year emissions will be restated to reflect new inclusions. ACC has applied NZCS 2 adoption provision 4 for scope 3 GHG emissions in this reporting period. Detailed information about included and excluded emissions sources is presented in the 2024 GHG Emissions Inventory report (Appendix 1).

Targets

ACC is committed to helping the Government achieve the reduction targets Aotearoa New Zealand has signed up to under the Paris Agreement. In line with this, we have set the following targets to reduce gross emissions from corporate operations:

- Reduce GHG emissions by 21% by 30 June 2025.
- Reduce GHG emissions by 42% by 30 June 2030.

ACC's targets are for gross emissions and exclude carbon offsets. ACC does not currently use carbon offsets. The targets are for absolute reduction (not intensity reduction) against the base year of 2018/19.

The targets apply to ACC's mandatory scope 1, 2 and 3 emission sources as defined by the CNGP. These sources are shown in Table 1 above and further detailed in Appendix 1.

At present, the reduction targets apply to all emission sources included in the inventory. In 2024/25 ACC will assess the remaining scope 3 emissions from the value chain for inclusion into the GHG emissions inventory. As we work through this process, we will assess each value chain emission source for inclusion into the targets. The decisions need to balance several considerations.

- ACC is committed to responsible contribution to public sector emissions reductions. The CNGP asks that targets are ambitious but achievable and based on the reduction potential within the agency.
- ACC has a statutory duty to provide injury prevention, treatment and rehabilitation for people in Aotearoa New Zealand. We need to ensure that any operational or procurement changes made within the value chain for the purpose of reducing emissions does not negatively impact the treatment and rehabilitation pathways for clients.
- Reliability — for many value chain sources, the emissions calculation will be spend-based and therefore subject to greater uncertainty than emissions calculated from the underlying activity.

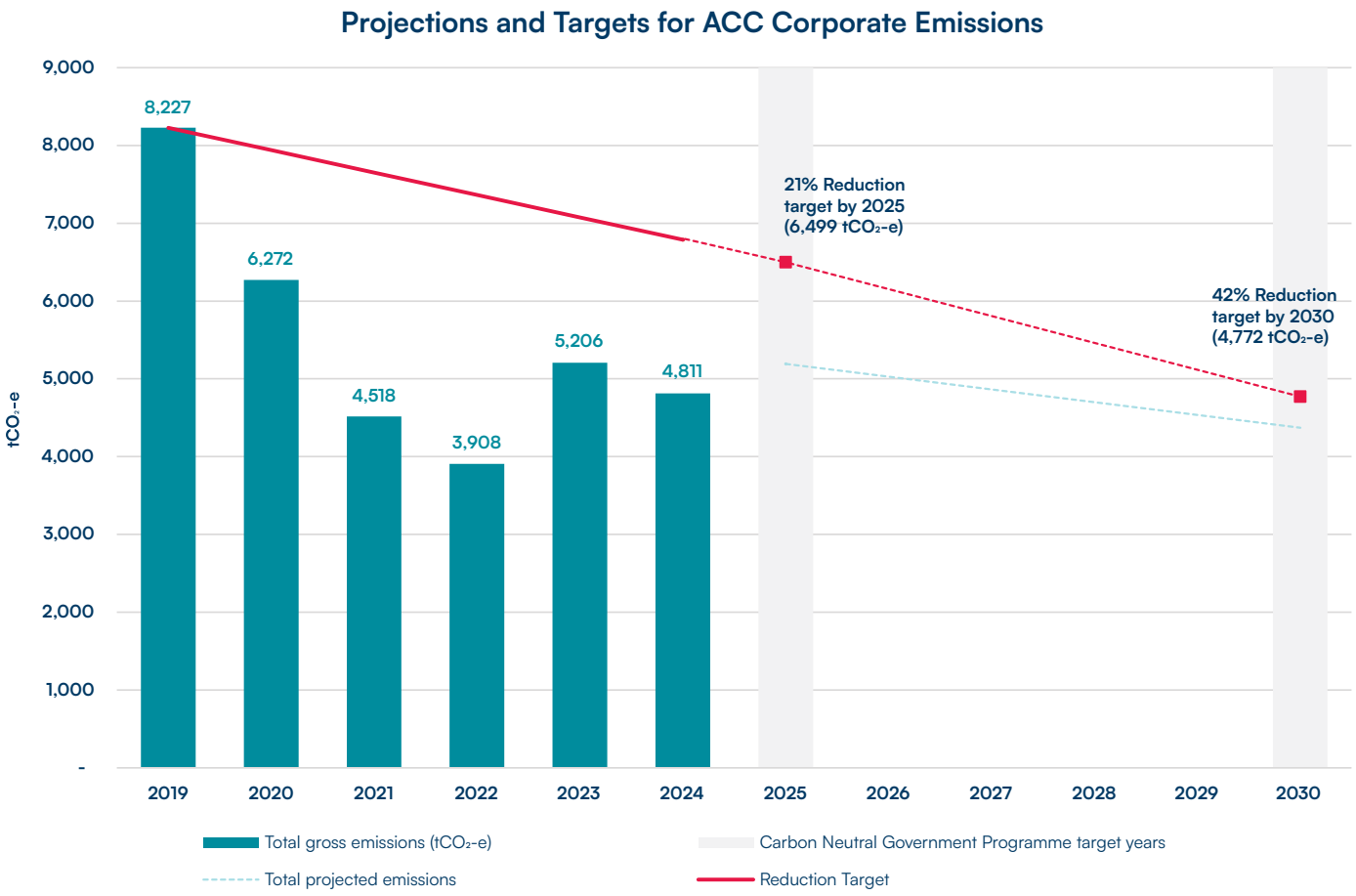
The targets are the minimum required under the CNGP and were established by the CNGP as science-based in accordance with the international Science-based Targets initiative (SCTi). SCTi considers targets to be 'science-based' if they are in line with what the latest climate science deems necessary to limit global warming to 1.5°C above pre-industrial levels (**www.sciencebasedtargets.org**).

Progress to targets

The GHG emissions from corporate operations for the 2023/24 financial year were 4,811 tCO_2-e (tonnes of cardon dioxide equivalent). Our largest emissions sources are staff commute 53%, air travel 21% and electricity 6%.

ACC expects to meet its 2025 and 2030 emissions reductions target. Existing emissions are 40 tonnes of carbon equivalent (1%) above the 2030 target (4,811 tCO_2-e currently compared to the 2030 target of 4,772 tCO_2-e). However, inclusion of further scope 3 emissions from the value chain into the GHG emissions inventory may alter the targets and forecasts. ACC also recognises that shifts in emissions factors in future years is an area of uncertainty.

ACC has achieved a 42% (3,416 tonnes of carbon equivalent) decrease in emissions from corporate operations since the 2018/19 base year. Year-on-year emissions have decreased by 8% (395 tonnes of carbon equivalent). This was driven by decreases in electricity and air travel emissions, offset by an increase in direct emissions from natural gas. The decreases in electricity and air travel emissions were largely driven by changes in emissions factors rather than shifts in underlying activity.



Reduction in electricity emissions due to lower national emissions factors

ACC's property strategy includes a move to greener, more energy efficient buildings. In April 2023, ACC moved into new premises in Kirikiriroa, Hamilton. The building meets a four-star standard under NABERSNZ, the system for rating the energy efficiency of office buildings. This supported a 16% reduction in electricity usage.

However, the 49% decrease in our electricity emissions over the past 12 months was amplified by a lowered MfE emissions factor for electricity. The factor was lower due to rainfall levels supporting higher hydroelectricity generation and less power generation from coal and gas.

Reduction in travel emissions due to use of aircraft specific travel data

Although emissions from air travel have reduced since last year, the kilometres flown by ACC staff increased compared to the prior year (4.97 million kilometres in 2024 compared to 4.16 million kilometres in 2023). The reduction in emissions occurred because ACC adopted the MfE 2024 aircraft-specific emission factors for domestic air travel calculations.

These result in a more accurate representation of emissions based on whether flights were in large, medium or small aircraft.

Moving to this level of definition was made possible by changes in the configuration of the travel data ACC receives from its travel provider. Aircraft specific emissions factors were provided by MfE in prior years but ACC's travel data did not specify aircraft type.

Addition of natural gas emissions

Natural gas emissions for ACC's Wellington property (Aitken Street) are included in our inventory for the first time in 2024. Gas connection is managed by the landlord and used for core building services that are included in the building lease. Natural gas emissions data has not previously been available for inclusion in ACC's corporate GHG inventory report. ACC has not adjusted the base year as the landlord has indicated that gas will be removed from the building in the next 12 to 24 months.

Table 3: Emissions reduction or measurement improvement initiatives

Buildings	• Ongoing assessment in energy related improvements across all ACC's sites remains a priority. Renewable energy solutions for large sites are being investigated. • In the 2023/24 reporting period ACC consolidated the Newmarket and Henderson sites into a single site. The new office is in Newmarket and has a Green Star NABERSNZ[7] rating of 5. • ACC Dunedin offices will relocate to a single, newly built site in the 2024/25 reporting period. The new building aims to achieve a 4.5 -5 NABERSNZ rating for energy efficiency. • The upgrade to LED lighting in ACC's main Wellington site (Aitken Street) will be completed in the 2024/2025 reporting cycle.
Travel	• Closer alignment of annual travel budgeting with emissions reductions targets is a focus for the 2025/26 budgeting round. • Carbon travel budgets will be investigated from 2025/26 onwards.
Fleet	• The transition to an electric and hybrid fleet is complete. The fleet is currently 31% electric and 66% hybrid. We reduced the size of our vehicle fleet from 184 at 30 June 2019 to 80 at 30 June 2024 and will investigate options for further reduction of the fleet size. This includes a review of ways to optimise the use of pool cars.
Waste	• ACC's waste review was completed in the 2023/24 reporting period. • Results from this will be used to improve end-to-end recycling processes and reduce waste emissions over time. • Information campaigns to discourage single-use items.
Staff commute and Working from Home	• Work alongside People and Culture to investigate ways that flexible working and recruitment can further optimise staff commute and working from home emissions.
Value chain (other scope 3 emissions)	• Incorporate value chain emissions into our inventory from 2024/25, including from ICT/cloud services, client travel and third-party services.
Data quality improvement	• Continue the transition to smart meters for all key sites. • Work with electricity provider to ensure consistent reporting of activity and emissions • Work with travel booking partner to extend emissions data. • Implement an emissions data reporting tool to support efficient analytics and reporting.

