CLIMATE-RELATED DISCLOSURE FY25

CIALTS25007

CIAL CLIMATE-RELATED DISCLOSURE FY25

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CLIMATE STATEMENT

INTRODUCTION

We are pleased to present our Climate-related Disclosure for the reporting period 1 July 2024 – 30 June 2025 prepared in accordance with Aotearoa New Zealand Climate Standards (NZ CS).

Christchurch International Airport Limited (CIAL) is a climate-reporting entity (CRE) under the Financial Markets Conduct Act 2013. These Climate-related Disclosures are for CIAL and its wholly owned subsidiaries. As the wholly owned subsidiaries were not trading and held no assets and liabilities during and at the end of the period of review, this Climate-related Disclosure represents both the parent and the group.

CIAL's Climate-related Disclosure for the year ended 30 June 2025 on pages 4-42 & 47-50 complies with NZ CS 1, 2 and 3 issued by the External Reporting Board (XRB).

In preparing this Climate-related Disclosure, CIAL has elected to utilise Adoption Provisions 2, 6, 7, and 8 as provided for in NZ CS 2 (refer to Appendix 1 for more details).

As per the requirements set out in NZ CS 1, assurance has been provided by Audit NZ over our Scope 1 and 2 GHG emissions data for the year ended 30 June 2025, in accordance with NZ SAE 1 (See Appendix 2). We have not sought assurance from Audit NZ over the wider climate statement.

This document contains forward-looking information that is subject to limitations and disclaimers (see the Important Note on page 5 for details).

Approved on behalf of CIAL on 1 October 2025.

Sarah Ottrey
Chair

Andrew Barlass
Director

IMPORTANT NOTE

This Climate-related Disclosure sets out CIAL's current approach to scenario analysis, our current understanding of, and response to, our climate-related risks and opportunities and our current and anticipated impacts of climate change in relation to the group. This reflects CIAL's current understanding as at publication date. We acknowledge that climate-related risk is an evolving area and often uses data and methodologies that are developing and uncertain. This Climate-related Disclosure contains forward looking statements, including climate-related scenarios, targets, assumptions, climate projections, forecasts, statements of CIAL's future intentions, estimates and judgements that may not evolve as predicted. We base those statements and opinions on reasonable information at the date of publication. We do not represent those statements and opinions will not change or will remain correct after publishing this Climate-related Disclosure or promise to revise or update those statements and opinions if events or circumstances change or unanticipated events happen after publishing this Climate-related Disclosure.

CIAL cautions reliance on climate-related forward-looking statements that are necessarily less reliable than other statements CIAL may make in its annual reporting. These statements involve assumptions, forecasts and projections about CIAL's present and future strategies and CIAL's future operating environment.

Such statements are inherently uncertain and subject to limitations, particularly as inputs, available data and information are likely to change.

The risks and opportunities described in this Climate-related Disclosure, and our strategies to achieve our targets, may not eventuate or may be more significant than anticipated. There are many factors that could cause CIAL's actual results, performance or achievement of climate-related metrics (including targets) to differ materially from that described, including economic and technological viability, climatic, government, consumer, and market factors outside of CIAL's control. CIAL gives no representation, warranty or assurance that actual outcomes or performance will not materially differ from the forward-looking statements. We disclaim to the fullest extent possible any liability whatsoever for any loss arising directly or indirectly from any use of the information contained in this report.

This disclaimer should be read along with the methodologies, assumptions and uncertainties and limitations outlined within these Climate-related Disclosures.

This Climate-related Disclosure is not an offer document and does not constitute an offer or invitation or investment recommendation to distribute or purchase securities, shares, or other interests. Nothing in this report should be interpreted as capital growth, earnings or any other legal, financial tax or other advice or guidance. For detailed information on our financial performance, please refer to our Annual Report, available at: https://www.christchurchairport.co.nz/globalassets/about-us/who-we-are/financial-reports/2025-Annual-Report-Financial-Statements.pdf

GOVERNANCE

Governance body's oversight of climate-related risks and opportunities

Our Board of Directors is responsible for the company's corporate governance and, as part of this, oversees the management of climate-related risks and opportunities. The Board's oversight includes:

- Ensuring that CIAL has appropriate risk management and regulatory compliance policies and practices in place and monitoring the appropriateness and implementation of these.
- Promoting the long-term ambitions of the company about embedding Environmental, Social and Governance (ESG) principles into our business by ensuring that appropriate strategies and activations are in place in the near term whilst we actively prepare for transition. This will be required to help underpin long-term shareholder and stakeholder value, including CIAL's Climate Policy (discussed below).
- Approving key performance criteria for CIAL and monitoring the performance of the Chief Executive (CE) against these.
- Approving and monitoring the company's Climate-related Disclosures and ensuring disclosure obligations are met.

Further information about the Board's role can be found in the Corporate Governance section of our FY25 Annual Report, page 76.

The Risk, Audit and Finance (RAF) Committee is a sub-committee of the Board that supports the Board. It oversees the enterprise risk management framework and associated procedures for effective identification and management of the company's financial and strategic business risks (including climate-related risks); the setting and execution of our ESG strategy and priorities; and has specific responsibility for our Climate-related Disclosure and compliance with NZ CS.

All other Board sub-committees (Aeronautical, Property & Commercial, and People, Culture & Safety) as appropriate individually consider the impact of climate-related risks and opportunities on underlying strategies and business decisions being reviewed on behalf of the Board.

Governance processes and frequency

The Board receives updates such as progress against strategic activations and greenhouse gas (GHG) emissions targets, and relevant legislative changes in the monthly reporting prepared by management. Additional board papers are provided as required for deep dives into specific climate-related matters.

In the year ended 30 June 2025, the Board was kept appraised of key climate-related risks and opportunities via monthly sustainability board reports. Quarterly ESG updates are prepared by management and reviewed by the RAF Committee, prior to being submitted to the Board.

Board skills and competencies

The Board Charter notes the high-level skills and competencies that are required of board members. The Board uses a skills matrix to assess and monitor its members' range of skills, including sustainability and climate change risk competencies.

The Board accesses climate-related expertise and advice from within the business and externally as required.

> "*The organisation* has established a dedicated team with recognised knowledge and experience in climate change matters."

CIAL has established a dedicated team with recognised knowledge and experience in climate related risks and opportunities, including a Sustainability Transition Leader and Sustainability Advisors. This team provides the Board and management with ad hoc updates on emerging best practice, regulatory requirements and other climate-related issues that are relevant. External expert advice and support is drawn upon as required, including to facilitate climate risk assessments and to peer-review the outputs of the assessment.

Integration with strategy

On an annual basis, the Board reviews all material business risks and opportunities, including those related to climate, and considers them in the approval of our company objectives, strategy, business plan activations, and budgets, including capital deployment. Funding of climate-related strategic activations and ongoing operational activities is considered through these annual business plan and budgeting processes. Any major activations required to manage and mitigate business risk or achieve strategic activations will be reflected as activities in the business plan.

CIAL is beginning a refreshed long-term strategic planning process that will consider distinct but inter-connected horizons. Beyond the 'Current Horizon' (the next three years), the 'Transforming Horizon' (four to ten years in the future) will further explore how we actively prepare for adaptation and transition to our changing climate and the changing aviation industry, and 'Emerging Horizon' (beyond ten years) looks beyond linear forecasts, preparing for a range of potential plausible futures.

Climate-related risks and opportunities are a key consideration in our airport campus master planning process. Planning to support our long-term terminal and campus plan is typically undertaken on a 10-year cycle, and our last plan was released in 2017. Given the speed of change across the policy, technology, industry, and climate change landscapes, planning is underway to update the Master Plan ahead of 2026 to consider the potential airport infrastructure that may be needed to support the decarbonisation of the aviation sector and to enhance airport infrastructure resilience.

Setting and managing metrics and targets

The Board is responsible for setting and approving CIAL's Climate Policy, which contains our climate-related commitments and objectives including GHG emission targets (set in alignment with science-based targets). Sitting under the Climate Policy is our Emissions Reduction Plan (ERP) which outlines the strategic activations we intend to implement to help in achieving our emissions reduction targets in line with our Climate Policy. Responsibility for activating the ERP sits across the Executive Leadership Team (ELT). The ERP was last revised in 2023 and will undergo further updates every three years. The Board receives updates on the ERP as appropriate, for example where there is a material challenge or anticipated divergence from the agreed pathway.

Key climate-related metrics, including GHG emissions, are reported to the Board monthly and annually through the business planning and reporting cycles.

The CE is ultimately accountable for executing CIAL's business plan and achieving strategic goals, which is reflected in the performance-based component of the CE's annual remuneration package. In FY25, the CE's annual remuneration package included a variable at-risk salary element. One of the elements of the variable at risk remuneration included requirements related to maintaining our reductions pathway (Scope 1 and 2 GHG emissions' reduction above 90%), helping others decarbonise and improving biodiversity outcomes. This also included master planning associated with future aviation needs and energy infrastructure requirements to cater for a renewable energy transition. The Board sets and monitors these key targets as part of our half-yearly and annual reporting.

Management's role in assessing and managing climate-related risks and opportunities

By delegation from the Board, management is responsible for ensuring the business identifies, assesses, and monitors climate-related risks and opportunities.

Key roles with climate-related responsibilities include the CE, who is ultimately responsible for the delivery of strategy, the Chief Strategy and Stakeholder Officer and the Sustainability Transition Leader.

Management submits to the Board various regular and ad hoc reports covering climate related topics. During the current reporting period the Board received papers on climate risk assessment updates including scenario, risk and opportunities refresh, GHG verification and external assurance requirements, transition planning, load shedding, sustainability linked loans, decarbonisation transition pathway, future aviation fuels, carbon abatement costs and campus-wide renewable energy generation and network infrastructure. Management attends board meetings to discuss the contents of the papers.

The ELT is informed about, makes decisions on, and monitors climate-related risks and opportunities through various channels, including:

- updates, as necessary, on changes to risk assessments or new / emerging risks through reporting from business units / risk owners in accordance with CIAL's enterprise risk management framework.
- quarterly reporting and review of GHG emissions by business unit (internal carbon dashboards).
- periodic reporting from the Sustainability Transition Leader on market and operating environment trends. During the reporting period ELT received and reviewed all the papers provided to the Board (as noted above), in advance of Board presentation.
- engagement in the climate risk assessment processes (planned to be undertaken at least every five years, with annual pulse checks). In the current reporting period, the most material climate-related risks and opportunities were reviewed and updated.

CLIMATE-RELATED GOVERNANCE & MANAGEMENT RESPONSIBILITIES

BOARD AND BOARD COMMITTEES

CIAL BOARD

- Ensures CIAL has appropriate and effective risk and opportunity management practices in place, including for climate-related issues.
- Assigns climate-related-issue goals and targets to management annually via agreed strategic objectives and targets and holds management accountable to these.
- Receives reports from the RAF Committee.
- Has access to risk and sustainability reports from management.

RISK AUDIT AND FINANCE (RAF) COMMITTEE

- Supports the Board in relation to risk management process and oversight.
- Reviews risk reports and new and escalating emerging risks and ensures risks are managed in accordance with policy.
- Periodically reviews whole of business risk analysis and makes recommendations to Board.
- Reviews and updates risk management framework and associated procedures.
- Reviews management's implementation of strategy and action plans on key issues (including climate).
- Monitors and reviews current and emerging trends to ensure the strategy remains well positioned.

EXECUTIVE LEADERSHIP

CE

- Delegated authority from the Board for management of climate-related risks and opportunities.
- Primarily responsible for the implementation of strategy and achieving strategic targets, including emissions reduction targets.

CHIEF STRATEGY AND STAKEHOLDER OFFICER

- Report on climate risks and initiatives and emerging areas.
- Monitors projects aligned to the ERP.

OTHER EXECUTIVE LEADERSHIP TEAM (ELT) MEMBERS

- Owners of the risks in their Business Unit.

OTHER MANAGEMENT ROLES

SUSTAINABILITY TRANSITION LEADER

- Enables effective integration of sustainability into strategy.
- Implements sustainability initiatives aligned with agreed strategic initiatives.
- Owns the CIAL Climate Policy and the Carbon Objectives therein.
- Reports/presents to RAF (quarterly)/Board (each Board meeting) on sustainability and climate-related issues.

KEY RISK OWNERS

- The responsibilities for managing climate-related risks and issues are allocated to roles based on the nature of the issue and the associated Business Unit.