Vulnerability to transition risks, physical risks and climate-related opportunities

As outlined in the Risk management section, ACC sites, assets, and functions, as well as the client section of the value chain have now been screened for exposures to climate hazards and exposures. The initial findings are presented in the Strategy section. During the 2024/25 reporting cycle, ACC will assess, and prioritise each of the identified risks. This will enable ACC to assess the percentage of assets or business activities that are vulnerable to physical and transition risks or are aligned to climate-related opportunities.

Remuneration

Remuneration for ACC management is not linked to climate-related risks and opportunities or climate performance metrics.

Capital deployment and internal emissions pricing

In the current reporting period, ACC's corporate operations do not have any capital expenditure, financing, or investment deployed toward climate-related risks and opportunities. ACC does not currently use an internal emissions price. During the next reporting cycle ACC will assess and quantify the climate exposures identified in the first phase of the 3-year work plan (see the Risk management and Strategy sections for further detail). Scenario analysis and adaptation planning will follow.

[7] The Green Star rating tool is used during design and construction to assess the environmental aspects of buildings. Energy is just one of the criteria Green Star assesses. NABERSNZ looks solely at energy performance and is used once buildings are occupied and operating for a year or more.

Ngā haumi

Investments

He kupu whakataki | **Introduction**

This section considers the impact of climate change on ACC's investment portfolio, while emissions that are a consequence of ACC's investment operations are accounted for in our corporate operations.

The investment emissions reported here are covered by the CRIF which was established by The Treasury as a separate framework to compliment the CNGP and set a standard for ACC Investments and the other CFIs to be consistent with the Paris Agreement.

Ngā mahi whakatūpato | **Risk management**

Our monitoring and management of climate risks and opportunities include frequent interactions with portfolio managers and stakeholders, alongside measuring and reporting of key metrics. The measures we use to identify and assess the portfolio's climate-related risks include absolute emissions, carbon intensity, and the Climate Value-at-Risk (CVaR) metric developed by MSCI ESG Research (MSCI).

We manage listed equities climate risk by reducing exposure to carbon-intensive investments. Portfolio carbon intensity (emissions per USD 1 million of revenue) is the metric used to track progress in reducing the portfolio's carbon exposure. Portfolio carbon intensity accounts for the end-use of oil, gas and thermal coal produced by energy companies (and other fossil fuel reserve owners), in recognition of fossil fuel combustion being the largest single source of global GHG emissions. We have implemented portfolio carbon caps (budgets), which are aligned with our carbon reduction goals, and have also moved equity portfolios to lower carbon benchmarks. We also apply targeted divestment to companies which we believe are most unlikely to have capabilities valuable for a low-carbon economy. This has resulted in the portfolio not investing in companies generating a large proportion of their income from sales of thermal coal.

We apply targeted divestment instead of full divestment of fossil fuel producers (or other carbon-intensive industries) because the energy pathways to a net-zero economy remain highly uncertain. Since different industries react differently to economic and geopolitical events, we also believe that diversification strategies effectiveness in mitigating portfolio risk may be undermined by policies that ban investment in major segments of the energy sector. Full divestment policies may also have unintended negative consequences that are inconsistent with a just, orderly, and equitable energy transition.

For example, they may exacerbate the risk that control of fossil fuel producers shifts to less climate conscious investors or less transparent private/state operators with potentially worse environmental records.

Engaging with companies is also part of our approach to managing climate-related risks. We actively engage with investee companies either directly, collaboratively with peer CFIs, or through a global engagement specialist. ACC and the other CFIs publicly launched a climate change engagement programme in 2022 to use our collective influence to engage directly with New Zealand's listed companies.

ACC's portfolio managers consider climate-related risks alongside other investment risks when making investment decisions.

Several external managers utilise proprietary ESG research to evaluate investee companies climate-related risks. They integrate this information into existing models or share it with portfolio managers to ensure it serves as an input to investment decision-making processes. Portfolio managers assessments of material ESG issues determine the weighting (priority) attached to climate and other ESG related risk factors.

Our private markets team has incorporated climate-related factors into their investment strategy. This involves evaluating the carbon footprint of all potential investments and their carbon reduction plans. Although strict limits on acceptable emission levels are not imposed, we do consider how an investment might affect the ACC Fund's overall carbon footprint, opting not to invest if the impact is excessive.

We also aim to reduce emissions through engagement with our private markets portfolio companies.

Our processes for identifying, assessing and managing climate-related risks are incorporated in our overall risk management process in several ways. We engage regularly with portfolio managers to assess their progress achieving our carbon reduction goals. We also assess how they are engaging with companies to reduce carbon emissions.

Oversight and management of risks, including climate and other ESG risks, is a key consideration when appointing new managers and monitoring existing managers.

The approaches our external portfolio managers are taking to manage and mitigate ESG risk in their portfolios is reviewed by our CCSG at least annually. The ACC Investments Risk team monitors climate-related risk and provides quarterly reporting to the Board Investment Committee.

Ngā mahi rautaki | **Strategy**

ACC's Investment Fund is designed to meet the future costs of accidents that have already occurred and reduce the risk that future levy payers will have to pay for past injuries. ACC's investment strategy is directed by its legislative framework, which emphasises a commercial approach that integrates ethical factors. ACC aims to achieve a suitable balance between return and risk, with risk primarily defined in terms of impact on funding ratios and levy rates. We also seek to maximise return for the level of risk adopted. ACC is an active investor, utilising in-house and external Portfolio Management teams. Our investment strategy has evolved to align the Fund with the transition to a low-carbon economy while seeking to achieve all its objectives.

The investments climate strategy was established in 2020 with the objective of the Fund being consistent with net zero by 2050. The strategy continues to develop, and our transition plan incorporates emissions measurement and reduction targets, company engagement, and investor collaboration through the Paris Aligned Asset Owners group.

To align with New Zealand's commitment to net-zero emissions by 2050, the ACC Board has set interim carbon intensity reductions targets for listed equities investments. Targets are a 60% reduction by 2025 and 65% by 2030, compared to a 2019 base year. ACC imposes annually declining carbon caps on external and internal equity portfolios in line with achieving the carbon-intensity reduction targets. To align portfolio management with our transition plan, we also introduced low-carbon benchmarks for our New Zealand, Australian and global equity portfolios.

Portfolio managers are responsible for understanding the climate-related risks and opportunities associated with their investments. They are also responsible for judging whether current market prices appear to be over- or under-estimating these risks, relative to the other risks that investee companies also face. The pricing of risk is a continually changing feature of the investment landscape and portfolio managers assess the likelihood of climate-related, and other investment risks and opportunities, materialising within different investment horizons. ACC is a liability-driven investor with a long-term investment horizon of over 20 years. We are also an active investor which enables portfolio managers to alter the Fund's holdings whenever opportunities are identified as compelling over short- (1 to 5 year) or medium-term (6 to 20 year) investment horizons.

While our climate scenario analysis leverages scenario-specific carbon price estimates used by the Network for Greening the Financial System (NGFS), we do not currently require portfolio managers to incorporate a specific internal emissions price in their investment decision-making processes because future carbon prices are highly uncertain. Uncertainty arises from regulatory risk, variability in policy clarity across regions, and the need for climate technologies which are yet to be developed at scale.

How the Fund will be positioned as the global and domestic economy transitions towards a low-emissions world is reliant on the speed of the transition, the pace and extent of regulation, technology developments, business adaptation, and how investment markets react to these factors.

Active portfolio management will play a role in our exposure to climate risk, and in determining how our investment strategy might change to address climate-related risks and opportunities.

Climate-related impacts on investments

Climate change poses a financial risk to the Fund and is one of the many risk factors we monitor and actively manage. The Fund's climate-related risks depend on the strength of government policies and the success of the companies in our portfolio achieving their climate-related objectives.

Climate risks can be classified into two types: physical risk and transition risk. Physical risks include the risk of more frequent and severe events, such as large storms and wildfires, as well as chronic climate change risks such as rising temperatures and sea levels. They can affect the fund's assets in various ways, such as damaging property and infrastructure, and disrupting supply chains, business operations, and workforce availability or productivity. The extent of physical risks will depend on the pace of decarbonisation as well as the amount of adaptation in the short and medium term. In the longer term, physical risks are likely to be the more material of the climate risks.

Transition risk refers to the challenges and potential disruptions caused by the global move to a lower-carbon economy. It impacts assets in the Fund by potentially altering their value due to regulatory, market, and technological changes aimed at reducing carbon emissions. Investee companies can also be impacted by shifting consumer preferences towards more sustainable products, fluctuations in the cost of raw materials due to climate policies, reputational risks, and legal liability risks. They may also benefit from the transition due to new business opportunities driven by technological change and economic realignment. Transition risks interact with each other and will vary over time in sectors and geographies. Over the short-term transition risks are expected to be the more material of the climate risks.

Climate-related risks can also impact investee companies' access to, and cost of, insurance and other financial services.

ACC is a minority shareholder in over 1,500 publicly traded companies, some of whose earnings over the last year will have been impacted by weather events that were potentially exacerbated by climate change.

Others' share prices will have moved up and/or down in response to changing expectations of how transition risks and opportunities will impact their future earnings.

Isolating and measuring the change in portfolio value which is attributable to experienced and anticipated impacts of climate change is challenging. However, our assessment is the impact over the past year has been immaterial compared to other drivers of investment returns, such as changes in interest rate expectations and economic outlooks, commodity price movements, geopolitical events, industry trends, and company earnings surprises.

Climate scenarios

The NGFS has developed a set of climate scenarios that provide a common starting point for analysing climate risks and opportunities across different sectors and regions. The NGFS scenarios are designed to be exploratory, not predictive. They do not represent forecasts or policy recommendations, but rather plausible and coherent narratives of how the world could evolve under different assumptions.

We have selected three NGFS climate scenarios which are widely used by global investment managers and encompass a range of severities for both physical and transition-related climate impacts. Our selection covers a 1.5°C scenario ("Net Zero 2050"), a high transition risk scenario ("Delayed Transition"), and a scenario where global efforts are inadequate to prevent significant global warming ("Current Policies").

Societal assumptions in the NGFS scenarios have been standardised by the academic community as the Shared Socioeconomic Pathways (SSPs). Our selected scenarios assume that global population peaks around 2070 and that society evolves broadly in line with past trends, although consumers' adoption of more sustainable lifestyles occurs most rapidly in the Net zero 2050 scenario, abruptly from 2030 in the Delayed Transition, and gradually over time in Current Policies (due to generational changes). In all three scenarios, the combined physical and transition-related effects of climate change are expected to negatively impact global gross domestic product (GDP), although the impact is materially less for the Net Zero 2050 scenario compared to Current Policies.

For each scenario we have used MSCI's forward-looking CVaR model to illustrate the potential impact of climate-related physical risks, transition risks, and opportunities on portfolio value.