STRATEGY

Nature and Scope of Activities and Business Model

CIAL's core activity is the safe and efficient operation of airport facilities, facilitating air connectivity through the provision of appropriate landside and airside infrastructure, to meet the needs of all airport users (including both commercial and non-commercial aviation users), our customers, staff and the travelling public. This includes pursuing commercial opportunities with wider complementary products, services and business solutions where needed.

CIAL operates a diversified business portfolio. We organise our commercial activities into three areas: aviation; terminal and ground transport; and property development on campus, together with several inter-generational transition projects investigating future aviation demands, energy transition and the future of airfreight, and e-commerce demands. Our three commercial pillars are balanced with a fourth – our commitment to Planet.

Our Purpose

We are a purpose driven organisation, and our team have decided our purpose is best described as:

FOR A PROSPEROUS AND SUSTAINABLE
Te Waipounamu

The cornerstones of our purpose, together with our over-arching goal of being a **"HIGH PERFORMING RESILIENT BUSINESS"**, lead to us targeting the following outcomes:

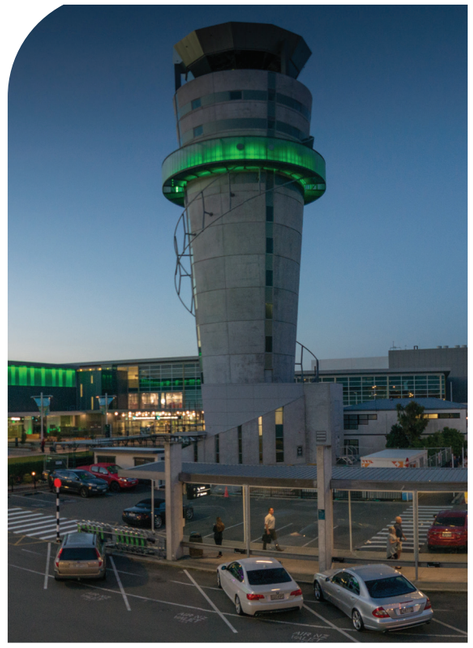
FUELLING ECONOMIC PROSPERITY
of the South Island and New Zealand

+

ENHANCING PEOPLE'S LIVES
Our team, customers, partners, communities

+

STEWARDS OF PLACE & PLANET
Sustainably shaping our shared future



Outcomes associated with being "Stewards of Place & Planet" include

- To be absolute zero emissions for our own airport operations (Scope 1 and 2 market based) by 2035
- Support the wider aviation industry with decarbonisation transition initiatives (Scope 3) – through appropriate investment in campus infrastructure and advocacy
- Strengthen climate resilience and infrastructure resilience through future-focused climate adaptation planning

Our Strategy

Our strategy is built around our core objective to operate as a successful commercial entity that aims to deliver strong, sustainable financial returns and long-term value growth, that support our shareholders and regional economy, while operating in a way that delivers and balances sustainable benefits for all our stakeholders – including customers, the travelling public, our partners and staff, communities and future generations.

PLANES PROPERTY PASSENGERS PLANET

When developing our strategy, we incorporated the impact of the long-term, mega trends we believe will significantly shape the aviation and airport landscape: Climate Change; Technological Innovation; Property Investment; and Changing Demographics and Geopolitical Factors.

In relation to the Climate Change mega trend, we have identified three main areas of impact:

- **Adaptation:** adapt systems and infrastructure to mitigate changing weather patterns and extreme weather events
- **Mitigation:** continued reduction of emissions from our own controlled airport operations[1] and support of the transition of the wider transportation sector to a net zero carbon future
- **Transition:** preparing for societal scale energy transition towards lower-emissions fuels, technologies and infrastructure

The integration of climate change considerations into our strategy was aided by our scenario analysis.

[1] Further description of CIAL's controlled business operations is contained in the Metrics and Targets section of this Climate-related Disclosure.

SCENARIO DEVELOPMENT PROCESS

1. FOCAL QUESTION

In the FY25 Scenario refresh session, the group reconsidered the focal question. Participants agreed to reframe the focal question to "How do we continue to thrive, build resilience, and support sector decarbonisation in the context of systemic change?". The focal question provides a guiding purpose to the scenario analysis process while allowing flexibility to explore future possibilities.

2. DETERMINE BOUNDARIES

The boundary of the scenario analysis was confirmed as being defined by CIAL's core operations, and one tier up, and one tier down the value chain. The time horizons were agreed as short-term (now -2030), medium-term (2030-2050), and long-term (2050-2100).

3. KEY DRIVING FORCES

CIAL's view of the key driving forces was determined, with participants choosing from a long list drawn from various sector scenarios, including New Zealand Green Building Council; Aotearoa Circle's Tourism sector scenarios; and the Aviation sector's WayPoint 2050 Technology and SAF/Fuel availability scenarios. In 2025 driving forces identified in Aotearoa Circle's Transport Sector Scenarios were also considered. The modelling which is inherent in these sector scenario archetypes is the extent of the modelling used by CIAL in its scenario analysis.

4. RANKING

The key driving forces were ranked on an influence / certainty matrix, to determine which were most relevant to inform CIAL's scenario narratives. In FY25 a selection of relevant driving forces from Aotearoa Circle's Transport Sector Climate Change Scenarios were ranked and voted on to identify which could most materially affect CIAL. These were used to supplement the scenario narratives.

5. FORMULATE

Participants worked in groups to formulate the driving forces' narratives under each scenario and time horizon, considering the political, social, and economic context.

6. CONSOLIDATE

The results of this session were consolidated into the scenario narratives as provided below, which were reviewed, challenged, and endorsed by the ELT and Board.

Scenario development

To help identify the risks and opportunities related to climate change, and better understand the resilience of our business model and strategy to these, we analysed three scenarios that describe challenging, plausible futures, exploring different assumptions for how climate policy, emissions, temperatures and physical risk impacts might evolve over time.

To develop the scenarios, a team of subject matter experts from across the business participated in a workshop session, facilitated by Deloitte, and followed the process outlined in the table opposite.

Our scenario narratives were reviewed, updated, and endorsed by the Board in FY25, to be used as an input to our strategy refresh sessions. We intend to review scenarios annually to determine if a refresh is required. Any updates will be submitted to the Board for endorsement.

To review the scenarios a group of subject matter experts conducted a workshop and considered changes in the domestic, global and sectoral scenario context, including developments in scenario archetypes (including updated NGFS scenarios, NIWA's downscaled AR6 data) and The Aotearoa Circle's Transport Sector Climate Change Scenarios (released in June 2024). This workshop resulted in the driving forces and scenarios agreed in FY24 being supplemented with additional information. The updates centred on consumer and social preferences, including social connectivity and fear of flying/climate stranding, the enabling ecosystems for technology, disintegration of global multilateralism, access to finance and exposure to public action on climate.

> "A team of subject matter experts participated in a Deloitte-facilitated workshop to identify climate change *risks, opportunities & scenarios.*"

Scenarios adopted for the purpose of testing our business strategy

We adopted the following scenario to assess our business strategy:

- Orderly – 'Net zero by 2050' scenario, under which the increase in global surface temperatures is limited to ~1.5°C.
- Disorderly – 'Delayed Transition' scenario, under which the increase in global surface temperatures is limited to below 2°C;
- 'Hot house World – 'Current Policies' scenario, under which global surface temperatures are in exceedance of 3°C.

Timeframes used in scenario analysis

Within each scenario we focused primarily on the timeframe within which the scenario would present the greatest challenge to our strategy and business model. For an orderly transition, the short term will present high transition challenges, with low exposure to physical risk over the longer-term; a disorderly transition, where the response is delayed and disjointed, will result in higher transition challenges and slightly elevated exposure to physical impacts in the medium-term; while under a hot house world scenario, where climate policy ambition is limited, exposure to some transition risks is low, however, the years beyond 2050 will become increasingly challenging as exposure to physical impacts becomes more extreme.

Scenario analysis and testing of business strategy

For the purpose of testing CIAL's business strategy, we developed three, entity-level scenario narratives that test two pathways under which the international community achieves our collective net zero targets, (with and without target overshoot); and a pathway under which the international community misses our collective 2050 targets. These narratives are presented on the following pages.

As part of CIAL's strategy setting in FY25, a team of senior executives and the Board gathered over two days to begin a refreshed long-term strategic planning process that will consider three distinct but inter-connected horizons. Emissions reduction and climate change form one of the four key mega-trends that we believe will significantly shape the aviation and airport landscape over the medium term).

ORDERLY SCENARIO

Critical Timeframe: Present Day – 2030
Average global temperature +1.5°C

LOCAL CLIMATE HAZARDS

- 45 wet days per annum
- 80 hot days per annum
- Extreme wind 70 km/hr

KEY DRIVING FORCES

Government priorities	Decisive and swift, supportive of decarbonisation
Infrastructure and energy needs	Early action and a well signalled pipeline
Decarbonisation of air travel	Well supported by infrastructure investors, regulators, and consumers
Emerging technology	Early investment & adoption of technology
Consumer preferences	Consumers actively favour lower emission air travel and products

SCENARIO ARCHITECTURE AND DATA SOURCES[2]

Intergovernmental Panel on Climate Change AR5, AR6	SSP1-1.9
Network for Greening the Financial System	Orderly – Net Zero
Climate Change Commission[3]	Tailwinds
NIWA	Downscaled RCP2.6
The Aotearoa Circle – Tourism Sector Climate Change Scenarios	Orderly Scenario
New Zealand Green Building Council – Climate change scenarios for the Construction and Property sector	Scenario 1
Air Transport Action Group – Waypoint 2050	Waypoint 2050
The Aotearoa Circle – Transport Sector Climate Change Scenarios	Fully Charged Scenario

[2] Refer to appendix 3 for data sources.

[3] CCC pathways and sector scenarios were not used to inform physical and transition risk exposure; given the global drivers that influence the aviation sector, CIAL adopted global data sets (IPCC and NGFS), and downscaled NIWA data to inform physical risk exposure. In this regard, CCC pathways and sector scenarios were referenced in a qualitative context only, to inform the types of national policy settings that would be in place and the way alternative futures might plausibly develop under scenarios.

CIAL's Orderly scenario narrative

Political stability and strong policy frameworks reward investment into low-carbon aviation technology and the SAF supply chain, providing a stable investment environment. Globally, governments leverage fiscal and trade policies to address climate change and take a coordinated approach to reducing emissions from air travel.

Robust carbon markets and financial market regulation encourage investment into low carbon and climate resilient technologies and practices, indicating that economic growth is steadily decoupling from fossil fuels.

Government policy incentivises investment into renewable energy generating capacity and distribution networks. Public spending is invested in resilient low carbon infrastructure.

Consumers embrace and favour decarbonising behaviour, which results in a change in consumer demand across different markets. Consumer demand for low-carbon alternatives accelerates change in the aviation industry. This is coupled with investors holding businesses to account for progress towards short –to-medium-term emissions targets.

New workforce pathways are formed in relation to sustainable aviation technologies. This provides local employment opportunities and confers a competitive advantage on New Zealand's aviation sector in terms of ready access to a local, highly skilled and competent workforce able to service next generation aircraft technology. New Zealand successfully internalises the benefits of the transition to a low carbon economy through advanced training opportunities, job creation and economic growth.

Under an orderly scenario, global warming is successfully constrained, and natural resources are carefully managed, which reduces price volatility and supply side shocks.

Price stability and steady demand for clean tech provides investor confidence. Investors are willing to back sustainable aviation technology and supporting infrastructure investments at a lower short-term economic return. Funding and insurance is increasingly hard to access for high emission activity, accelerating the investment in decarbonisation. There is appetite to accept write-downs on older assets in view of the cost savings potential and resilience opportunities associated with new, innovative technologies.

DISORDERLY SCENARIO

Critical Timeframe: 2030 - 2050
Average global temperature <+2°C

LOCAL CLIMATE HAZARDS

- 50-60 wet days per annum
- 75-85 hot days per annum
- Extreme wind 70-85 km/hr

KEY DRIVING FORCES

Government priorities	Delayed and disjointed
Infrastructure and energy needs	Delayed investment leads to high prices and resource scarcity
Decarbonisation of air travel	Slow and lacking clear direction in the early years, then rapid uptake and high demand
Emerging technology	Late investment in and adoption of technology leads to increased prices
Consumer preferences	Air travel declines in popularity due to price, especially long-haul, and increasing disruptions due to changing climate

SCENARIO ARCHITECTURE AND DATA SOURCES[4]

Intergovernmental Panel on Climate Change AR5, AR6	SSP1-RCP2.6
Network for Greening the Financial System	Disorderly – Delayed Transition
Climate Change Commission[5]	Headwinds
NIWA	NIWA downscaled RCP4.5
The Aotearoa Circle – Tourism Sector Climate Change Scenarios	Disorderly
New Zealand Green Building Council – Climate change scenarios for the Construction and Property sector	Scenario 2
The Aotearoa Circle – Transport Sector Climate Change Scenarios	Short Detour

[4] Refer to appendix 3 for data sources.

[5] CCC pathways and sector scenarios were not used to inform physical and transition risk exposure; given the global drivers that influence the aviation sector, CIAL adopted global data sets (IPCC and NGFS), and downscaled NIWA data to inform physical risk exposure. In this regard, CCC pathways and sector scenarios were referenced in a qualitative context only, to inform the types of national policy settings that would be in place and the way alternative futures might plausibly develop under scenarios.

CIAL's Disorderly scenario narrative

The international government policy response to climate change is delayed and disjointed. Emission reduction mandates are slow to be introduced and are poorly communicated and enforced, undermined by weak monitoring and compliance. This creates confusion and distrust among the aviation sector and consumers.

Governments across the globe are inconsistent regarding treatment of aviation emissions within their carbon budgets and targets until 2035. After 2035, governments introduce fiscal measures to penalise high emitting sectors. Air travel demand and dynamics, particularly long haul, are impacted by several factors including higher costs primarily due to carbon taxes, a fear of stranding, driven by increasingly frequent climate-related delays and disruption to flights, and increasing social pressure to limit air travel. Additionally, an increasing preference for virtual interaction, coupled with advances in technology, see virtual and augmented reality experiences increase in popularity as a potential substitute for both leisure and business travel, reducing the demand for air travel.

Workforce pathways for sustainable aviation technologies are delayed and challenging to form. Training is time-pressured and local employees are not well supported to upskill. The result is higher overheads as skilled labour is imported.

The introduction of carbon border adjustment mechanisms has been delayed, as has international and domestic policy relating to low emissions fuel for aviation. The exclusion of aviation from carbon markets has led to delays by aircraft manufacturers in commercialising next generation aircraft (NGA). A sudden introduction of fiscal policies targeting the aviation sector triggers a surge in demand for NGA technology and infrastructure, and New Zealand is limited in how it can respond due to its relative lack of buying power. With airlines slow to adopt technology, a lack of standardisation and coordination between networks and a reluctance from consumers to use new technology, advances in low- carbon air travel are limited and fragmented. The decarbonisation efforts are also hampered by cost increases and an inability to source key technology, with climate hazards and geopolitics impacting freight routes, trade sanctions and tariffs, and mis-matched supply and demand.

HOT HOUSE WORLD

Critical Timeframe: 2050 - 2100
Average global temperature >+3°C

LOCAL CLIMATE HAZARDS

- 50-105 wet days per annum
- 70-85 hot days per annum
- Extreme wind 70-95 km/hr

KEY DRIVING FORCES

Government priorities	Limited focus and action on decarbonisation
Infrastructure and energy needs	Focus is on remediating impacts of climate change on infrastructure. Insurance against climate hazards is unobtainable, and access to finance is challenged.
Decarbonisation of air travel	Industry remains largely dependent on fossil fuels
Emerging technology	Little investment in or adoption of low-carbon technology
Consumer preferences	Demand impacted as air travel and freight becomes more expensive and disrupted. Consumers are increasingly wary of climate stranding.

SCENARIO ARCHITECTURE AND DATA SOURCES[6]

Intergovernmental Panel on Climate Change AR5, AR6	SSP5 RCP8.5
Network for Greening the Financial System	Hot house world – current policies
Climate Change Commission[7]	Current Policies
NIWA	NIWA downscaled RCP8.5
The Aotearoa Circle – Tourism Sector Climate Change Scenarios	Hothouse Scenario
New Zealand Green Building Council – Climate change scenarios for the Construction and Property sector	Scenario 3
The Aotearoa Circle – Transport Sector Climate Change Scenarios	Bypass to Breakdown

[6] Refer to appendix 3 for data sources.

[7] CCC pathways and sector scenarios were not used to inform physical and transition risk exposure; given the global drivers that influence the aviation sector, CIAL adopted global data sets (IPCC and NGFS), and downscaled NIWA data to inform physical risk exposure. In this regard, CCC pathways and sector scenarios were referenced in a qualitative context only, to inform the types of national policy settings that would be in place and the way alternative futures might plausibly develop under scenarios.

CIAL's Hot house world scenario narrative

Political polarisation has resulted in significant economic volatility, creating an unstable investment environment. International bilateral agreements on emissions reduction were dismantled early on, providing little incentive for high emitting sectors like aviation to address and reduce emissions. National and international governments' failure to provide an early, decisive policy response to incentives for a transition to a clean economy, and failure to invest in climate resilient infrastructure, has left the global population highly exposed and vulnerable to the physical impacts of climate change.

A lack of regulation around financed emissions and climate-related lending results in limited sustainable finance options being made available to commercial borrowers. This extends demand for fossil fuels, causing countries to miss emissions targets.

Price inflation due to resource scarcity has made air travel increasingly expensive, while climate-related service disruptions have rendered international air travel and air freight much more unreliable.

The lack of skilled workers available to service aviation technologies within New Zealand requires imported labour, which comes at a high cost. Extreme weather events are frequent and intense and have a significant impact on the supply chain of equipment and components required for next generation aircraft technology and clean energy generation, causing prices to frequently spike.

While demand for domestic and international air travel continues, extensive and frequent disruptions due to climate change and geopolitical instability increase the risks and costs of air travel. Travellers are wary of the perceived dangers of flying, such as extreme turbulence, and are afraid of being stranded overseas due to extreme weather events. Domestically, however, demand is sustained to a degree, as the frequent damage to roading infrastructure means that flying is often more reliable than driving.

The physical climate impacts on aviation networks and airports significantly alters the mix of airline partners and travel destinations. Insurance against the increasingly frequent and severe climate hazards is unobtainable. There is a rise in legal action taken against those who failed to provide sufficient climate adaptation or missed decarbonisation targets. The cost of finance increases and access to finance is limited as investors and banks price risk into debt.

RISK ASSESSMENT PROCESS

Climate-related risk processes

A full Organisational Climate Change Risk Assessment (OCCRA) process was undertaken in FY23. This process entailed Deloitte facilitating a series of workshops to establish the scope and boundaries of the climate-related risk assessment; agree the global warming scenarios and strategic time horizons to test climate hazards against; and identify the key subject matter experts (SMEs) who would contribute to the physical and transition climate risk and opportunity identification and rating process. We reviewed our highest rated risks and opportunities in FY25 as part of the scenario and risk refresh process.

Boundaries of risk assessment

The climate risk assessment included risks within the airport's direct sphere of operational control (for example, assets and operations within the airport campus, over which the airport has direct control); tier 1 upstream risks, (for example, supply chain logistics, resourcing through contractors, and energy security); and tier 1 downstream risks directly related to airside (for example, risks presenting for CIAL's airline customers). No parts of the value chain were specifically excluded.

Physical risks and opportunities

Our physical climate change risk assessment process aligns with the ISO14091-2021 climate risk methodology and the methodology followed by New Zealand Ministry for the Environment's National Climate Change Risk Assessment (NCCRA) for identifying, analysing, and evaluating physical climate risks.

Our full physical climate risk assessment (conducted in FY23) was based on a series of workshops, facilitated by Deloitte, in which our subject matter experts identified the risks, based on their insights, knowledge and observations, and assessed and rated the level of exposure, sensitivity and adaptative capacity of the airport to the identified risks over the selected time horizons and scenarios.

Physical risks were considered at three strategic points in time (2030, 2050, and 2100). These time horizons were chosen to align with our strategic planning horizons and asset design life and renewal cycles. This will help to ensure that any major capital infrastructure investments we make in the short-to-medium term incorporate the appropriate design specifications to withstand climate stressors that are projected to be in effect toward the end of the century.

The global warming scenarios adopted for the physical risk assessment included SSP1-2.6, SSP2-4.5 and SSP5-8.5, and we used NIWA's downscaled data for these scenarios to understand the climate change projections for Christchurch and the Canterbury region (Eastern South Island). The risks identified were systematically rated, using the downscaled climate projections provided by NIWA.

Initially more than 130 individual physical risks were identified and rated across the three risk areas of Operations, Assets, and People. The outputs of the physical risk workshops were then modelled to identify the most material risks by climate hazard, risk type, and risk area.

The review of physical risks undertaken in the current reporting period involved subject matter experts critically examining the exposure, sensitivity and adaptive capacity of each of the 20 highest rated risks, considering updated NIWA datasets[8] and investments made in asset resilience (including stormwater infrastructure). This resulted in a change to the material physical risks that are disclosed on page 24.

> "*Our physical* climate change risk assessment process adopts the ISO14091-2021 climate risk methodology..."

As part of the FY25 climate-related risk refresh process, physical opportunities related to climate change were identified and assessed. We used the same timeframes and scenarios as used for the physical risk assessment. It was determined that none of the physical opportunities identified represented a material opportunity for CIAL, and therefore we have not included these in our disclosure.

Transition risks and opportunities

Our transition risk assessment adopted scenarios provided by the Network for Greening the Financial System (NGFS), and referenced the transition risk categories provided in the Taskforce for Climate -related Disclosures (TCFD) guidance. Transition risks were identified and assessed in a series of workshops that drew on the expertise and experience of subject matter experts from across the business.

Transition risks were identified and rated against the backdrop of a NGFS Orderly 'Net zero by 2050' Transition / IPCC AR6 SSP1-1.9y, the NGFS Disorderly 'Delayed Transition' / IPCC AR6 SSSP1-2.6 and NGFS Fragmented World - 'Too little, too late' / IPCC SSP2-4.5 scenarios. The assumption of the orderly transition is that the global objective of achieving emissions reductions commensurate with limiting global warming to no more 1.5°C has been achieved. The rationale for identifying risks against this scenario is that, in terms of regulatory and policy frameworks, consumer preferences and expectations, and access to capital, transition risks are assumed to be high. . The Disorderly - 'Delayed Transition' scenario illustrates the impact of delayed climate action followed by sudden and stringent policy interventions, making it a high-risk pathway for assessing transition. The Fragmented World - 'Too Little Too Late' scenario represents a challenging climate future where global efforts to mitigate climate change are delayed, fragmented, and insufficient and both transition and physical risks are high.

Transition risks were considered over a 30-year time horizon (i.e. a shorter horizon than applied for our physical risk assessment), on the basis that the next 30 years are critical for the transition to a decarbonised economy. The short-term timeframe is current day to 5 years into the future (2025 – 2029), medium-term 5-15 years (2030– 2039), and long-term 15-30 years (2040 – 2054). These time horizons were chosen to align with our strategic planning horizons. In total, 31 transition risks were identified, and categorised as policy and legal risks, technology risks, market risks and reputation risks. 11 transition opportunities were identified and were categorised under the five TCFD categories of Resource Efficiency, Energy Source, Products and Services, Markets and Resilience. See below transition risk and opportunity tables that outline the material risks and opportunities identified as part of this workstream.

Our transition risks were first assessed in FY23, using an urgency and time-bound criteria rating. During FY24 the assessment was expanded to rate the materiality and impact of the risks previously identified as most urgent, by applying our standard risk-consequence framework, which assesses the likelihood of the risk materialising and severity of the impacts. In FY25 transition risks were reviewed as part of the climate-related risk and opportunity refresh process, and we changed the scenarios used to assess these, replacing the "Hot House World" scenario with the 'Too Little, Too Late' scenario, on the basis that transition risks do not surface prior to 2050 in the Hot House World scenario.

Oversight of climate risks

The results of the physical and transition risk assessments (and associated FY25 refresh) were presented to the RAF Committee for review and feedback, prior to being presented to the Board for review and feedback.

Climate-related risks and opportunities, and anticipated impacts

While we have not yet quantified the potential financial impacts of the climate-related risks and opportunities identified, on a qualitative basis, transition risks are anticipated to present the most material risk to CIAL, particularly in the short to medium term.

Transition risks and opportunities

Because we have achieved significant reductions in our Scope 1 and 2 emissions, the transition risks and opportunities identified as priorities primarily relate to Scope 3 emissions in our value chain, both downstream in relation to the activities and costs associated with a transition to low carbon aviation and upstream in relation to power supply to support decarbonisation more broadly.