Results are presented in the Metrics and targets section below. We selected CVaR due to its breadth of scenarios and ability to break down a portfolio's climate risk by physical risk, transition risk, and individual company security. The CVaR output is a measure of both a company's potential climate cost exposure and a measure of how climate change may affect a company valuation. Scenario modelling involves estimating a time series of climate costs for each company and then calculating the sum of the present value of these costs. The present value is then expressed as a percentage of company market value to reflect the implied value at risk. The time horizon endpoint for each of our scenarios is the year 2100.

Multiple data sources are used to construct the CVaR model's scenarios. Integrated Assessment Models (IAMs) used by the NGFS provide future transition pathways for assessing economic and environmental impacts of climate change, including carbon emissions pathways, global temperature projections, energy efficiency factors, and policy-related outputs like carbon pricing and mandated emissions reductions. Company financial, emissions, and energy data are obtained from different sources, including company reports and the Carbon Disclosure Project (CDP). Physical hazard data is based on projections from general circulation models and global hydrological models from academic and think tank research organisations. Governance of the CVaR model is the responsibility of MSCI's ESG Methodology Committee which evaluates the conceptual soundness of models by systematically vetting each specification of the framework, the assumptions that are applied in the model, and a sampling of the outputs of the model. Descriptions of MSCI's climate methodologies are available from www.msci.com/legal/disclosures/climate-disclosures.

Like all climate change scenarios, the CVaR model is subject to assumptions and limitations, potential errors and omissions, and is continually evolving, meaning its results can vary significantly from year to year. We believe CVaR is useful for high-level insights and identifying areas for further investigation but given the inherent uncertainties in the assumptions and data underpinning the scenarios, and how much climate risk is priced by the market, the model is currently used on a standalone basis instead of being explicitly integrated into our investment management processes.

Orderly scenario – Net Zero 2050

In this scenario, it is assumed that ambitious and coordinated climate policies are implemented in the near term, leading to a rapid and orderly transition to net- zero emissions by around 2050. The scenario is aligned with the Paris Agreement's goal (to limit the global temperature rise this century to 1.5°C above pre-industrial levels) and avoids the worst impacts of climate change. Of our three selected scenarios, this one has the lowest physical risk and greatest nearer-term transition risk, but less overall transition risk compared to the Delayed Transition scenario.

In the energy pathway for this scenario, renewables and biomass deliver the supermajority of global primary energy needs in 2050 and there is a major shift to electrification across industries, including transportation and heating. Carbon dioxide removal (CDR) is assumed to play a significant role in reducing emissions and ramps up from around 2030. Technology-based CDR solutions such as bioenergy with carbon capture and storage (BECCS) are expected to deliver greater emissions reductions than nature-based solutions such as afforestation. Carbon capture and storage (CCS) is assumed to reduce emissions from fossil fuelled power plants and industries that are difficult to decarbonise such as cement and steel.

Investments in clean energy, sustainable infrastructure, and green technology are substantial. This creates jobs, stimulates economic activity, and positively impacts GDP growth. However, sectors and regions which are more dependent on fossil fuels and carbon-intensive activities face significant transition risks in the near term and may experience substantial losses, necessitating support and compensation. Inflation may experience short- to medium-term upward pressure due to the initial costs of transitioning to a green economy (including the impact of carbon taxes or emissions trading schemes if implemented), but long-term inflation is expected to stabilise as the benefits of sustainable practices, reduced dependency on fossil fuel imports, and less exposure to oil price shocks are realised.

Disorderly scenario – Delayed Transition

This scenario assumes global annual emissions do not decline until 2030 because climate policies are delayed or insufficient. The rising frequency of heatwaves, floods, and other extreme weather events highlights the need for urgent action and a rapid and disruptive transition is required to limit global warming to 1.7°C by 2050.

Of the three scenarios this one has the highest transition risk as it entails a sudden and disorderly shift to a low-carbon economy in the 2030s and 2040s. The transition risks are more pronounced for countries and sectors that are more reliant on fossil fuels, have less diversified economies, and have limited fiscal and policy space to cope with the adjustment costs. Physical risk in this

scenario is greater than the Net Zero 2050 scenario but less than under Current Policies. Physical risks are more acute for regions that are already vulnerable to climate hazards, such as low-lying coastal areas, tropical and subtropical zones, and arid and semi-arid regions. The physical risks are also higher for sectors that are more exposed to climate shocks, such as agriculture, tourism, energy, and transport.

In the energy pathway for this scenario, the significant shift towards renewables and increased energy efficiency across industry does not occur until the 2030s or even later. CDR deployments are not expected to be significant before 2040, meaning more carbon dioxide needs to be removed from the atmosphere to compensate for the delayed action, placing additional pressure on CDR technologies.

Sudden policy shifts and economic disruptions cause a sharp drop in global GDP growth in the 2030s and a surge in global inflation, as carbon prices rise abruptly and are passed onto consumers. Sectors reliant on fossil fuels are substantially disrupted, face asset stranding, and suffer job losses, while new opportunities emerge in clean energy and green infrastructure.

The sudden and aggressive implementation of climate policies may disrupt existing trade patterns, exacerbate geopolitical tensions, and increase the risk of spillovers and contagion effects across markets and jurisdictions.

Hot house scenario – Current Policies

In this scenario the world proceeds along its current trajectory without the implementation of any major new climate policies or initiatives, resulting in 2°C global warming by 2050 and more than 3°C by 2100.

Of the three scenarios, this one has the lowest transition risk, but highest physical risk due to sustained higher temperatures, increased sea level rise, biodiversity loss, and more frequent and severe weather events in the medium- and long-term. The physical impact is not felt uniformly around the globe, but living conditions decline in many parts of the world and agriculture suffers in many regions, leading to food shortages and higher prices. Competition for resources like water and arable land could intensify, leading to regional conflicts.

In the energy pathway for this scenario, the continued reliance on fossil fuels cause emissions to grow until 2080, investments in renewable energy are modest but inadequate, and there is no acceleration in technological innovation or adoption. CDR and CCS are assumed to deliver immaterial emissions reductions.

In this scenario, the lack of additional climate policies results in high physical risks and the world faces significant challenges in adapting to the changing climate. Deteriorating health and social conditions, rising energy costs, more frequent damage to infrastructure, and increased supply chain disruptions, also lead to inflationary pressures and negatively impact global GDP.

Ngā aronui | Metrics and targets

This section details the metrics we use to measure emissions associated with investments, estimate the portfolio's exposure to companies with green business models and net-zero targets, illustrate potential portfolio losses in different climate scenarios, and establish climate-related portfolio targets.

Portfolio carbon metrics

GHG emissions associated with investments are classified as per the GHG Protocol and measured as a CO_2 equivalent, in tonnes of carbon (tCO_2-e). Biogenic CO_2 emissions associated with investments are not measured or reported due to data availability. Metrics are subject to significant data limitations, assumptions, and inherent uncertainty as outlined in this review. We use two complimentary metrics to measure emissions associated with investments: absolute emissions and portfolio carbon intensity.

Absolute emissions

We measure absolute emissions associated with investments according to the Partnership for Carbon Accounting Financials (PCAF) Standard. PCAF's methodology apportions investee emissions based on the proportion of each company's enterprise value including cash (EVIC), represented by ACC's investment in that company. The PCAF Standard facilitates the comparison of emissions across portfolios at the same, or similar points in time, and can be used to apportion emissions to asset classes other than equities. However, data limitations associated with PCAF's methodology (discussed below) may significantly reduce the comparability of emissions through time.

We have previously reported absolute emissions in line with the PCAF Standard for listed equities investments only. This year we have expanded our reporting to include corporate bonds, unlisted company equities, business loans, unlisted real estate, and project finance. As of 30 June 2024, the Fund's market value weight in these asset classes was 32% in listed equities, 4% in corporate bonds, 1% in unlisted company equities and business loans, and 2% in unlisted real estate and project finance. All investments from these asset classes have been included in our scope 1 and 2 and scope 3 emissions measurement process and the only investments excluded from the portfolio's emissions metrics are those without available emissions data (meaning that our scope 3 emissions reporting exceeds PCAF's minimum requirements for sector coverage). Listed equities emissions includes look-through to the underlying holdings of an externally managed portfolio (unit trust).

Sovereign debt is the only PCAF asset class where we have investments but are not currently reporting associated emissions because measurement processes are yet to be developed. As of 30 June 2024, sovereign debt accounted for 44% of the investment portfolio (99.8% of which was New Zealand sovereign debt). Investments currently not covered by PCAF, such as private equity investment funds and derivatives, were 18% of the portfolio on 30 June 2024.

Emissions data for listed equities and corporate bonds is sourced from MSCI and includes scope 1 (direct emissions), scope 2 (indirect emissions from the generation of purchased or acquired energy), and scope 3 (value chain) emissions. Emissions data from MSCI includes a combination of company reported emissions and model-based estimates.

MSCI's methodology involves estimating emissions for companies that do not report scope 1 and 2 emissions according to the GHG Protocol framework or other common reporting standards. MSCI's scope 3 emissions estimation model, which is used for all companies, attempts to address the challenges associated with companies' scope 3 data, which, even when reported, is often incomplete, inconsistent, and volatile. MSCI estimates scope 3 emissions for each of the 15 categories within the GHG Protocol's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" (except for Categories 1 and 2 which are combined). MSCI's estimation model uses global industry averages, a recognised approach within the PCAF Standard's hierarchy of emissions estimation methodologies. We expect there will soon be less need to estimate NZ Company emissions as more companies begin to report in line with the NZCS.

The PCAF standard also specifies a hierarchy for emissions data quality (score 1 = highest data quality; score 5 = lowest data quality). The data quality score reflects the level of estimation used to measure a company's emissions for a given point in time, rather than the level of consistency or comparability of emissions through time. Company reported emissions receive the highest quality score because they are the most certain.

The aggregated data quality score is the portfolio market value weighted average of the underlying investee company data quality scores.

Emissions data from MSCI covered 98% of listed equities and 61% of corporate bonds (by market value). Of those companies for which emissions data was available, company reported emissions accounted for 87% of listed equities scope 1 and 2 emissions and 92% of corporate bonds scope 1 and 2 emissions. Model-based estimates accounted for the remainder in each case, being 13% of listed equities scope 1 and 2 emissions and 8% of corporate bonds scope 1 and 2 emissions. Listed equities and corporate bonds scope 3 emissions include all 15 categories defined under the GHG Protocol.

Emissions data for unlisted investments was collected directly by ACC through investee populated surveys. For two unlisted property investments, we calculated emissions by combining investee supplied energy data with emission factors from the MfE. Scope 1, 2 and 3 emissions data was collected from 74% of unlisted company equities and business loans (by market value). Scope 1 and 2 emissions were data was collected from 29% of unlisted real estate and project finance. Scope 3 emissions were not available for project finance investments and are not required by PCAF for unlisted real estate investments.

Table 4: Investee scope 1 & 2 emissions, apportioned by share of enterprise value including cash.

	June year	Listed company equities	Corporate bonds	Unlisted company equities & business loans	Unlisted real estate & project finance	Total Apportioned Emissions
Absolute emissions apportioned to investment fund (t-CO_2e)	2024	342,124	22,752	2,024	617	367,517
	2023	481,893				481,893
Emissions data coverage (% of asset class market value)	2024	98	61	74	29	
	2023	98				
Emissions data quality (1=Highest quality, 5=Lowest quality)	2024	2.15	2.11	1.36	1.96	
	2023	2.16				

Total absolute scope 1 and 2 emissions apportioned to the investment portfolio (based on the PCAF methodology) were 367,517 t-CO_2e on 30 June 2024, with 99% attributable to listed equities and corporate bonds.

Absolute scope 1 and 2 emissions for listed equities were 342,124 tCO_2-e. The reduction of 29% from 30 June 2023 is mostly attributable to changes in the Fund's composition, although declines in emissions attributed to investee companies and movements in other factors (such as changes in equity to EVIC ratios) also contributed to the reduction. Changes in the Fund's composition include the impact of transactions due to portfolio managers and strategists changing investment views and transactions necessary to manage external cashflows, such as deposits and withdrawals. Changes in emissions attributed to investee companies include real world emissions reductions, the effects of changes in emissions calculation methodologies, and the effects of movements from estimated to reported emissions.

On 30 June 2024 absolute scope 1 and 2 emissions for corporate bonds were 22,752 tCO_2-e, unlisted company equities and business loans were 2,024 tCO_2-e, and unlisted real estate and project finance were 617 tCO_2-e (of which 192 t-CO_2e were unlisted real estate and 424 t-CO_2e were project finance).

The top three sectors as a proportion of listed equities and corporate bonds scope 1 and 2 emissions are utilities (30%), materials (24%), and energy (18%). The top sector as a proportion of unlisted investments scope 1 and 2 emissions is industrials (70%). Sectors are classified according to the Global Industry Classification Standard (GICS).

Table 5: Investee scope 3 emissions, apportioned by share of enterprise value including cash.

	June Year	Listed company equities	Corporate bonds	Unlisted company equities & business loans	Unlisted real estate & project finance	Total Apportioned Emissions
Absolute emissions apportioned to investment fund (t-CO_2e)	2024	2,489,513	114,865	47,461	0	2,651,840
	2023	3,468,790				3,468,790
Emissions data coverage (% of asset class market value)	2024	98	61	74	0	
	2023	98				
Emissions data quality (1=Highest quality, 5=Lowest quality)	2024	2.45	2.21	1.61		
	2023	2.57				

Total absolute scope 3 emissions apportioned to the investment portfolio (based on the PCAF methodology) were 2,651,840 t-CO_2e on 30 June 2024, with 98% attributable to listed equities and corporate bonds.

Absolute scope 3 emissions for listed equities were 2,489,513 tCO_2-e on 30 June 2024. The reduction of 28% from 30 June 2023 is mostly attributable to changes in equity ownership, although declines in emissions attributed to investee companies and movements in other factors also contributed to the reduction.

The top three sectors as a proportion of listed equities and corporate bonds scope 3 are Energy (30%), Materials (24%), and Industrials (11%). The top sector as a proportion of unlisted investments scope 3 emissions is Industrials (97%).

Portfolio carbon intensity

Our target decarbonisation metric for listed equities is portfolio carbon intensity. Investee emissions are normalised relative to revenues and apportioned to the Fund based on equity ownership (i.e., the Fund's proportional share of equity in each investee company). Equity ownership is calculated using market capitalisation data sourced from Bloomberg. Apportioning emissions by equity ownership avoids some of the data limitations associated with apportioning emissions by EVIC. Portfolio carbon intensity is calculated by dividing apportioned emissions by apportioned revenues.

Portfolio carbon intensity was selected as our listed equities decarbonisation metric because it is robust to portfolio deposits and withdrawals, which can heavily reduce the comparability of absolute emissions through time.

Portfolio carbon intensity includes scope 1 and 2 emissions across all sectors and priority scope 3 emissions. We define priority scope 3 emissions as the emissions embedded in the fossil fuel production volumes of those companies identified by MSCI as having fossil fuel reserves for energy purposes. Fossil fuels are defined as oil, gas and thermal coal, the combustion of which is the largest single source of GHG emissions.

Priority scope 3 emissions are estimated by ACC using a physical activity-based approach, where company reported fossil fuel production volumes are combined with emission factors from the U.S. Environmental Protection Agency (0.43 tCO_2-e per barrel of oil and 2.00 tCO_2-e per tonne of coal).

Scope 3 emissions, other than priority scope 3 emissions, have not been included in our portfolio carbon intensity metric because the comparability, coverage, transparency, and reliability of scope 3 data still varies considerably across companies. We believe this could misrepresent progress towards meeting interim decarbonisation targets. Our target does not use offsets.

Portfolio carbon intensity was 212 tCO_2-e per million USD of revenue on 30 June 2024, down from 226 the previous year, and 62% below the 2019 baseline.

Table 6: Listed equities portfolio carbon intensity

Portfolio carbon intensity - Input variables as of 30 June 2024:	
Scope 1 & 2 emissions apportioned by ownership share (tCO_2-e)	560,957
Priority scope 3 (fossil fuel end-use) emissions apportioned by ownership share (tCO_2-e)	543,367
Revenue apportioned by ownership share (USD million)	5,218
Portfolio scope 1 & 2 emissions intensity (tCO_2-e per million USD of revenue)	
As of 30 June 2024	108
As of 30 June 2023	112
Portfolio carbon intensity (total scope 1, 2 & priority scope 3 emissions tCO_2-e per million USD of revenue)	
As of 30 June 2024	212
As of 30 June 2023	226
Baseline as of 30 June 2019	562
Reduction on baseline as of 30 June 2024	62%
2025 reduction target	60%
2030 reduction target	65%

A recalculation threshold of 5% is applied to baseline (30 June 2019) portfolio carbon intensity in the event of calculation methodology changes or the discovery of data errors. No adjustments were applied to the baseline portfolio carbon intensity for the current reporting period.

Data limitations

There are significant limitations associated with measuring and apportioning emissions to an investment portfolio, including:

- **Reported emissions data quality** Quantifying GHG emissions is subject to various assumptions and inherent uncertainty because the scientific knowledge and methodologies to calculate quantities of GHG sources are still evolving, as are GHG reporting standards. Inconsistent assumptions between companies, incomplete emissions inventories, and changes in calculation methodologies — especially for scope 3 emissions — can render company reported data incomparable.
- **Estimated emissions data uncertainty.** Estimating emissions for companies introduces additional uncertainty because estimated emissions may not accurately reflect actual emissions. MSCI models have been used to estimate scope 1 and 2 emissions for companies that do not report emissions in line with GHG Protocol framework or other common reporting standards, and scope 3 emissions for all companies. Model estimated emissions may differ significantly to company reported emissions but may also be a more accurate reflection of actual emissions as defined by the GHG Protocol, especially for companies which only report some of the GHG Protocol's emission categories. However, model estimated emissions still rely on assumptions which may be inaccurate. For example, companies in the same industry having the same emissions intensity (emissions per unit of revenue or other economic measures), or a company's emissions intensity not changing from historical levels.

- **Backward-looking.** Changes in companies' historic emissions may not reflect their current strategies to reduce emissions or align with net zero emissions by 2050.
- **Lagged emissions data.** The analysis combines investee emissions for different financial years because companies have different year-end dates and companies ESG reporting often lags their financial reporting. There is also generally an additional lag before company disclosed emissions data is available from MSCI.
- **Lagged EVIC data.** There is also a lag between the date of investee companies EVIC (the most recent financial year available from MSCI) and our financial year-end (portfolio valuation) date which impacts the calculation of emissions apportioned by share of EVIC. This does not affect emissions apportioned by ownership share (or the calculation of portfolio carbon intensity) because investee company market capitalisations are as of portfolio valuation date.
- **Sensitivity to volatility in economic variables**. A potential downside of using EVIC or revenue to apportion absolute emissions or determine carbon intensity is that fluctuations in items such as exchange rates and commodity prices can reduce the comparability of subsequent emissions or intensity measures through time.
- **Sensitivity to volatility in security market prices.** The PCAF methodology of apportioning emissions to an investment portfolio by EVIC is subject to changes in security market prices. Changes in security market prices may obscure the effect of changes in investee company emissions (and/or changes in portfolio composition) meaning that changes in apportioned emissions from one year to the next are not directly comparable. Changes in security market prices do not impact the apportioning of emissions by ownership share or the calculation of portfolio carbon intensity.

Portfolio exposure to climate opportunities and green business models

The indicator we use to assess the Fund's exposure to companies aligned with climate related opportunities and investing in climate solutions is MSCI's estimated revenues range from any of the following five environmental themes: alternative energy, energy efficiency, green building, pollution prevention, and sustainable water. Options are 1 to 19.99%, 20 to 49.99%, and 50 to 100%. Based on MSCI's methodology, we estimate 32% of the fund's listed equities (by market value) derive over 1% of their revenues from environmental impact solutions, including 12% of listed equities which derive at least 20% of their revenues from these solutions.

Table 7: Listed equity investments in companies with climate- and environment-related revenues (as of 30 June 2024).

Estimated share of revenue from environmental impact solutions	Share of listed equities market value (%)
1 - 19.9%	20.2
20 - 49.9%	10.2
50 - 100%	1.5

Forward-looking climate metrics

We use forward-looking climate metrics to monitor the number of investee companies with net-zero targets and to illustrate potential portfolio losses under different climate scenarios.

Investee company net-zero targets

When companies have net-zero targets it indicates they have an emissions reduction strategy. The intention of our engagement efforts is to encourage investee companies to develop credible targets and transition strategies. We use MSCI to identify investments with Science Based Targets initiative (SBTi) carbon emission reduction targets. Based on MSCI's data, 40.9% of listed equities (by market value on 30 June 2024) had one or more active carbon emissions reduction targets approved by the SBTi and 10.6% had committed to work on a science-based emission reduction target aligned with SBTi's criteria.

Climate scenario analysis

We utilise MSCI's CVaR model to illustrate the portfolio's potential vulnerability to climate-related transition risks and physical risks. The CVaR model stress-tests the equity portfolio against our three selected NGFS climate scenarios. The results represent the present value of investee companies' climate-related costs and profits (projected by MSCI to the year 2100), expressed as a percentage of current market value.