Materiality of climate-related risks and opportunities

To inform the ratings of our physical and transition risks, we have referenced the materiality thresholds set out in our enterprise risk management framework, aligned with each risk criteria. By aligning our climate risk rating criteria with that of our enterprise risk management framework, we are able to integrate climate risk into our existing risk register.

[8] Noting that the NIWA downscaled AR6 data available at the time of the climate risk register refresh did not yet include the SSP-8.5 scenario downscaling. It is also worth noting that the downscaled AR6 data was published at a much more granular level than the regional data provided in the previous AR5 downscaled datasets. This did not allow for a direct comparison to be made between the two data sets.

TRANSITION RISKS (TR)

Risk Area Key

- Markets
- Technology
- Policy & Legal
- Reputation

Scenario Key

- Orderly - SSP1-1.9
- Disorderly - SSP1-2.6
- Too Little Too Late - SSP2-4.5

Risk Key

- Low
- Moderate
- High
- Extreme

Timeframes Key

ST - Short-term: Now to 2029
MT - Medium-term: 2030 to 2039
LT - Long-term: 2040 to 2054

Risk ID	Areas	Risk Description	Current Impacts	Anticipated Impacts	Related transition planning initiatives	Scenario	Timeframe ST | MT | LT
TR1.		International and national policy response and / or investment in supporting infrastructure are not sufficient to facilitate the aviation sector's shift to zero-emissions technology and future fuels.	Current levels of policy response and consequent investment in supporting infrastructure varies internationally, which is slowing the development and shift to zero- emission technology and future fuels.	If the industry doesn't shift to zero- emissions technology, it may result in CIAL being unable to capture an appropriate share of the future fuels and next-generation aviation market.	Transition T6		
TR2.		National energy generation and transmission capacity is insufficient to support the decarbonising economy, and supply constraints cause higher prices and / or interrupted supply (black/brown outs).	CIAL continues to participate in some levels of loadshedding for Orion by using diesel generators rather than the grid during demand peaks.	Higher energy prices and supply interruptions may result in operational disruption and, ultimately, revenue / market share loss.	Transition T6, T8		
TR3.		The cost of air travel increases (due to regulations e.g., carbon tax, SAF mandates and / or market forces e.g., fuel price).	No current impact being specifically observed related to the cost of air travel due to regulation or market forces.	Increased costs of air travel may result in inequitable access to travel, reduced demand, and consequent loss of revenue for CIAL.	Watching brief		
TR4.		Scarcity of Sustainable Aviation Fuel (SAF) or deployment of other new technologies presents a procurement and investment challenge for the sector and presents risks to the makeup of CIAL's future long-haul network partners.	CIAL's long-haul network partners are currently impacted by scarcity of SAF, making it hard to source locally and more expensive. Airlines are currently planning on obtaining SAF from international ports where it is both mandated and incentives are available. The scarcity is not currently impacting flight schedules.	If CIAL cannot support airlines with their procurement and infrastructure needs for their required volumes of SAF, our partner airlines, and consequently CIAL, may lose market share.	Transition T6		
TR5.		Public attitude towards climate change and aviation means heightened scrutiny and shifting consumer preferences for travel and freight.	No material impact has been identified from change in public attitude or customer preferences.	A change in consumer demand for air travel and freight may cause a stagnation or contraction of the overall market and reduce CIAL's revenue.	Watching brief		

TRANSITION OPPORTUNITIES (TO)

Opportunity Type Key

- Energy Source
- Resilience
- Resource Efficiency
- Markets

Timeframes Key

ST - Short-term: Now to 2029
MT - Medium-term: 2030 to 2039
LT - Long-term: 2040 to 2054

Opportunity ID	Opportunity type	Opportunity description	Current Impacts	Anticipated Impacts	Related transition planning initiatives	Timeframe ST | MT | LT
TO1		Our ability to invest in infrastructure and our access to land is an advantage.	Kōwhai Park development includes investment in an onsite substation to support electrical distribution for both future aeronautical and property demand.	Creates opportunity for market leadership in terms of Investment in and leverage of access to renewable energy sources and clean technology infrastructure.	Transition T8	
TO2		We have an opportunity to facilitate onsite renewable energy generation, for example we are partnering on the Kōwhai Park development.	As part of the Kōwhai Park development process the Airport has secured a long-term renewable Purchase Price Agreement (PPA)	PPA shields CIAL from rising energy prices and, if onsite hydrogen production is undertaken, fossil fuel supply scarcity issues.	Mitigation M5 Transition T8	
TO3		We have an opportunity to electrify operations (for both our own operations and facilitation of our partners' operations, for example this may include ground power units for aircraft and charging stations for ground transport).	New at gate ground power units and ground service equipment (GSE) charging infrastructure is under construction to support the electrification of our partners' operations.	Reduction in costs relating to fossil fuel, improved supply chain resilience by reducing reliance on fossil fuel (CIAL and partners), and the potential opening of new aviation markets.	Mitigation M1, M3, M4, M5, M6 Adaptation A2, A5 Transition T3, T6	
TO4		Kōwhai Park unlocks opportunity and attracts investors, tenants, and customers.	Engagement with existing and potential campus tenants and customers to articulate the value Kōwhai Park is providing increased exposure to property market opportunities.	This will enhance CIAL's relationships with local and external stakeholders and improve our ability to form and leverage partnerships.	Adaptation A5 Transition T8	
TO5		The transition presents an opportunity for CIAL to be the first mover and market leader in New Zealand future aviation infrastructure and expertise.	No current impact	Market leadership will provide early access to low emissions aviation technology – New Zealand will need to leverage the buying power of bigger, wealthier economies.	Transition T4, T5, T7, T8	
TO6		First mover advantage afforded through rapid investment in future focused aviation infrastructure and opportunity to become a green infrastructure hub in New Zealand, strengthening regional opportunities for collaboration in Christchurch.	Engagement underway with key stakeholders.	This has the potential to improve CIAL's market share and open potential new aviation markets.	Adaptation A5 Transition T4, T5, T8	
TO7		There is an opportunity for CIAL to partner with airlines that are aligned with our climate goals.	Airline partner and potential partner engagement includes specific focus on how to collectively align and support decarbonisation strategies These partnerships continue to inform and de-risk our investment in transition pathways allowing us to work in step with other parts of the supply chain.	This has the potential to open potential new aviation markets.	Transition T7, T8	
TO8		Our Leadership position provides an opportunity for CIAL to advocate for policy through trusted engagement with regulator and key stakeholders.	CIAL currently sits on or advises several regulatory and industry groups.	Our leadership and advocacy could enhance policy development to support the transition to a low-carbon economy.	Transition T7, T8	

PHYSICAL RISKS (PR)

No physical risks were identified as having a material impact in the current year.

Scenario Key

- Disorderly - SSP1-2.6 (NIWA downscaled 2.6)
- Too Little Too Late - SSP2-4.5 (NIWA downscaled 4.5)
- Hot House World - SSP5-8.5 (NIWA downscaled 8.5)

Risk Key

- Moderate
- High
- Extreme

Timeframes Key

- Short-term (ST): Now to 2029
- Medium-term (MT): 2030 to 2050
- Long-term (LT): 2050 to 2100

Climate Hazard	Risk ID	Risk types	Potential future impacts	Related transition planning initiatives	Scenario	Timeframe ST | MT | LT
	PR1	Increasing hot days result in increased operations and maintenance costs, disruption to operations and asset upgrade investments.	Asphalt flushing of linear infrastructure in and around the airport campus (including the apron and runways), presenting risk of increased remediation costs.	Adaptation A4		
			Increased investment in heat refuge for customers, requiring increased investment in HVAC (heating, ventilation, and air conditioning) air bridges, covered walkways, walking carpets etc.	Transition T3		
			Increased energy demand, requiring electrical equipment and HVAC upgrade across the airport campus, presenting a risk of increased remediation and maintenance costs.	Transition T3		
	PR2	Extreme weather events such as storms and tropical cyclones result in disruptions to the supply chain, critical work, and logistics, lost revenue / increased costs and injuries to people.	Aviation fuel supply is disrupted by port closures and shipping delays, causing a fuel security risk.	No specific initiative however fuel farm size will be considered as part of master planning.		
			Reduced weather windows for construction and maintenance (airside and landside) present a risk of increased cost and/or revenue losses associated with delays and cost over-runs.	This risk is currently managed via contract mechanisms.		
	PR3	Fluvial and pluvial flooding result in increased repair costs, disruption to operations and asset upgrade investments.	Flood damage to airport campus due to the Waimakariri River breaching the stop banks.	Adaptation A1, A2		
			Subsidence occurs due to shifting subsoil structure and subsequent damage to infrastructure, presenting a risk of increased remediation costs.	No specific initiative however we are monitoring the areas of the campus known to be at risk of subsidence.		
	PR4	Increased rainfall results in investments in asset upgrades; increased operating costs; revenue loss.	Stormwater and wastewater infrastructure requires upgrading to increase capacity.	Adaptation A1, A2		
			Investment is required in covered walkways, anti-slip surfacing, covered carparks and rental car yards.	No specific initiative however we are maintaining a watching brief on requirements.		
	PR5	Increased severity and frequency of high wind events results in increased costs, revenue loss, and injuries to people.	Flying debris disrupts operations, resulting in increased costs and/or revenue loss; causes damage to assets, requiring remediation and replacement costs, and / or causes injuries to people.	Adaptation A3		

TRANSITION PLANNING

Ambition

Under each of the scenarios we analysed, we believe there will continue to be societal demand for aviation to move people and goods and connect Ōtautahi Christchurch to the rest of New Zealand and the world.

To achieve our over-arching goals whilst acknowledging that the changing climate is a significant shaping force for the future, we are making investments in enabling infrastructure that will support the future transition to a low carbon economy, as well as asset resilience, energy efficiency and security.

The transition plan aspects of our emissions reduction and climate change strategy can be broadly grouped into the following three areas:

Mitigation: CIAL has committed to maintaining Net Zero Scope 1 & 2 emissions[9] which we achieved in 2021, and to eliminating all Scope 1 and 2 GHG emissions from our operations by 2035. Our future initiatives will reflect the continuation of our fleet electrification, energy efficiency improvements, and on-going development of our on-site renewable energy generating capacity.

Adaptation: Our adaptation plan seeks to address future impacts of climate change arising from increased rainfall, increased high temperatures, wind, and storm events, on CIAL's physical assets and infrastructure, business continuity, and operations. The impacts of climate change are projected to significantly impact New Zealand's airport network in the long-term. Our long-term ambition is to develop the airport as an alternative fully capable all-weather airfield to provide additional resilience to the country's long-haul capable airport infrastructure.

Economy-wide Transition: In support of the broader transition, we will continue to collaborate with our

> "CIAL *has committed* to maintaining Net Zero Scope 1 & 2 emissions, achieved in 2021."

partners and suppliers across our value chain to identify areas in which we can provide tangible support to enable them to reduce their Scope 1 and 2 emissions (our Scope 3). This ranges from providing the requisite enabling infrastructure, such as electrification of our apron, providing next-generation aircraft support facilities and preparing for hydrogen-ready infrastructure, to advocacy on decarbonised aviation fuels and next generation aircraft technology.

We have identified a range of initiatives to support each of these areas, which are outlined below. For those initiatives that are committed, we have allocated funds in our FY26 budget. For projects that are longer-term or less certain, the future need will be signalled as part of our Master Plan.

Funding for these and other initiatives is currently partially provided by our Sustainability linked loan, which was extended in late 2024 for an additional three years and its value was increased to $85 million. The loan provides a financial incentive for us to meet agreed sustainability targets, as funding costs are linked to whether we achieve our stated goals for carbon reduction, renewable energy generation on our campus, and energy efficiency.

MITIGATION

We have removed over 90% of the Scope 1 and 2 emissions from our operations (against our 2015 baseline). The most significant impact on Scope 1 emissions was achieved through the Ground Source Heat Pump project in 2020 which removed approximately 900 tCO2e. While our Scope 2 emissions have, since 2021, been neutralised through the purchase of Renewable Energy Certificates, we continue to seek opportunities to be more efficient in our use of electricity.

[9] We define 'net zero' according to the GHG Protocol, as having reached 90% absolute CO2e emissions reductions in Scope 1 and 2 with the remaining balance of greenhouse gas (GHG) that's produced having been removed from the atmosphere. To achieve net zero, we utilise offsets as described further on page 39.

The key remaining projects that address the remaining Scope 1 emissions and reduce our electricity usage (Scope 2) are covered below.