Table 8: Climate scenario analysis – Climate Value-at-Risk model implied impact on listed equities market value, by the year 2100 (% of listed equities market value as of 30 June 2024)

	Net Zero 2050	Delayed Transition	Current Policies
Physical risk	-2.5	-3.8	-5.8
Transition risk	-10.5	-4.8	n/a
Transition opportunity	3.5	1.1	n/a
Total climate-related risk	**-9.6**	**-7.6**	**-5.8**

The CVaR model implied reduction in listed equities market value is between 5.8% (Current Policies scenario) and 9.6% (Net Zero 2050 scenario). Since CVaR does not forecast return for any specific time window, apportioning this impact over ACC's long-term (20 year) investment horizon, and assuming listed equities' current 32% share of total Fund market value, would imply an indicative annual reduction in total Fund expected return (attributable to listed equities climate-related risks) of between 0.1 and 0.2% per annum from 2025 to 2044.

Our CVaR analysis indicates that investee companies in all sectors have at least some vulnerabilities to transition risk and physical risk, although the range of impacts across sectors is greater for transition risk than for physical risk. In all three scenarios, the energy sector has the highest physical risk, and the highest transition risk, consistent with it having the highest scope 3 emissions intensity. In the Net Zero 2050 and Delayed Transition scenarios, most of the CVaR model implied losses materialise between 2035 and 2050, which ACC considers to be the medium- to long- term. In the Current Policies scenario, around half of the losses (which are all physical risk impacts) are after 2040.

While physical risks could be underestimated by the CVaR model, we believe it would be reasonable to anticipate actual future climate-related losses being smaller in magnitude than the numbers above. This is because CVaR assumes company share prices currently do not reflect any climate-related costs or profits, and the model does not consider factors such as insurances, company-specific adaptation measures, the potential for some business sectors to benefit from weather extremes, or the likelihood of higher-than-expected climate-related costs being passed onto consumers. We also believe it is plausible that current market prices are pricing-in the expectation that some of the companies with SBTi approved targets will have credible transition plans. Research also indicates that the market is pricing-in climate risk, at least to some extent.

Anticipating how the world will respond to the challenges of climate change in the coming decades is difficult. Unlike other types of financial crises, such as a credit crisis or sovereign debt crisis, a climate crisis such as we are seeing has never previously occurred. This means that the impact of climate change on financial markets, and ACC's investments, cannot be forecasted using past trends and is highly uncertain. Future changes in the Fund's composition could also cause the actual impact of climate change to be significantly different to the model implied impacts discussed above.

Climate-related targets

ACC is committed to the Investments Pathway target of carbon neutrality by 2050. In line with this, we have set the following interim targets:

- Reduce listed equities portfolio carbon intensity by at least 60% from the 2018/19 base year by 2025.
- Reduce listed equities portfolio carbon intensity by at least 65% from the 2018/19 base year by 2030.

We considered the Inaugural Target Setting Protocol published by United Nations-convened Net-Zero Asset Owner Alliance when setting our interim targets. The Protocol recommends that targets strive for carbon reductions in the range of -16% to -29% by 2025, using 2019 as a baseline.

Decarbonisation of each equity portfolio is implemented using a carbon cap (budget) which declines over time and considers the composition of the portfolio's benchmark index. ACC is on track to meet its investment portfolio decarbonisation targets, with listed equities portfolio carbon intensity at 30 June 2024 being 62% below the base year.

Ngā āpitihanga
Appendices

Appendix 1 — Corporate Operations: Greenhouse Gas Emissions Inventory

This appendix reports the annual greenhouse gas (GHG) emissions inventory for ACC's corporate operations for the period 1 July 2023 to 30 June 2024 (FY2023/24).

The GHG inventory has been prepared in accordance with The Greenhouse Gas Protocol — A Corporate Accounting and Reporting Standard (GHG protocol), The Corporate Value Chain (scope 3) Accounting and Reporting Standard (GHG scope 3 protocol), and ISO 14064-1:2018 Greenhouse gases — Part 1: Specification with guidance at the organisation level for quantification and reporting of GHG emissions and removals (ISO 14064-1:2018).

Ernst & Young Limited (EY) has provided third-party, independent, limited assurance over ACC's scope 1, 2 and 3 emissions from corporate operations for the year ended 30 June 2024 included in this report. Please refer to Appendix 2 — Assurance Report.

Toitū Envirocare, an entity that is 100% owned by a Crown agency, has certified ACC's 2018/19 baseline, and annual emissions from 2019/20, 2020/21, 2021/22, 2022/23 and 2023/24 against the ISO 14064-1:2018 standard.

About ACC

The purpose of the Accident Compensation Scheme (Scheme) is to deliver injury prevention initiatives and no-fault personal injury cover for everyone in Aotearoa New Zealand. Operationally ACC has 24 offices nationwide and approximately 4,000 permanent and temporary staff. Although climate action is outside of the core functions of the Scheme, ACC recognises it as an expression of stewardship, and an important aspect of partnership under Te Tiriti o Waitangi | The Treaty of Waitangi. ACC takes climate responsibilities seriously and has taken significant actions to reduce GHG emissions from its corporate operations.

ACC has publicly reported on the GHG emissions from corporate operations since 2018/19. This report describes changes to ACC's inventory since base year and includes information on changes in calculation methodology, improvements in the accuracy of emissions factors and activity data.

GHG emissions

Table 9: GHG emissions by scope and category

Scope	Category (tCO_2-e)	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Scope 1	*Category 1: Direct emissions*						
	Fleet	262.99	161.98	98.40	46.66	67.08	71.90
	Gas						166.11
	Total Category 1	**262.99**	**161.98**	**98.40**	**46.66**	**67.08**	**238.01**
Scope 2	*Category 2: Indirect emissions from imported energy (location-based method)*						
	Electricity	557.30	575.60	582.80	550.17	602.03	308.17[8]
	Total Category 2	**557.30**	**575.60**	**582.80**	**550.17**	**602.03**	**308.17**
Scope 3	*Category 3: Indirect emissions from transportation*						
	Accommodation	56.34	111.01	52.95	17.78	57.08	74.03
	Air travel	2,661.94	1,751.89	602.01	490.00	1,261.45	1,025.32[9]
	Commuting	4,289.71	3,141.52	2,677.39	2,233.09	2,545.83	2,565.83
	Freight					6.26	6.89
	Private mileage	12.21	13.95	4.31	2.60	5.40	3.35
	Rental car	35.75	38.14	15.83	3.93	15.57	13.62
	Taxi	54.71	40.87	11.96	5.55	21.15	17.79
	Working from home	7.84	135.70	178.62	218.15	186.56	156.89
	Total Category 3	**7,118.50**	**5,233.08**	**3,543.07**	**2,971.10**	**4,099.30**	**3,863.72**
	Category 4: Indirect emissions from products used by organisation						
	Transmission and distribution losses	57.45	57.74	53.50	51.46	55.26	22.54
	Waste to landfill	43.00	43.00	43.00	85.85	167.95	166.36
	Waste water	172.86	186.38	182.46	188.07	198.76	194.93
	Water supply	14.66	14.58	14.28	14.72	15.56	17.42
	Total Category 4	**287.97**	**301.70**	**293.24**	**340.10**	**437.53**	**401.25**
	Category 5: Indirect emissions associated with the use of products from the organisation	-	-	-	-	-	-
	Category 6: Indirect emissions from other sources	-	-	-	-	-	-
	Total gross emissions	**8,226.76**	**6,272.36**	**4,517.52**	**3,908.03**	**5,205.95**	**4,811.15**
	Category 1 direct removals	-	-	-	-	-	-
	Purchased emissions reductions	-	-	-	-	-	-
	Total net emissions	**8,226.76**	**6,272.36**	**4,517.52**	**3,908.03**	**5,205.95**	**4,811.15**
	Change in gross emissions (all categories since base year)		23.8%	45.1%	52.5%	36.7%	41.5%

Columns may not add to the total due to rounding. Periods prior to 2021/22 were not subject to assurance procedures by EY. All periods have been certified by Toitū Envirocare.

[8] Electricity emissions have reduced due to lower national emissions factors. See the Progress to targets section in the Metrics and targets section for corporate operations in body of the Climate Report for detail.

[9] Air travel emissions have reduced due to the availability of aircraft specific travel data. See the Progress to targets section in the Metrics and targets section for corporate operations in body of the Climate Report for detail.

Table 10: GHG scope 3 emissions by sub- categorisation

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Category 1: Purchased goods and services						
Water supply	14.66	14.58	14.28	14.72	15.56	17.42
Category 2: Capital goods	-	-	-	-	-	-
Category 3: Fuel and energy related activities not included in scope 1 or 2						
Transmission and distribution losses	57.45	57.74	53.50	51.46	55.26	22.54
Category 4: Upstream transportation and distribution						
Freight	-	-	-	-	6.26	6.89
Category 5: Waste generated in operations						
Waste to landfill	43.00	43.00	43.00	85.85	167.95	166.36
Waste water	172.86	186.38	182.46	188.07	198.76	194.93
Total Category 5	**215.86**	**229.38**	**225.46**	**273.92**	**366.71**	**361.29**
Category 6: Business travel						
Accommodation	56.34	111.01	52.95	17.78	57.08	74.03
Air travel	2,661.94	1,751.89	602.01	490.00	1,261.45	1,025.32[10]
Private mileage	12.21	13.95	4.31	2.60	5.40	3.35
Rental car	35.75	38.14	15.83	3.93	15.57	13.62
Taxi	54.71	40.87	11.96	5.55	21.15	17.79
Total Category 6	**2,820.95**	**1,955.86**	**687.06**	**519.86**	**1,360.66**	**1,134.11**
Category 7: Employee commuting						
Commuting	4,289.71	3,141.52	2,677.39	2,233.09	2,545.83	2,565.83
Working from home	7.84	135.70	178.62	218.15	186.56	156.89
Total Category 7	**4,297.55**	**3,277.22**	**2,856.01**	**2,451.24**	**2,732.39**	**2,722.72**
Category 8: Upstream leased assets	-	-	-	-	-	-
Category 9: Downstream transportation and distribution	-	-	-	-	-	-
Category 10: Processing of sold products	-	-	-	-	-	-
Category 11: Use of sold products	-	-	-	-	-	-
Category 12: End of life treatment of sold products	-	-	-	-	-	-
Category 13: Downstream leased assets	-	-	-	-	-	-
Category 14: Franchises	-	-	-	-	-	-
*Category 15: Investments**	-	-	-	-	-	-
Total scope 3 emissions	**7,406.47**	**5,534.78**	**3,836.31**	**3,311.20**	**4,536.85**	**4,264.97**

Columns may not add to the total due to rounding. Periods prior to 2021/22 were not subject to assurance procedures by EY. All periods have been certified by Toitū Envirocare.

*Emissions from the ACC Investment Fund are reported in the Metrics and targets section for iInvestments in the body of the disclosure.

[10] Air travel emissions have reduced due to the availability of aircraft specific travel data. Please refer to the Progress to targets section in the Metrics and targets section for corporate operations in body of the Climate Report for detail.

Table 11: Emissions intensity

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Gross emissions (tCO_2-e)	8,226.76	6,272.36	4,517.52	3,908.03	5,205.95	4,811.15
Reduction on base year		23.80%	45.10%	52.50%	36.70%	41.50%
FTE	3,354	3,693	3,630	3,828	4,050	4,273
Total expenditure $M 1	732	807	766	818	832	943
Total gross emissions per FTE (tCO_2-e)	2.45	1.7	1.24	1.02	1.29	1.13
Total gross emissions per million dollars of expenditure (tCO_2-e)	11.24	7.77	5.9	4.78	6.26	5.10

Periods prior to 2021/22 were not subject to assurance procedures by EY. All periods have been certified by Toitū Envirocare.

Persons responsible

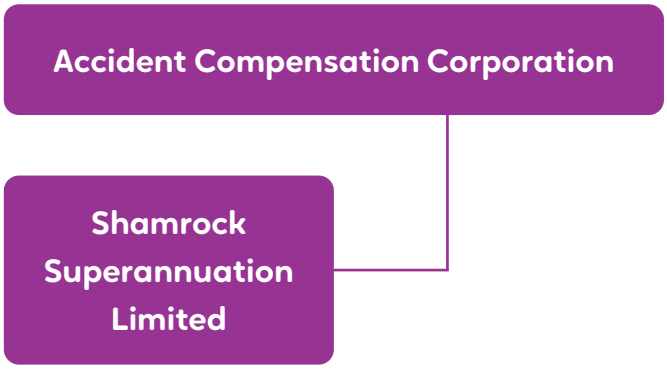
ACC's Board has ultimate responsibility for the oversight of the organisation's climate responsibilities. The Board delegates the day-to-day management and leadership of ACC to the Chief Executive. The Chief Executive has responsibility for this annual GHG emissions inventory for ACC's corporate operations.

Organisational boundary

ACC has applied the operational control approach to consolidation of emissions. This approach means ACC accounts for all GHG emissions from the facilities we control operationally or financially. This is appropriate because ACC has sole financial and operational control of its facilities. The alternative is an equity share consolidation, where the organisation accounts for its portion of GHG emissions from respective facilities.

ACC has defined its operational boundaries in line with the methodology described in the GHG Protocol and ISO 14064-1:2018 Standards.

ACC is one Crown entity and has one subsidiary, Shamrock Superannuation Limited (SSL), which is wholly owned by ACC and was established in 1991 to act as the independent corporate trustee for the mysuper Superannuation Scheme. Although SSL is within the organisational boundary, the company has no emissions. SSL's financial statements are published on the New Zealand Companies Office website companiesoffice.govt.nz. Financed emissions from the ACC Investment Fund are reported separately in the Metrics and targets section for investments in the body of the disclosure.



Reporting boundary

The GHG emissions sources included in this inventory were identified in accordance with the methodology described in the GHG Protocol, ISO 14064-1:2018, and the requirements set out by the CNGP. The CNGP requires inclusion of scopes 1 and 2 emissions and specified mandatory scope 3 emissions into the organisation's emissions inventory. It also requires the inclusion of material scope 3 emissions where reliable measurement is feasible. Please refer to the section below on inclusions and exclusions of emissions for more information.

Emissions source identification method and significance criteria

The GHG emissions sources included in this inventory were identified with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 Standards. They are also those required for the Toitū Envirocare programme certification.

The emissions sources that are mandatory and material to ACC corporate operations for CNGP targets and reporting are reviewed annually.

The significance of emissions sources within the organisational boundaries has been considered in the design of this inventory. The significance criteria used comprise:

- All direct emissions sources that contribute more than 1% of total category 1 and 2 emissions.
- All indirect emissions sources that are required by the CNGP.

Inclusions and exclusions of emissions

Table 12 details the emissions sources included in ACC's 2024 inventory by GHG Protocol classification and ISO 14064-1:2018 classification. It also shows which categories will be assessed for inclusion in ACC's GHG inventory from the 2024/25 reporting cycle onwards (please refer to the note below about exclusion of scope 3 emissions).

GHG emission categories that are not relevant to ACC's corporate operations are highlighted in the table below. ACC corporate does not sell products, or own buildings, or any franchises.

Financed emissions from the ACC Investment Fund are reported separately in the Metrics and targets section for Investments in the body of the disclosure.

Exclusion of scope 3 emissions

Under the GHG Protocol, companies are required to report all scope 1 and scope 2 emissions, while reporting scope 3 emissions is optional. As noted, this inventory report includes scope 3 emissions which are mandatory under the CNGP. It also includes scope 3 emissions from staff commuting on the basis that they are material to ACC's corporate operations. The remaining scope 3 value chain emissions have been excluded from the inventory to date based on the lack of reliable data. In the next reporting cycle ACC will reassess data availability and include additional sources of scope 3 emissions where possible.

Table 12: Inventory emission sources by GHG and ISO classification

GHG Protocol classification	ISO 14064-1:2018 classification	GHG Protocol sub-categorisation of scope 3 emissions	Sources included	Sources excluded
Scope 1 — Direct GHG emissions from sources that are owned or controlled by the company	Category 1 — Direct emissions from operations that are owned or controlled by ACC		Fleet (Mobile combustion), Natural gas (Stationary combustion)	No known exclusions
Scope 2 — Indirect GHG emissions from the generation of purchased electricity, heat and steam consumed by the company	Category 2 — Indirect emissions from imported energy (location-based method)		Purchased electricity	No known exclusions
Scope 3 — Indirect GHG emissions that occur as a consequence of the activities of the company but occur from sources not owned or controlled by the company	Category 3 — Indirect emissions from transportation	Category 4 — Upstream transportation and distribution	Freight	Except for freight, all other sources are excluded due to data availability. These will be assessed for inclusion in 2025.
		Category 6 — Business Travel	Accommodation, air travel, private mileage, rental car, taxi.	No known exclusions
		Category 7 — Employee commuting	Staff commute, working from home.	No known exclusions
		Category 9 — Downstream transportation and distribution		Not currently in inventory due to data availability. To be assessed for inclusion in 2025

GHG Protocol classification	ISO 14064-1:2018 classification	GHG Protocol sub-categorisation of scope 3 emissions	Sources included	Sources excluded
Scope 3 — Indirect GHG emissions that occur as a consequence of the activities of the company but occur from sources not owned or controlled by the company	Category 4 — Indirect emissions from products used by the organisation	Category 1 — Purchased goods and services	Water	Except for water, all purchased goods and services are excluded due to data availability. These will be assessed for inclusion in 2025.
		Category 2 — Capital goods		Not currently in inventory due to data availability. To be assessed for inclusion in 2025.
		Category 3 — Fuel and energy related activities not included in scope 1 or 2	Transmission and distribution losses (T&D losses)	No known exclusions
		Category 5 — Waste generated in operations	Waste to landfill, wastewater.	No known exclusions
		Category 8 — Upstream leased assets		Not currently in inventory due to data availability. To be assessed for inclusion in 2025.
	Category 5 — Indirect emissions through use of products from the organisation	Category 10 — Processing of sold products		
		Category 11 — Use of sold products		
		Category 12 — End of life treatment of sold products	Not applicable to ACC	
		Category 13 — Downstream leased assets		
		Category 14 — Franchises		
		Category 15 — Investments	Financed emissions from the ACC Investment Fund are reported separately in the Metrics and targets section	
	Category 6 — Indirect emissions from other sources		Not applicable to ACC	

Base year

This inventory report relates to the financial period 1 July 2023 to 30 June 2024. The base year is 1 July 2018 to 30 June 2019. The base year of 2018/19 was selected because it provided a stable and representative period before the disruption of the COVID-19 pandemic. In deciding on the base year, ACC consulted with MfE and other government agencies. Given the fluctuations caused by COVID-19, it was agreed that the base year should be set before March 2020.

There has been no change to the base year in this inventory report.

Emissions for the base year were audited and certified by Toitū Envirocare.

Recalculation policy

To accurately track progress towards our reduction targets, we will restate our emissions inventories for significant changes. A 5% significance threshold is applied. The base year and subsequent inventories will be recalculated and restated where changes exceed this threshold. Events that may create the need for restatement include changes to the organisational boundary, the inclusion of new emissions sources due to improvements in data availability, updated calculation methodologies, improved data accuracy, and discovery of significant errors or omissions in previous inventories. Restatement may also be required in other unforeseen circumstances to ensure the accurate tracking and the reporting of emissions and emissions reductions.

Adjustments to the inventory

There have been no recalculations since the prior inventory report in 2022/23.

ACC's base year does not contain emissions associated with natural gas for ACC's Wellington property (Aitken Street). Aitken Street is a leased building in shared tenancy with the Ministry of Justice. Gas connection is managed by the landlord and the gas emissions data has not previously been included in ACC's corporate GHG inventory report. ACC has not adjusted the base year as the landlord has indicated that gas will be removed from the building in the next 12 to 24 months.

Offsets

No purchased emissions offsets are included in this inventory.

Source of emissions factors

These emissions results align with the MfE's 2024 Measuring Emissions Guidance, which uses the 100-year global warming potentials in the Intergovernmental Panel on Climate Change Fifth Assessment Report (AR5a).

The 2024 MfE emissions factors were used for calculations except for employee commuting and freight. Details of the emissions factors used are shown in the emissions calculation methodology table below.

ACC notes that the 2024 MfE location-based electricity emissions factors have decreased compared to 2023 due to an increase in renewable energy generation in New Zealand. ACC electricity data (kilowatt hours consumed) remains consistent year on year.

Emissions calculation methodologies

Sources of emissions are described in the table below. The table includes the sources of data, notes about the calculation methodology, the quality of the data and any uncertainties.

The emissions inventory is quantified based on the following calculation:

Emissions = activity data x emissions factor

The application of this method for each category of emissions is shown in the table below.

ACC has adopted the MfE aircraft specific emission factors in calculations for domestic air travel for the 2024 reporting period. This has resulted in a decrease in air travel emissions year on year. In prior reporting periods the national average emission factor was applied to domestic air travel calculations because aircraft type was not identified in the travel data ACC received. ACC air travel activity data (kilometres travelled) has increased year on year.