INITIATIVE ID	INITIATIVE	DESCRIPTION	STATUS	SCOPE	TIME FRAME	RELATED RISKS / OPPORTUNITIES
M1	Corporate vehicle fleet electrification	CIAL has a corporate and utility vehicle fleet of 19 vehicles, of which 18 have now transitioned to electric alternatives. Technology does not currently exist to transition the remaining vehicle to a suitable electric alternative, but capital has been allocated for when a replacement comes to market.	In progress	Scope 1	By 2030* (tech dependent)	Transition Opportunity TO3
M2	Fire truck fleet electrification	There are 4 operational vehicles in CIAL's fire truck fleet. Our first electric powered truck was received in 2025, with another due to arrive in 2026. The transition of the remaining two vehicles is scheduled to occur by 2030.	In progress	Scope 1	By 2030	Transition Opportunity TO3
M3	Reduce / eliminate load shedding emissions	The largest remaining source of Scope 1 emissions for the airport is the diesel used to run our backup generators, which provide us with resilience to power outages (required as a critical infrastructure provider), as well as contribute to local network resilience through load shedding at the request of Orion. We are currently investigating options to reduce the load shedding emissions. Until there is a viable, cost-effective solution, we will continue to offset the emissions we generate by load shedding.	Investigation	Scope 1	By 2035 (tech / cost dependent)	Transition Opportunity TO3
M4	100% Renewable - Renewable Energy Certificates from Pioneer Energy	Since 2021 we have been purchasing Renewable Energy Certificates (RECs) from Pioneer Energy for all our Scope 2 emissions.	Ongoing	Scope 2	To 2026	Transition Opportunity TO3
M5	100% Renewable - Power Purchase Agreement and REC – Contact Energy / Kōwhai Park	We have negotiated a Power Purchase Agreement (PPA) with Contact Energy, which will be certified against the Kōwhai Park solar power generated. Kōwhai Park is expected to be commissioned in 2026.	Planning	Scope 2	From commissioning of Kōwhai Park – expected in 2026	Transition Opportunity TO3
M6	Energy efficient LED Lighting	While we ensure that we use 100% renewable energy, we recognise the need to be efficient with our use of it, and over the last ten years we have been transitioning lighting across the apron, terminal and carparks to lower energy options including LED lighting replacements. CIAL has invested over $960,000 in LED projects and earmarked approximately $2 million more to the remaining lighting upgrade projects, which will be implemented over the next four years.	In progress	Scope 2	By 2030	Transition Opportunity TO3

ADAPTATION / RESILIENCE

Our climate risk and opportunity assessment process identified the potential physical impacts of climate change to our assets and operations (see page 24). As caretakers of intergenerational assets and critical infrastructure, we recognise we will need to adapt and future proof our assets and operations to reduce our vulnerability to changing climate hazards.

We continue to progress the development of our physical risk adaptation plan which will identify key adaptation actions required for the most material physical climate risks together with timeframes and investment needs. While none of the required initiatives are likely to be material in the short- to medium-term, we intend to undertake further analysis on the costs of responding to climate-related impacts on our assets and operations to understand the future decision points that will guide our decisions on investment in remediation, upgrades, or replacement. In the meantime, we continue to monitor the incidence and impact of the key identified risks, such as asphalt flushing due to hot days and the risk of increased rainfall resulting in subsidence.

Longer term initiatives under consideration

Changing climate will also impact other airports in our network, and we have a long-term ambition to develop the airport as an alternative fully capable all-weather airfield to provide additional resilience to the country's long-haul capable airport infrastructure. Our Master Plan, which serves as a broad guide to our long-term capital deployment strategy, is currently being updated. The Master Plan will consider a wide range of aspects across the airport campus including the electrification of our terminal and ground transport strategy, investment property strategy, capacity and resilience of energy supply, climate adaptation requirements and operational resilience.

While the physical impacts of climate change for CIAL are not expected to be material in the short to medium term, there are several initiatives related to physical climate risks that we have progressed, as set out in the following table:

INITIATIVE ID	INITIATIVE	DESCRIPTION	STATUS	RELATED RISKS / OPPORTUNITIES (SEE KEY)
A1	Upgrade stormwater infrastructure	This includes mitigation work to upgrade the capacity of airport and freight apron storm water infrastructure for greater run-off volumes considering increased risks associated with more frequent and intense rainfall events, and fluvial and pluvial flooding. This year we have invested approximately $160,000 in soak pit upgrades. All new stormwater assets are right sized according to our design guidelines.	In progress	Physical Risks PR3, PR4
A2	Design-Build guidelines	To minimise risk to building assets from increased heavy wind loads, operational measures have been put in place to reduce operational practices that could create risks to the building assets i.e. limiting the use of cranes during high wind loads.	In progress	Physical Risks PR1, PR3, PR4, PR5
A3	Operating procedure adjustments	Increasing hot days heighten the risk of asphalt rutting. Our asset maintenance team has developed a programme of work to replace asphalt with concrete in the high use areas that are known to rut with repetitive heavy wheel loads. Our focus to date has been on the International and Domestic Jet stands, and the next phase of the programme will consider the regional apron	In progress	Physical Risk PR5
A4	Parking stand asphalt replacement	Future build locations and design for offices will consider increased hot weather days and harsh solar glare. For example, north facing offices are likely to face greater challenges with increased hot weather days, drawing more heavily on HVAC systems and being less comfortable for staff and tenants, so design preference is adapting to place offices on the southern side of buildings, and factor outdoor spaces on to the north side.	In progress	Physical Risk PR1

[10] see GHG inventory, Scope 3 Category 11, use of sold products.

[11] Over the three-year period FY23-FY25.

ECONOMY-WIDE TRANSITION

Scope 3 Emissions

CIAL's Scope 3 emissions are primarily emissions from flights[10] which, over the last three periods accounted for over 97% of our total emissions[11]. Our plans and actions in relation to full flight emissions are covered in more detail in the next section.

We have identified several initiatives related to Scope 3 emissions where we have a greater ability to impact and influence the use of energy, which include energy used on campus by airlines and service providers, the emissions from materials used in construction of assets, emissions generated from waste, and the emissions generated by people travelling to and from the airport. Several projects have been completed, and projects that are underway and planned are set out in the following table:

INITIATIVE ID	INITIATIVE	DESCRIPTION	STATUS	EXPECTED TIME FRAME	RELATED RISKS / OPPORTUNITIES
T1	Gate ground power units	Ground power has been installed at 13 of 15 gates, allowing jet aircraft to plug into electricity while at the gate thereby replacing the use of jet fuel in the plane's auxiliary units. This reduces Scope 3 airline emissions, while also providing a lower cost energy source for the airlines. Since 2017 CIAL has invested $3.6 million in gate ground power provision and has allocated capital to install power at the remaining gates (planned for 2028).	In progress	By 2029	Transition Opportunity TO3
T2	Ground service equipment charging	CIAL's Ground Service Equipment (GSE) charging system allows for ground handlers to transition to electric equipment. The system provides smart charging to the GSE, delivers data feeds to assist both the Airport and Ground Handler to manage the equipment, and stage one of the project allows more than 20 pieces of equipment to be charged at one time. To date CIAL has invested $3.2million on GSE electrification provision and we intend to complete additional works over the next ten years.	In progress	By 2035	Transition Opportunity TO3
T3	Procurement and Design-Build guidelines for lower carbon products and energy use	CIAL has developed procurement and Design-Build guidelines that include standards for sustainability to be implemented across all new builds. Emissions generated during the manufacturing, transportation, and construction of building materials accounts for the largest spike in a building's life cycle emissions. CIAL is considering ways in which it may address these Scope 3 emissions through procurement of low-carbon construction materials, with particular focus on concrete and steel products within a lower-carbon range. These are considered on a case-by-case basis, with lifecycle assessments and embodied emissions reductions being core drivers.	In progress	Ongoing - Projects to be assessed on a case-by-case basis	Transition Risk TR2

Flight emissions and aviation infrastructure

While aviation is recognised as a 'hard to abate' sector, and reducing emissions from flights is challenging, we are focused on identifying opportunities to collaborate with our partners and wider stakeholders to support the decarbonisation of the aviation sector and supporting the sector's collective long-term global aspirational goal (LTAG[12]) of net zero carbon emissions by 2050.

The Air Transport Action Group's 'Waypoint 2050' Report sets out potential pathways by which the aviation sector could achieve net zero emissions by 2050, against a backdrop of rising demand. The four transition scenarios outlined in the report each combine, to varying degrees, technological innovations, operations and infrastructure improvements, the use of sustainable aviation fuel, and offsets or other market-based measures.

Therefore, the ability of the sector to reach net zero by 2050 will rely on various external factors including a supportive policy environment, the ability of our airline partners to decarbonise, the availability of next-generation aircraft and the availability of alternative forms of aviation fuel. We believe we can contribute to several of these areas, and we have developed a Stakeholder Partnership Plan, which aims to influence and support airlines' emissions reduction goals by identifying opportunities where we can influence the potential reduction of full flight Scope 3 emissions.

We are also developing a Future Fuels strategy to understand, at a high level, how the energy needs of aviation and our region will develop, and CIAL's role in meeting those needs. This includes the anticipated requirements of electric, hydrogen and sustainable aviation fuelled aircraft.

We will continue to participate in a range of working groups to understand and advocate best practice emissions reductions across our industry, including Sustainable Aviation Aotearoa, Sustainable Business Council, Airports Council International (ACI) Asia Pacific and New Zealand Airports Association.

We recognise that infrastructure plays a critical role within the aviation sector's climate transition. Central to this is ensuring CIAL's readiness to support airlines' transition to new, lower-carbon technologies as they emerge and being able to provide (or enable the development of) the infrastructure required to support the transition to low carbon aviation.

[12] 2,500 delegates from 184 States and 57 organizations at the 41st International Civil Aviation Organisation (ICAO) Assembly, adopted a collective long-term global aspirational goal (LTAG) of absolute net zero emissions - meaning that by 2050 the net emissions of the airline industry will be zero.

To support the economy-wide transition, we have several initiatives associated with flight emissions and aviation infrastructure, as set out in the following table:

INITIATIVE ID	INITIATIVE	DESCRIPTION	STAGE	EXPECTED TIME FRAME	RELATED RISKS / OPPORTUNITIES
T4	Hosting ElectricAir on site, including facilitation of bespoke onsite electric charging infrastructure and waiving landing and take-off fees	Next generation aircraft support infrastructure	In progress	Ongoing	Transition Opportunities TO5, TO6
T5	Hosting Fabrum's hydrogen liquefaction testing facility onsite, allowing us to learn from a small-scale hydrogen liquefaction operation, and to invite future partners to consider CIAL as a location for new technology aviation testing	Next generation aircraft support infrastructure	In progress	Ongoing	Transition Opportunities TO5, TO6
T6	Participate in industry working groups, committees, and policy forums	Engage and influence	In progress	Ongoing	Transition Opportunities TO5, T07, TO8, Transition Risks TR1, TR2
T7	Share our learnings with other airports and organisations	Engage and influence	In progress	Ongoing	Transition Opportunities TO5, TO7, TO8
T8	Kōwhai Park – enabling future electricity infrastructure network capacity that may support future aviation charging, SAF refuelling, and hydrogen production and liquefaction	Energy resilience	Phase 1 is in progress. Future phases and opportunities are being investigated	Ongoing	Transition Opportunities TO1, TO2, TO3, TO4, TO6, Transition Risks TR2

Initiatives T4 and T5 - Next generation aircraft support infrastructure

There are several emerging technologies designed to decarbonise and modernise the industry, including electric aircraft, liquid green hydrogen, and sustainable aviation fuel. It is expected each will have a slightly different use case and, for the next three decades, it is likely all will be utilised, alongside the phasing down of jet fuel.

Initiatives T6 and T7 – Engage and Influence

CIAL is already leading several international initiatives and mentoring of airports, around aviation development, climate change and sustainability. Our credibility in this area is supported by our Level 5 Airport Carbon Accreditation (ACA)[13]. The Airports Council International (ACI) introduced Level 5 accreditation to set a global benchmark for airports aiming to reach net-zero carbon. To achieve Level 5, airports must meet strict criteria, including verified carbon footprints, Scope 1 and 2 emissions reductions of 90% or more, and credible carbon removals as well as robust Carbon Management and Stakeholder Partnership Plans to reduce emissions across their entire value chain.

Our experience in facilitating the development of Kōwhai Park and our work to date in alternative fuels reinforces the opportunity for us to take a leadership role with other airports such as knowledge sharing, consulting or even a partnership approach.