Table 13: Emissions calculation methodology

Emissions source	Data source	Calculation methodology	Uncertainties, assumptions and limitations
Category 1: Direct emissions from operations that are owned or controlled by ACC			
Stationary combustion (natural gas)	Invoices from landlord — Aitken Street site.	New data source added to the 2024 Inventory. Gas consumption is for the Aitken Street building in Wellington only. No other ACC sites use gas. Consumption for the building is apportioned to tenants based on square metre occupancy. The 2024 MfE emission factor was applied to ACC's share of the kilowatt hours consumed.	Gas invoice records are supplied by the landlord. We consider the invoicing from the supplier to be reliable. ACC conducts reasonability checks for completeness and accuracy. Where necessary queries are raised and resolved.
Mobile combustion including company owned or leased vehicles (fleet)	Invoices and/or supplier records	Hybrid and petrol vehicles: 2024 MfE emission factor applied to litres of fuel used. Electric vehicles: 2024 MfE emission factor applied to kilowatt hours of electricity used. Supplier records are accepted as complete and accurate following reasonability checks.	ACC uses Custom Fleet for fleet management and analytics. Records are accessed through a data portal which includes the fuel and electricity consumption information used to calculate emissions. The source of data is considered reliable. ACC conducts reasonability checks for completeness and accuracy. Where necessary queries are raised and resolved.
Category 2: Indirect emissions from imported energy (location-based method)			
Purchased electricity	Invoices and/or supplier records	The 2024 MfE emission factor is applied to kilowatt hours consumed. Supplier records are accepted as complete and accurate following reasonability checks. Where a meter reading is missed, the correction is made in the following month. Electricity emissions have reduced due to lower national emissions factors. Please refer to the 'Progress to targets' section in the Metrics and targets section for corporate operations in body of the Climate Report for detail.	ACC uses Meridian as our electricity supplier. ACC sites are being transitioned to smart meters, but 11 sites have older style meters which are on a bi-monthly actual read and estimated read cycle. Where a site receives an estimation for the final read of the financial year, there is some uncertainty in the data. This corrects in the next reporting cycle and is not regarded as material. Irrespective of the type of meter, kilowatt hours by meter are supplied by Meridian through a data portal. ACC notes that Meridian's smart meter data provides kWh usage for every 30 minutes and also provides a 24-hour read once per day. Data is cleaned by ACC to remove the duplication. ACC will discuss with Meridian options for removal of the duplication prior to supply of the data. ACC also receives data directly from the landlord for Timaru, Hastings, and Lower Hutt. The sources of data are considered reliable. ACC conducts reasonability checks for completeness and accuracy. Where necessary queries are raised and resolved.

Emissions source	Data source	Calculation methodology	Uncertainties, assumptions and limitations
Category 3: Indirect emissions from transportation			
Air travel		The 2024 MfE emission factor is applied to kilometres travelled by booking class and aircraft type. Aircraft specific emission factors have been used in domestic air travel calculations. National average emission factors were used in previous reporting periods. This level of definition was made possible by changes in the configuration of travel data ACC receives from its travel provider. Air travel emissions have reduced due to the availability of aircraft specific travel data. Please refer to the 'Progress to targets' section in the Metrics and targets section for corporate operations in body of the Climate Report for detail.	ACC books travel through Tandem Travel. Records are accessed through a data portal, which includes the flight information used to calculate emissions. In 2024 the type of aircraft was added to the record for each flight. The source of data is considered reliable. ACC conducts reasonability checks for completeness and accuracy. Where necessary queries are raised and resolved.
Private mileage		The 2024 MfE emission factor is applied to kilometres driven. Kilometres driven are calculated by dividing the private mileage spend by the Inland Revenue Department's published kilometre expense rates.	Private mileage spend is derived from ACC's accounting system which is subject to financial audit. This is considered reliable, but the emissions calculation relies on employees filing expense claims accurately and in a timely manner. Internal sign-off procedures for expense claims provide checks for accuracy.

Emissions source	Data source	Calculation methodology	Uncertainties, assumptions and limitations
Category 3: Indirect emissions from transportation			
Rental car	Invoices and/or supplier records	The 2024 MfE emission factor is applied on a kilometre driven basis.	Kilometres driven are sourced from invoices and reports provided monthly by suppliers. These are considered reliable. ACC conducts reasonability checks for completeness and accuracy. Where necessary queries are raised and resolved.
Taxis		The 2024 MfE emission factor is applied on a dollar spend basis	Taxi spend is sourced from reports provided by our taxi supplier. These are considered reliable. ACC conducts reasonability checks for completeness and accuracy. Where necessary queries are raised and resolved.
Accommodation	Invoices and/or supplier records	The 2024 MfE emission factor for the country in which the hotel is located is applied to the room nights at the property. Room nights are the room count multiplied by the stay nights.	ACC books travel through Tandem Travel. Records are accessed through a data portal which includes the country of stay and room nights. The source of data is considered reliable. ACC conducts reasonability checks for completeness and accuracy. Where necessary queries are raised and resolved. Where there is not an emission factor for the country, the New Zealand factor is used. This may impact accuracy, but it is not regarded as material. Most ACC travel is in New Zealand or countries for which a factor exists.
Employee commuting	CarbonWise survey response	ACC uses the CarbonWise survey tool provided by Abley to estimate employee commuting emissions. Responses to the survey are extrapolated to reflect ACC's total workforce. CarbonWise used 2023 MfE emissions factors.	CarbonWise is a specialist tool for measuring commuter emissions calculations. The CarbonWise tool and methodology is accepted by ACC as robust and fit for purpose. Toitū Envirocare has conducted an independent audit on the CarbonWise methodology. CarbonWise survey results have been verified as Toitū Carbon Compatible and can be treated as pre-verified data suitable for use in an ISO 14064-1:2018 compliant inventory. Several assumptions are made in the calculation. The survey is conducted annually and asks employees to respond based on the prior week of commuting. The week respondents fill their answers in for is assumed to be representative of all other worked weeks in the year or reporting period. The respondent sample is assumed to be representative of how the rest of the organisation commutes. The response rate in 2024 was 50%. Emissions are therefore an estimate and rely on the accuracy of the survey responses provided by employees.

Emissions source	Data source	Calculation Methodology	Uncertainties, assumptions and limitations
Working from home	ACC Staff engagement survey	ACC uses the annual Pulse survey results which record staff working from home days. Data is extrapolated to reflect ACC's total workforce. The 2024 MfE emission factor is applied to calculate total working from home emissions.	The Pulse survey is administered by the specialist provider Gallup. Emissions are an estimate and rely on the accuracy of survey responses provided by employees.
Freight (Upstream)	Freightways supplier records	Freightways couriers provide emissions data to ACC. Kilograms of carbon dioxide equivalent is calculated by applying vehicle specific emission factors to weight and transport distance data. The 2023 MfE emission factor was applied by Freightways to calculate freight emissions.	ACC relies on the emissions calculations completed by Freightways. These are disclosed as suitable for use in an ISO 14064-1:2018 compliant inventory. The factors used by Freightways were verified by Toitū Envirocare during audit. ACC considers this data to be reliable.
Category 4: Indirect emissions from products used by organisation			
Waste to landfill	Invoices and/or supplier records	The 2024 MfE waste to landfill emission factor without gas recovery is applied to kilograms of waste.	Waste is weighed on site by cleaners and provided to the property and facilities manager, Colliers, for collation. Records are provided to ACC monthly. ACC undertakes reasonability checking across months to ensure weights fall within average ranges by site. Where necessary queries are raised to support forward quality control. In the event of a missing value, ACC applies the value for the site from the previous month as a proxy. ACC considers this data to be subject to human error but recognises that minor errors in weighing of waste will not materially affect ACC's total gross emissions. Waste is approximately 3% of ACC's gross emissions.
Transmission and distribution losses	Invoices and/or supplier records	The 2024 MfE emission factor is applied to kilowatt hours of electricity used.	As for electricity (above).
Water supply and wastewater	ACC workforce records	The 2024 MfE per-capita emissions factor is applied to the fulltime equivalent employee (FTE) count for ACC.	The FTE counts are obtained from the employee records maintained by ACC's People and Culture division. This is considered complete and accurate.

Further information about the emissions calculations and data for each source can be obtained from Justine.whitfield@acc.co.nz.

Uncertainty and data limitations

ACC recognises there is some level of uncertainty in the GHG emissions inventory and projected future emissions for corporate operations. The specific areas of uncertainty that ACC is aware of about the source data for each emissions source are outlined in Table 13 above. To minimise uncertainty ACC has used the best information available at the time and reviewed data for completeness and reasonability. ACC's GHG emissions measurement (emissions data and calculations) has been independently certified against ISO 14064-1:2018 by Toitū Envirocare (Enviro-Mark Solutions Limited).

There are also significant uncertainties within the emissions factors which are specific to the individual factors. For brevity within this disclosure, please refer to the 2024 guide to measuring emissions published by the MfE for detailed information on the uncertainties for each factor (Measuring-emissions: Detailed-guide 2024 (environment.govt.nz)).

ACC acknowledges that quantifying GHG emissions is subject to uncertainty because the scientific knowledge and methodologies used to determine the emissions factors and the processes to calculate or estimate quantities of GHG emissions from each source are still evolving.

Assurance

Ernst & Young Limited (EY) has provided third-party, independent, limited assurance over ACC's scope 1, 2 and 3 emissions from corporate operations for the year ended 30 June 2024.

EY has also provided limited assurance over financed emissions from listed equities, corporate bonds, unlisted equities and business loans and unlisted real estate and project finance investments against the PCAF Standard.

EY's assurance does not extend to the remainder of the climate report.

The assurance report for ACC, including corporate operations and the investment portfolio, is provided at Appendix 2.

Emissions by greenhouse gas

Table 14: Emissions by greenhouse gas[11] (tonnes of carbon dioxide equivalent)

Category	CO_2	CH_4	N_2O	NF_3	SF_6	HFC	PFC	CO_2-e*	Total (tCO_2e)
Scope 1									
Category 1: Direct emissions									
Fleet	68.88	0.92	2.10	-	-	-	-	-	71.90
Gas	165.60	0.43	0.08	-	-	-	-	-	166.11
Total Category 1	**234.48**	**1.35**	**2.18**	**-**	**-**	**-**	**-**	**-**	**238.01**
Scope 2									
Category 2: Indirect emissions from imported energy (location-based method)									
Electricity	296.84	10.99	0.34	-	-	-	-	-	308.17
Total Category 2	**296.84**	**10.99**	**0.34**	**-**	**-**	**-**	**-**	**-**	**308.17**
Scope 3									
Category 3: Indirect emissions from transportation									
Accommodation	-	-	-	-	-	-	-	74.03	74.03
Air travel	1,020.54	0.13	4.65	-	-	-	-	-	1,025.32
Commuting	-	-	-	-	-	-	-	2,565.83	2,565.83
Freight	-	-	-	-	-	-	-	6.89	6.89
Private mileage	3.21	0.04	0.10	-	-	-	-	-	3.35
Rental car	13.05	0.17	0.40	-	-	-	-	-	13.62
Taxi	17.22	0.16	0.41	-	-	-	-	-	17.79
Working from home	151.11	5.60	0.18	-	-	-	-	-	156.89
Total Category 3	**1,205.14**	**6.10**	**5.74**	**-**	**-**	**-**	**-**	**2,646.75**	**3,863.72**
Category 4: Indirect emissions from products used by organisation									
Transmission and distribution losses	21.66	0.85	0.03	-	-	-	-	-	22.54
Waste to landfill	-	166.36	-	-	-	-	-	-	166.36
Waste water	23.58	81.19	90.16	-	-	-	-	-	194.93
Water supply	16.78	0.62	0.02	-	-	-	-	-	17.42
Total Category 4	**62.02**	**249.02**	**90.21**	**-**	**-**	**-**	**-**	**-**	**401.25**
Category 5: Indirect emissions associated with the use of products from the organisation									
Total Category 5	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Category 6: Indirect emissions from other sources									
Total Category 6	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total gross emissions	**1,798.47**	**267.46**	**98.47**	**-**	**-**	**-**	**-**	**2,646.75**	**4,811.15**

*Reported as CO_2e where no breakdown of the emission factor by gas is available, or where third-party calculation does not provide breakdown by gas.

[11] Greenhouse gases as listed in the Kyoto Protocol: carbon dioxide (CO2); methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), nitrogen trifluoride (NF3), perfluorocarbons (PFCs), and sulphur hexafluoride (SF6).

Table 15: Emissions by greenhouse gas (tonnes)

Category	CO_2	CH_4	N_2O	NF_3	SF_6	HFC	PFC	CO_2-e*
Scope 1								
Category 1: Direct emissions								
Fleet	68.88	0.03	0.01	-	-	-	-	-
Gas	165.60	0.02	0.00	-	-	-	-	-
Total Category 1	**234.48**	**0.05**	**0.01**	**-**	**-**	**-**	**-**	**-**
Scope 2								
Category 2: Indirect emissions from imported energy (location-based method)								
Electricity	296.84	0.39	0.00	-	-	-	-	-
Total Category 2	**296.84**	**0.39**	**0.00**	**-**	**-**	**-**	**-**	**-**
Scope 3								
Category 3: Indirect emissions from transportation								
Accommodation	-	-	-	-	-	-	-	74.03
Air travel	1,020.54	0.00	0.02	-	-	-	-	-
Commuting	-	-	-	-	-	-	-	2,565.83
Freight	-	-	-	-	-	-	-	6.89
Private mileage	3.21	0.00	0.00	-	-	-	-	-
Rental car	13.05	0.01	0.00	-	-	-	-	-
Taxi	17.22	0.01	0.00	-	-	-	-	-
Working from home	151.11	0.20	0.00	-	-	-	-	-
Total Category 3	**1,205.13**	**0.22**	**0.02**	**-**	**-**	**-**	**-**	**2,646.75**
Category 4: Indirect emissions from products used by organisation								
Transmission and distribution losses	21.66	0.03	0.00	-	-	-	-	-
Waste to landfill	-	5.94	-	-	-	-	-	-
Waste water	23.58	2.90	0.34	-	-	-	-	-
Water supply	16.78	0.02	0.00	-	-	-	-	-
Total Category 4	**62.02**	**8.89**	**0.34**	**-**	**-**	**-**	**-**	**-**
Category 5: Indirect emissions associated with the use of products from the organisation								
Total Category 5	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Category 6: Indirect emissions from other source								
Total Category 6	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total gross emissions	**1,798.47**	**9.55**	**0.37**	**-**	**-**	**-**	**-**	**2,646.75**

*Reported as CO_2e where no breakdown of the emission factor by gas is available, or where third-party calculation does not provide breakdown by gas.

Appendix 2 — Assurance Report

Building a better working world

Independent Limited Assurance Report to the Directors of Accident Compensation Corporation.

Assurance Conclusion

Based on our limited assurance procedures performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Accident Compensation Corporation's ('ACC') corporate and financed emissions disclosures for the year ended 30 June 2024 have not been prepared, in all material respects, in accordance with the Criteria defined below.

Emphasis of Matter
We draw attention to "Estimated emissions data uncertainty" on page 46 which describes the significant uncertainty in the portion of emissions from investments which are estimated, due to the calculation approaches and assumptions used to estimate these. Our conclusion is not modified in respect of this matter.

Scope
Ernst & Young Limited ("EY") has undertaken a limited assurance engagement, as defined by International Standards on Assurance Engagements, to report on ACC's corporate emissions disclosures (within pages 32 and 35 and pages 52 to 66) and financed emissions disclosures (within pages 43 and 49) reported in its Climate Report for the year ended 30 June 2024 (the "Report"). The reported amounts are as follows:

Subject matter	Total emissions (tCO_2e)
Corporate emissions	4,811
Financed emissions	3,019,357 (ACC's attribution factor based on Enterprise Value Including Cash-EVIC) 1,104,324 (ACC's attribution factor based on market capitalisation and inclusion of scope 3 emissions from only priority sectors)

Other than as described in the preceding paragraphs, which sets out the scope of our engagement, we did not perform assurance procedures on the remaining information included in the Report, and accordingly, we do not express a conclusion on this information.

Criteria applied by ACC
In preparing the corporate and financed emissions disclosures, ACC applied the following criteria (the "Criteria"):

Subject matter	Criteria
Corporate emissions	▸ Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised version) (2004) ▸ Corporate Value Chain (Scope 3) Standard ▸ Carbon Neutral Government Programme ('CNGP')
Financed emissions	▸ Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised version) (2004) ▸ Corporate Value Chain (Scope 3) Standard ▸ Partnership for Carbon Accounting Financials' The Global GHG Accounting and Reporting Standard ('PCAF Standard') for the Financial Industry (Part A – Financed Emissions)

ACC's Responsibility
The Directors are responsible, on behalf of ACC, for selecting the Criteria and preparation of the corporate and financed emissions disclosures in accordance with the Criteria. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the corporate and financed emissions disclosures, such that they are free from material misstatement, whether due to fraud or error.

EY's Responsibility
Our responsibility is to express a limited assurance conclusion on the corporate and financed emissions disclosures based on the procedures we have performed and the evidence we have obtained.
Our engagement was conducted in accordance with International Standard for Assurance Engagements (New Zealand) 3410: *Assurance Engagements on Greenhouse Gas Statements* ('ISAE (NZ) 3410') issued by the New Zealand Auditing and Assurance Standards Board. Those standards require that we plan and perform this engagement to obtain limited assurance about whether the corporate and financed emissions disclosures have been prepared, in all material respects, in accordance with the Criteria. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

Building a better working world

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

Ernst & Young provides audit, review and agreed upon procedures to ACC on behalf of the Office of the Auditor-General ("OAG"). Partners and employees of our firm may deal with the Entity on normal terms within the ordinary course of trading activities of the business. We have no other relationship with, or interest in, the Entity.

Our Independence and Quality Management
We have complied with the independence and other ethical requirements of the Professional and Ethical Standard 1 *International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board*, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Professional and Ethical Standard 3 *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.

Description of procedures performed
Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the report and related information and applying analytical and other relevant procedures.

Our procedures included:
- Considering the suitability of the Criteria in the preparation of the relevant disclosures
- Conducting interviews with personnel to understand the business and relevant reporting process.
- Considering organisational and operational boundaries to assess completeness of GHG emissions sources.
- Considering the suitability of calculation methodologies and assumptions used by ACC
- Comparing year on year activity-based GHG and energy data where possible.
- Assessing on a sample basis emissions factors and methodologies have been correctly applied as per the Criteria and calculation methodology.
- Sample testing of calculation and aggregation.
- Considering the appropriateness of the presentation of disclosures and the descriptions on assumptions and uncertainties.
- Obtaining management representation

We also performed such other procedures as we considered necessary in the circumstances.

Inherent Uncertainties
The GHG quantification process is subject to scientific uncertainty, which arises because of incomplete scientific knowledge about the measurement of GHGs. Additionally, GHG procedures are subject to estimation uncertainty resulting from the measurement and calculation processes used to quantify emissions within the bounds of existing scientific knowledge.

Use of our Assurance Report
We disclaim any assumption of responsibility for any reliance on this assurance report to any persons other than the Directors of ACC, or for any purpose other than that for which it was prepared.

Ernst & Young Limited
Auckland, New Zealand
18 September 2024

Appendix 3 – Guide to acronyms

AR5	Climate Change Fifth Assessment Report
BECCS	Bioenergy with Carbon Capture and Storage
BIC	Board Investment Committee
CCS	Carbon Capture and Storage
CCSG	Climate Change Steering Group
CDP	Carbon Disclosure Project
CDR	Carbon Dioxide Removal
CFI	Crown Financial Institution
CVaR	Climate Value-at-Risk
CRO	Climate-related Risks and Opportunities
CRIF	Crown Responsible Investment Framework
ESG	Environmental, Social and Governance
EVIC	Enterprise Value Including Cash
GDP	Gross Domestic Product
GHG	Greenhouse gases as listed in the Kyoto Protocol: carbon dioxide (CO_2); methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), nitrogen trifluoride (NF_3), perfluorocarbons (PFCs), and sulphur hexafluoride (SF_6).
GICS	Global Industry Classification Standard
kWh	Kilowatt hours
MfE	Ministry for the Environment
MSCI	Morgan Stanley Capital International. A global provider of equity, fixed income, real estate indices, multi-asset portfolio analysis tools, ESG and climate products
NABERSNZ	System for rating the energy efficiency of office buildings. It is an independent tool, backed by the New Zealand Government.
NZCS	Aotearoa New Zealand Climate Standards
PCAF	Partnership for Carbon Accounting Financials
OCL	Outstanding Claims Liability. The OCL is an estimate of the present value of expected future payments on all existing ACC claims.
SBTi	Science Based Targets initiative
T&D	Transmission and Distribution
TCFD	Task Force on Climate-related Financial Disclosures
tCO_2-e	GHG emissions are measured as a CO_2 equivalent in tonnes of carbon.

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