Supporting operational efficiency: CIAL supported the critical work of 'New Southern Sky', a multi-agency programme led by the Civil Aviation Authority, which outlined operational and flight path efficiencies for adoption in New Zealand, and practical steps to transition to the use of next generation technologies, manage airspace as demand increases, and to enhance aviation safety.

Policy settings: CIAL actively participates in government and the New Zealand Climate Change Commission consultations on climate change policy. This has included submitting on the Government's first and second Emissions Reduction Plans (ERP), the Climate Change Commission's consultations on the ERPs, as well as consultation on the inclusion of international shipping and aviation emissions in New Zealand's 2050 emissions reduction target.

Contributing to Aviation and Climate-related Working Groups: The transition to a low-carbon resilient future for aviation relies on a collaborative approach involving many stakeholders acting in parallel. CIAL views continued participation in national, regional, and global working groups as an important transition action to encourage climate action momentum and mitigate the risk of a disorderly disjointed sector transition.

Sustainable Aviation Aotearoa: CIAL sits on Sustainable Aviation Aotearoa, a public-private body led by the New Zealand Ministry of Transport focused on aviation decarbonisation. Three working groups with different focus areas have been established. One group focuses on SAF, another focuses on Zero Emission Aviation, and the third focuses on strategic aviation policy. CIAL is currently co-chairing the Zero Emission Aviation workstream.

Wider climate issues: CIAL is also a member of several organisations focused on climate issues; including the Climate Leaders Coalition, Sustainable Business Council, New Zealand Hydrogen Council, Airport Carbon Accreditation Taskforce, the International Working Group on Aviation Alternative Fuels, and the Asia Pacific Middle East Regional Airport Council International Environmental Working Group.

Initiative T8 – Energy Resilience

Kōwhai Park

Kōwhai Park is a 400-hectare block of land to the south-west of the airfield and is ideally situated for renewable energy generation. It is inside the airport campus, adjacent to main transmission infrastructure and accessible to the local lines network.

Kōwhai Park is intended to be developed under an ecosystem approach where the system, rather than a single development, can enable a range of potential future technology and opportunities across solar generation, battery storage, national transmission and local distribution, future aviation charging, and hydrogen production.

The plan for the initial phase is to deliver a 230-hectare solar array capable of generating 170 megawatts of solar energy. Contact Energy and Lightsource bp have been selected as our preferred development partner for Phase One.

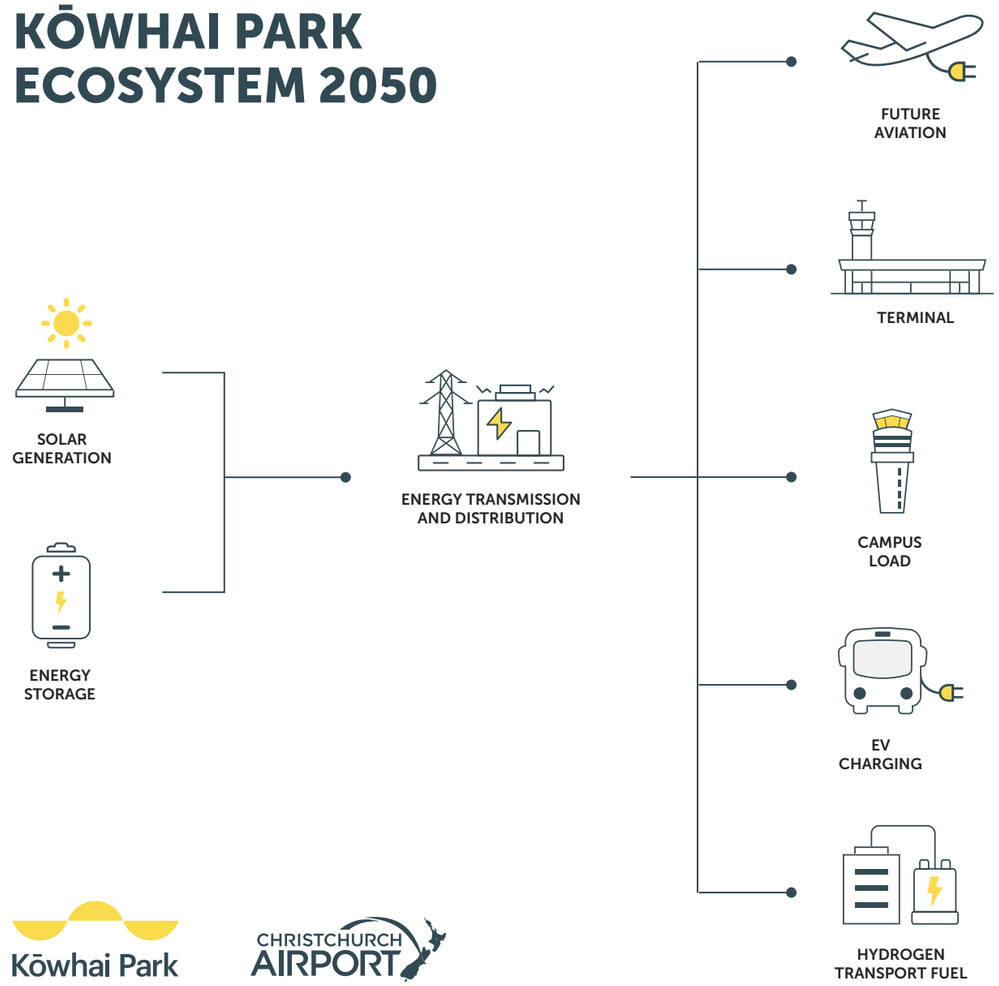
The purpose of the solar component of the ecosystem is to deliver the grid connection infrastructure to enable CIAL to participate in the opportunities in the right-hand side of the ecosystem i.e. to provide electricity infrastructure network capacity to property development, terminal and car parking facilities and next generation aircraft such as electric and hydrogen aircraft as well as the production of synthetic aviation fuel.

Whilst Kōwhai Park will be complemented by a localised grid connection/sub-station to ensure CIAL has future energy resilience and supply for its campus as well as increasing the supply of renewable energy to the national grid, it will not connect existing tenants directly to the solar farm or substation who will still be required to undertake commercial negotiations with the preferred developer for their electricity supply.

The 230-hectare solar farm delivered as Phase 1 will enable an increased grid connection. CIAL will be required to work with Orion to develop local network infrastructure within the campus, in line with our future investment needs.

[13] https://www.airportcarbonaccreditation.org/accredited-airports/

KŌWHAI PARK ECOSYSTEM 2050



Kōwhai Park

CHRISTCHURCH AIRPORT

A major emerging focus for CIAL, as part of our master planning process, will be on energy resilience. Resilience of energy supply and the ability to enable growth of high electricity use on campus will become a key focus over the next one to two years.

All businesses are searching for energy resilience including physical, price and climate change resilience. CIAL expects the electricity supply needs of our campus to triple over the next decade to service initial deployment of battery electric aircraft, production of hydrogen for land and air transport, and expansion of the property portfolio.

The initial phase of CIAL's Kōwhai Park project will be fundamental to addressing the risk of a constraint to development through a lack of energy supply through the core objectives of obtaining an appropriate grid connection developing renewable and cost-effective energy and improving physical and financial energy resilience. In addition to the grid connection, it is envisioned that there will be additional investment required to connect the relevant parts of the campus to the grid.

RISK MANAGEMENT

Integration of climate risks to our Risk Management Framework

Our risk management framework provides the Board and management with a clear understanding of how strategic and operational risk is managed across the organisation. Climate-related risks are assessed under this risk management framework as part of the annual business planning process. It sets out the high-level approach to each stage of risk management:

Risk identification considers the objectives of the business plan and strategy, across business-as-usual and projects. Our climate-related risks were identified in a series of workshops with subject matter experts from across the business, as described previously.

Our assessment of non-climate related risks requires the determination of consequence and likelihood, each assessed on a five-point scale, to derive a risk rating. This rating enables risks to be prioritised, to ensure that our resources are focused on the area of greatest exposure or opportunity

We **assess** climate-related risks slightly differently, to account for their chronic and temporal nature. Physical climate-related risks are assessed on exposure, sensitivity, and adaptive capacity, and transition risks are assessed on urgency and impact. These elements are scored, and the score is aligned to our five-point scale, thereby enabling the climate-related risks to be integrated into our existing risk register and prioritised and managed in the same manner as all other identified risks.

Risk **management** can then be considered and, depending on the risk appetite, options could include avoiding the risk, reducing the likelihood, or reducing the consequences (including adaptation and mitigation). The treatment then informs the business strategy and planning.

Monitoring is through the Risk, Audit and Finance (RAF) committee's quarterly review, informed by updates from key managers and the ELT. The level of reporting is determined by the severity of the risk, with key risks reported to the Board. External advisors are engaged to undertake a peer review of risk monitoring and reporting activity.

In addition to the regular risk identification, analysis, monitoring, and reporting undertaken as part of the enterprise risk management framework, we intend to undertake a full climate risk assessment review every five years, or as indicated through an annual review for any significant changes that indicate a reassessment is required.

> *Risk identification* considers the objectives of the business plan and strategy, across business-as-usual and projects.

METRICS AND TARGETS

GHG EMISSIONS METRICS

Audit New Zealand has provided limited assurance over Scope 1 and Scope 2 location-based emissions for FY25 in accordance with the requirements of the Financial Market Conduct Act. In addition, we have procured an independent verification from TUV SUD America in FY25 and FY24 and Ruby Canyon Environmental Inc for FY23 to provide additional assurance required under the Airport Carbon Accreditation program. This includes verification on the market-based emissions and the Scope 3 emissions included in the table below.

Location-based emissions reflect the average grid intensity where electricity is consumed, while market-based emissions account for the specific contracts or certificates CIAL purchases.

EMISSION SOURCE	TONNES CO2-E (LOCATION-BASED)			TONNES CO2-E (MARKET-BASED)		
	FY25	FY24	FY23	FY25	FY24	FY23
Scope 1: Direct GHG emissions[14]	257	280	222	257	280	222
Scope 2: Indirect GHG emissions	1,503	1,042	1,062	-	-	-
Scope 3, category 1, purchased goods and services	2,010	3,172	1,064	2,010	3,172	1,064
Scope 3, category 2, capital goods	2,564	4,295	6,022	2,564	4,295	6,022
Scope 3, category 3, fuel- and energy-related activities	336	90	173	336	90	173
Scope 3, category 5, waste generated in operations	263	283	563	263	283	563
Scope 3, category 6, business travel	350	393	836	350	393	836
Scope 3, category 7, employee commuting	84	86	423	84	86	423
Scope 3, category 11, use of sold products[15]	712,955	798,459	698,277	712,955	798,459	698,277
Scope 3, category 13, downstream leased assets	5,762	971	958	5,762	971	958
TOTAL	**726,084**	**809,084**	**709,600**	**724,581**	**808,042**	**708,538**

EMISSION INTENSITY	TONNES CO2-E PER PASSENGER (LOCATION-BASED)			TONNES CO2-E PER PASSENGER (MARKET-BASED)		
	FY25	FY24	FY23	FY25	FY24	FY23
Scope 1 and 2 Emissions per passenger[16] (tCO2e)	0.0003	0.0002	0.0002	0.0000	0.0000	0.0000
Scope 3: Emissions per passenger[17] (tCO2e)	0.1133	0.1291	0.1245	0.1133	0.1291	0.1245
Total: Emissions per passenger[18] (tCO2e)	**0.1136**	**0.1293**	**0.1247**	**0.1133**	**0.1292**	**0.1245**

[14] Whilst we remain on track with our Scope 1 and 2 emissions reduction trajectories to achieve our 2035 target, our Scope 1 emissions can fluctuate each year as a direct result of load shedding required to support the national electricity network resilience.

[15] This includes full flight emissions, which are based on fuel consumption on all departing flights from Christchurch Airport to their destination, in accordance with the PACE measurement methodology – see Appendix 4 for additional information.

[16] The denominator (passengers) refers to any person carried on an Aircraft with the exception of the flight crew and cabin staff operating the flight and infants aged under 2 years.

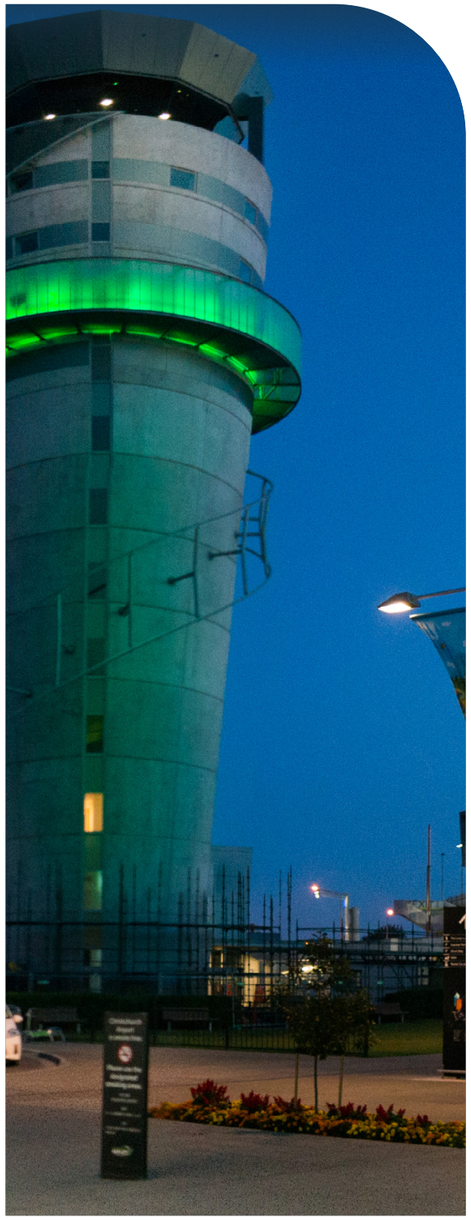
[17] Based on carbon inventory as audited by 3rd party.

[18] CIAL does not use an intensity metric in the management of our emissions, as we believe it is more important to focus on absolute emission reductions. We have chosen to disclose the tCO2e/pax metric to align with our peers.

GREENHOUSE GAS EMISSIONS

CIAL is a participant in the Airport Carbon Accreditation (ACA) programme, an institutionally-endorsed, global carbon management certification programme for airports.

It independently assesses and recognises the efforts of airports to manage and reduce their carbon emissions through various levels of certification. CIAL has participated in the programme since 2017 and is currently at Level 5, the highest level. The programme requires, amongst other things, independent verification of our carbon footprint and our claims relating to carbon management processes. We voluntarily offset our residual Scope 1 and 2 emissions in accordance with the ACA.



Standards and guidance

Our GHG Emissions inventory has been prepared in accordance with the following standards and guidance:

- The relevant GHG Protocol standards and guidance, specifically the
    - Corporate Accounting and Reporting Standard (revised edition),
    - Corporate Value Chain (Scope 3) Accounting and Reporting Standard,
    - Technical Guidance for Calculating Scope 3 Emissions (version 1.0), and
    - Scope 2 Guidance.
- ISO 14064-1:2018 – Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals
- The requirements set out in the Airport Carbon Accreditation (ACA) Application Manual, Issue 14, December 2023,
- Guidance provided by the New Zealand Ministry for the Environment's (MfE)
- The guidance and recommendations set out under the
    - Airports International Council's Guidance Manual: Airport Greenhouse Gas Emissions Management, and
    - Airport Cooperative Research Program's Guidebook on Preparing Airport Greenhouse Gas Emissions inventories.

Inventory, Emission factors and calculations

The inventory primarily covers the seven GHGs defined under the Kyoto Protocol and recognised by the GHG Protocol and NZ CS 1:

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur hexafluoride (SF_6)
- Nitrogen trifluoride (NF_3)

Where material, the inventory also includes emissions from other synthetic gases used in refrigerant and fire suppression systems.

Emissions are reported in tonnes of carbon dioxide equivalent (tCO_2-e) using 100-year Global Warming Potentials from AR5. All estimates are calculated by multiplying activity data by the relevant emission factors and applying appropriate conversion constants. Results are rounded to the nearest whole tonne for clarity; totals may not always sum exactly due to rounding.

The emission factors and calculation approach for each emission source are set out in Appendix 4.

Consolidation approach

CIAL applies the operational control approach to define its organisational boundary. Under this approach, CIAL reports 100% of the GHG emissions from operations over which it has operational control — defined as having the greatest authority to introduce and implement operating policies, particularly those relating to work health and safety (WHS), environmental management, energy use, and day-to-day operational practices. Operational control does not require ownership or financial interest but rather depends on the entity's ability to direct how operations are conducted on the ground.

In practical terms, this means CIAL has operational control where it has:

- The primary responsibility and authority to make decisions about how activities are managed
- The power to set and enforce site-level policies relating to WHS, environmental compliance, and operational standards
- The ability to control inputs and outputs, such as resource use, maintenance schedules, and contractor management
- Oversight of compliance with legal and regulatory obligations for areas and activities under CIAL's operational responsibility, including the ability to set and enforce site-wide operational policies.[19]

This approach is consistent with international practice and reflects the principles embedded in frameworks used in comparable infrastructure sectors.

CIAL exercises operational control over the majority of Christchurch Airport's core infrastructure and services, including:

- Terminal facilities and common-use base building services
- Airside and landside operating surfaces and infrastructure
- Vehicle and equipment fleets managed by CIAL
- Fire training grounds and emergency response areas
- Utility systems and energy infrastructure under CIAL's management
- Corporate offices and shared-use service areas

These facilities and activities define the organisational boundary for Scope 1 and Scope 2 reporting.

The following are considered outside CIAL's organisational boundary, as no operational control exists, and are therefore excluded from Scope 1 & 2:

- investment properties where the tenant has control of operating and environmental policies;
- hotel property - given it is operated by a third party under a service agreement, and CIAL does not have authority to introduce and implement its operating policies.

We have not excluded any Scope 1 and 2 emissions for sources that fall within our organisational boundary.

In addition to emissions from operations under its control, CIAL also reports material Scope 3 emissions from sources outside its organisational boundary, in accordance with the GHG Protocol Scope 3 Standard, NZ CS 1, and the Airport Carbon Accreditation (ACA) Manual. These emissions occur as a consequence of CIAL's activities and infrastructure but originate from sources CIAL does not directly control.

[19] This does not mean that all activities occurring on airport grounds fall within CIAL's operational control. While CIAL may impose access requirements or procedural expectations (e.g. safety protocols, airside behaviour), these do not constitute control over how third parties conduct their core operations. Airlines, ground handlers, and other tenants typically retain their own legal obligations and operational autonomy, and their emissions are treated as Scope 3 unless CIAL has the authority to manage how those emissions-generating activities are undertaken.

Scope 3 categories reported in this inventory cover both upstream and downstream value chain impacts and include:

- Category 1 – Purchased goods and services
- Category 2 – Capital goods (construction materials, plant)
- Category 3 – Fuel- and energy-related activities not included in Scope 1 or 2 (including energy on-charged to tenants)
- Category 5 – Waste generated in operations
- Category 6 – Business travel
- Category 7 – Employee commuting
- Category 11 – Use of sold products (notably full-flight aircraft emissions)
- Category 13 – Downstream leased assets (tenant energy use not managed by CIAL)

These inclusions ensure that the inventory captures material indirect emissions arising from CIAL's operations, infrastructure, and broader value chain, even where those sources are outside CIAL's direct control.

Emissions have been classified in accordance with the GHG Protocol Scope 3 Standard, with consistent categorisation applied year-on-year to ensure comparability.

Scope 3 reporting is a mandatory requirement for ACA Level 5, which requires airports to disclose all material upstream and downstream emissions sources. However, it is important to note that ACA's interpretation of Scope 3 categories does not always align with the original intent of the GHG Protocol. For example:

- ACA requires the inclusion of full-flight aircraft emissions under Category 11 (Use of Sold Products), even though under the GHG Protocol, this category would typically only apply where the reporting entity directly sells fuel to end users. In most cases, airports provide access to infrastructure or engage third parties to manage fuel delivery, which does not meet the GHG Protocol's intent for this category.
- Similarly, ACA classifies all tenant electricity use under Category 13 (Downstream Leased Assets), regardless of whether the electricity is directly procured by tenants or on-charged by CIAL. Under the GHG Protocol, energy that is on-charged to tenants would usually be reported under Category 3 (Fuel- and Energy-Related Activities), whereas Category 13 is intended for assets leased to others where the tenant procures energy from a utility directly.

ACA's treatment reflects a broader sectoral interpretation that prioritises physical enablement and infrastructure-related emissions, rather than strict contractual or value chain attribution. CIAL has followed the ACA framework in full to maintain alignment with Level 5 accreditation requirements, while ensuring that boundary choices and classification logic are clearly documented for transparency and assurance purposes.

This divergence affects only the classification of emissions sources within Scope 3. It does not alter the description, characteristics, or underlying emissions estimates associated with those sources.

Additional information is provided in a full GHG Inventory Report available on line at https://www.christchurchairport.co.nz/globalassets/about-us/sustainability/carbon/fy2024-25-independent-ghg-inventory-report.pdf

Use of offsets

As outlined throughout this climate statement, CIAL's principal focus is on gross emissions reductions. In addition to this, in FY25 we worked with New Zealand-based carbon management firm Ekos to purchase and progress the permanent cancellation of a volume of New Zealand Units (NZUs) under the New Zealand Emissions Trading Scheme (ETS) that is equivalent to our FY24 residual Scope 1 and 2 (market-based)[20] and Voluntary Carbon Units (VCUs) equivalent to a portion of CIAL's FY24 scope 3[21] GHG emissions[22] . This purchase and cancellation of NZUs and VCUs has been undertaken by CIAL as a voluntary additional action.

The NZUs cancelled by Ekos on CIAL's behalf in FY25 were sourced from Flax Hill in Canterbury and Maruia on the West Coast, which are both registered under the ETS and will also be accounted for by New Zealand's reporting against its Nationally Determined Contribution under the Paris Agreement. The projects consist of indigenous forest and exotic forest that is transitioning to indigenous forest.

Further information about the NZU projects is available on Ekos's website: https://www.ekos.co.nz/our-projects.

Ekos cancels NZUs on behalf of its clients quarterly and has its unit cancellation independently audited. The VCUs cancelled by Ekos on CIAL's behalf in FY25 were sourced from a tropical lowland rainforest project in Babatana, Solomon Islands and tropical rainforest in Drawa, Fiji. These offsets are certified to the Plan Vivo Standard and retired in the Markit Environmental Registry. We intend to cancel NZUs and VCUs equivalent to our FY25 remaining emissions.

> "CIAL's principal focus is on gross emissions *reductions*."

Metrics and targets

Our metrics and targets are set out in the following tables.

Note that we do not currently target any relative emissions measures (i.e. per passenger or per square metre)- these measures have been included in the GHG emissions table above for peer comparison purposes only.

[20] These NZUs were voluntarily cancelled on 24 Sept 2024.
[21] As of the date of this Climate-related Disclosure, we are awaiting the retirement of these VCUs through Ekos.
[22] Extended Scope 3 emissions were deemed to include upstream transport and distribution of goods, business travel (flights, accommodation etc), staff working from home, waste generated in operations (solid waste to landfill and wastewater to water treatment plants), transmission and distribution losses for electricity and natural gas), well to tank emissions for fuel, emissions from purchased goods, downstream leased assets, and tenant de-icing substances.

TARGETS

Metric	GHG Emissions - Scope 1 and 2 (market-based)	
Target	Maintain Net Zero Scope 1 and 2 emissions (this includes maintaining 90% reduction across Scope 1 and 2 from 2021 onwards). This is an absolute (as opposed to intensity) reductions target.	Absolute zero Scope 1 and 2 emissions by 2035. Absolute target (not intensity).
Time frame	Ongoing.	2035.
Base year	2015.	2015.
Performance against target	We have achieved Net Zero Scope 1 and 2 emissions since 2021. Net Zero is as defined by the GHG Protocol and requires us to maintain over 90% reduction in Scope 1 and 2 emissions (from a 2015 base year) and to offset the remaining emissions. In FY25 we offset our emissions from FY24, and we also maintained the 90% reductions for FY25. We intend to offset our remaining FY25 emissions in FY26.	We have successfully reduced our Scope 1 and 2 emissions by more than 90% against a 2015 baseline. We are committed to the long-term target of absolute zero Scope 1 and 2 emissions, no later than 2035. Our current Scope 1 and 2 emissions for FY25 are reported on page 35 (FY25 – 1,760 Tonnes CO2-e (location-based) and 257 Tonnes CO2-e (marketbased)).
How target contributes to limiting global warming to 1.5°C and basis of this opinion	We set these targets to be ahead or aligned with the projected pathway created using the free online Science Based Targets Initiative net-zero tool[23], which outlines the reductions in emissions required to meet the Paris Agreement and limit global warming to 1.5°C.	
The extent to which the target relies on offsets	In this reporting period we offset the remaining Scope 1 and 2 emissions from FY24 to achieve net zero. Refer to page 39 for further explanation regarding CIAL's use of offsets.	This target does not rely on offsets.
Offset verification and scheme	Refer to page 39 for details of our offset verification and scheme.	N/A
Assumptions and sources of uncertainty	Our ability to maintain a 90% reduction and our Net Zero position relies on several factors, some outside of CIALs control. These include the availability of clean back-up generator technology, zero emission refrigerants, zero emission fire fleet alternatives, decarbonised de-icing substances and continued access to renewable energy certificates. Further, the assumptions and sources of uncertainty associated with measuring our GHG emissions are set out in Appendix 4.	To achieve our 2035 target, new technologies will be required. This includes low emission refrigerants, a full fire truck fleet conversion, and new technology to replace our back-up generators.

In addition to our scope 1 and 2 targets, in order to align with a 1.5°C pathway as laid out by the SBTi net zero tool, our ambition is to support the LTAG net zero targets of the broader aviation sector by 2050. As noted in the scenario analysis narratives as well as the transition planning section contained in this Climate-related Disclosure, there is significant uncertainty about the exact trajectory towards 2050, and this pathway will be extensively reliant on technology (e.g., availability of next-generation aircraft and availability of alternative forms of aviation fuel), regulation and partner capability, much of which is outside our control. We will update our position and pathway toward 2050 over time in light of progress and changing circumstances.

[23] (Note that while we have used the Science Based Targets tool, our targets have not been validated by Science Based Targets Initiative).

METRICS

Business activity vulnerable to transition risks	• While we have not yet undertaken a detailed quantitative assessment, we estimate based on FY25 audited financial information that all CIAL's core operational business activity (aeronautical, passenger, and park to plane), which represents approximately 64% (FY24: 64%) of our total revenue, is vulnerable to transition risk given the underlying reliance on hydrocarbon fuel. • We have made significant progress in reducing our controllable emissions, however the ability and timeframe for the aviation industry to develop and access the technology and investment needed to decarbonise exposes all CIAL's aeronautical, freight and passenger related revenue streams to a degree of transition risk.
Assets / business activity vulnerable to physical risks	• While we have not yet undertaken a detailed quantitative assessment, we estimate the majority of CIAL's assets and business activities are subject to essentially the same physical hazards, given they are located on the Christchurch campus. However, the degree to which they are expected to be impacted varies, as a function of each asset's exposure, sensitivity and adaptive capacity, as considered in our climate risk assessment processes. • In terms of business activity, the core operations of aeronautical, passenger, and park to plane, which together comprise approximately 64% (FY24: 64%) of our revenue, are all subject to disruption from severe weather events. Property revenue, which represents approximately 36% (FY24: 36%) of revenue, is less likely to be impacted by severe weather events.
Assets / business activities aligned with climate-related opportunities	• While there are several key climate-related opportunities for Christchurch Airport (described on page 23, the potential impact has not yet been quantified. • The opportunities we have identified include: • On-site renewable electricity generation. • Electrification of gate ground power units and ground service equipment charging infrastructure. • Early-stage master planning for potential renewable energy activities (e.g. hydrogen production / liquefaction) • $12.3m of assets are currently aligned to climate-related opportunities. This relates to land specifically allocated to on-site renewable generation, hydrogen testing and a vehicle charging hub.
Amount of capital expenditure deployed toward climate-related risks and opportunities	• In the current reporting period, we have made the following investments towards climate-related risks and opportunities: • Investment in energy solutions $3.4m (FY24: $1.9m) – This amount reflects spend on various energy solution initiatives including the Kōwhai Park solar farm, EV energy hub, upgrading LED lighting and electrifying fleet vehicles (including Fire vehicle). • Investment in water and drainage initiatives of $142,000 (FY24: $267,000) to both increase current understanding of water usage across the campus and build in climate resilience to new drainage infrastructure.
Internal emissions price:	• CIAL does not currently use an internal emissions price. We follow Climate Commission pathway and projections. Our focus is on reduction of absolute emissions and our initiatives are selected based on the potential abatement.
Management remuneration linked to climate-related risks and opportunities	• The CE's variable remuneration is determined by the Board, based on the achievement of the strategy and business plan. In FY25 the CEO had a specific KPI within the short-term incentive linked to specific climate and sustainability initiatives (15% weighting), and a specific master plan KPI linked to energy infrastructure planning to cater for a renewable energy transition (10% weighting).

APPENDICES

Appendix 1: Adoption Provisions utilised

Adoption provision 2: Anticipated financial impacts

This provides a first and second reporting period exemption from NZ CS 1 paragraph 15(b), which requires a CRE to disclose the anticipated financial impacts of climate-related risks and opportunities reasonably expected by an entity.

Adoption provision 6: Comparatives for metrics

This provides a second reporting period exemption from NZ CS 3, paragraph 40 which requires a CRE to disclose comparative information for the immediately preceding two reporting periods for each metric disclosed in the current reporting period, allowing the CRE to disclose one year of comparative information for each metric. This provision is being used for metrics except GHG emissions.

Adoption provision 7: Analysis of trends

This provides a first and second reporting period exemption from NZ CS 3, paragraph 42 which requires a CRE to disclose an analysis of the main trends evident from a comparison of each metric from previous reporting periods to the current reporting period.

Adoption provision 8: Scope 3 GHG emissions assurance

This provides an exemption, for accounting periods ending before 31 December 2025, for a CRE to exclude its scope 3 GHG emissions from the scope of the assurance engagement.

Appendix 2: GHG Limited Assurance

AUDIT NEW ZEALAND
Mana Arotake Aotearoa

Independent Limited Assurance Report

To the readers of Christchurch International Airport Limited's GHG emissions disclosed in its group Climate Statement for the year ended 30 June 2025

Under section 461ZH(3) of the Financial Markets Conduct Act 2013, the Auditor-General is the assurance practitioner of Christchurch International Airport Limited and its subsidiaries and controlled entities (together referred to as the group). The Auditor-General has appointed me, Chris Genet, using the staff and resources of Audit New Zealand, to carry out a limited assurance engagement, on his behalf, on the greenhouse gas (GHG) emissions information disclosed in the group's Climate Statement (GHG disclosures), for the year ended 30 June 2025.

Scope of the engagement

The GHG disclosures below are within the scope of our limited assurance engagement:

- The gross emissions for the year ended 30 June 2025, in metric tonnes of carbon dioxide equivalent, classified as Scope 1 and Scope 2 (calculated using the location-based method), on page 35.
- The statement describing what the GHG emissions have been measured in accordance with on page 36.
- The approach used to consolidate GHG emissions (operational control) on page 37.
- The sources (or references to sources, where applicable) of emission factors and the global warming potential rates used, on pages 37 and 48.
- The statement that there are no specific exclusions of Scope 1 and Scope 2 (calculated using the location-based method), emissions sources, including facilities, operations or assets on page 37.
- The description of the methods and assumptions used (including the rationale for doing so, where applicable) to calculate or estimate Scope 1 and Scope 2 (calculated using the location-based method) GHG emissions, and the limitations of those methods, on page 48.
- The description of any uncertainties relevant to the Group's quantification of its Scope 1 and Scope 2 (calculated using the location-based method) GHG emissions, including the effects of these uncertainties on GHG disclosures, on page 48.

Appendix 2: GHG Limited Assurance *cntd*

Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the group's GHG disclosures within the scope of our limited assurance engagement for the year ended 30 June 2025, are not fairly presented and prepared, in all material respects, in accordance with Aotearoa New Zealand Climate Standards, issued by the External Reporting Board.

Other matter

The comparative information, being the group's 2024 and 2023 GHG disclosures on page 35 has not been subject to assurance. As such, it is not covered by our assurance conclusion.

The board of directors' responsibilities

Subparts 2 to 4 of the Financial Markets Conduct Act 2013 set out requirements for a climate reporting entity in preparing a climate statement or group climate statement, which includes proper record keeping, compliance with the climate-related disclosure framework and subjecting it to assurance.

The Aotearoa New Zealand Climate Standards have been issued by the External Reporting Board as the framework that applies for preparing and presenting a climate statement or group climate statement. The board of directors of the group is therefore responsible for preparing and fairly presenting a group climate statement for the year ended 30 June 2025, in accordance with those standards.

The board of directors is also responsible for the design, implementation, and maintenance of internal control relevant to preparing the group's climate statement that is free from material misstatement, whether due to fraud or error.

Our responsibilities

Section 461ZH of the Financial Markets Conduct Act 2013, requires the GHG disclosures included in the group's Climate Statement to be the subject of an assurance engagement.

NZ CS1 *Climate-related disclosures*, paragraph 25 requires such an assurance engagement at a minimum to be a limited assurance engagement, and paragraph 26 specifies the scope of the assurance engagement on GHG disclosures.

To meet these responsibilities, we planned and performed procedures (as summarised below), to provide limited assurance in accordance with New Zealand Standard on Assurance Engagements 1 *Assurance Engagements over Greenhouse Gas Emissions Disclosures*, and International Standard on Assurance Engagements (NZ) 3410 *Assurance Engagements on Greenhouse Gas Statements*, issued by the New Zealand Auditing and Assurance Standards Board.

Appendix 2: GHG Limited Assurance *cntd*

Summary of work performed

The procedures we performed were based on our professional judgement and included enquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above:

- We obtained, through enquiries, an understanding of the group's control environment, processes and information systems relevant to the preparation of the Scope 1 and Scope 2 (location-based) disclosures. We did not evaluate the design of particular control activities or obtain evidence about their implementation.
- We evaluated whether the group's methods for developing estimates are appropriate and had been consistently applied. Our procedures did not include testing the data on which the estimates are based or separately developing our own estimates against which to evaluate the group's estimates.
- We performed analytical procedures on particular emission categories by comparing the expected GHG emissions to recorded GHG emissions and made inquiries of management to obtain explanations for any significant differences we identified.
- We evaluated the appropriateness of the emission factors applied.
- We evaluated the overall presentation and disclosure of the Scope 1 and Scope 2 (location-based) GHG disclosures.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, 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.

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

Inherent limitations

As outlined on page 5, GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

Other information

The Climate Statement contains information other than the GHG disclosures and the assurance report thereon. The board of directors is responsible for the other information.

Our assurance engagement does not extend to any other information included, or referred to, in the Climate Statement on pages 4, 6 to 34, 38 to 42, 47, 49 to 50, and therefore, no conclusion is expressed thereon.
We read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the GHG disclosures, or our knowledge obtained in the assurance engagement, or otherwise appears to be materially misstated.

Appendix 2: GHG Limited Assurance *cntd*

Where such an inconsistency or misstatement is identified, we are required to discuss it with the board of directors and take appropriate action under the circumstances, to resolve the matter. There are no inconsistencies or misstatements to report

Independence and quality management

We complied with the Auditor-General's independence and other ethical requirements, which incorporate the requirements of Professional and Ethical Standard 1 *International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand)* (PES 1) issued by the New Zealand Auditing and Assurance Standards Board. PES 1 is founded on the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. These principles for example, do not permit us to be involved in the preparation of the current year's GHG information as doing so would compromise our independence.

We have also complied with the Auditor-General's quality management requirements, which incorporate the requirements of Professional and Ethical Standard 3 *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements* (PES 3) and Professional and Ethical Standard 4 *Engagement Quality Reviews issued by the New Zealand Auditing and Assurance Standards Board* (PES 4). PES 3 requires our 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. PES 4 deals with an engagement quality reviewer's appointment, eligibility, and responsibilities.

Other than our work in carrying out all legally required audit and assurance engagements, we have no relationship with or interests in the group.

Chris Genet

Audit New Zealand

On behalf of the Auditor-General

Christchurch, New Zealand

1 October 2025

Appendix 3: Scenario archetypes and data sources

Scenario	Orderly scenario	Disorderly scenario	Too Little, Too Late	Hot House World scenario
Used in climate risk assessment	Transition	Transition	Transition	
		Physical	Physical	Physical
Intergovernmental Panel on Climate Change AR5, AR6 **AR5** https://www.ipcc.ch/assessment-report/ar5/ **AR6** https://www.ipcc.ch/assessment-report/ar6/	SSP1-1.9 ~1.4°C	SSP1-2.6 ~1.8°C	SSP2 – 4.5 ~2.7°C	SSP5-8.5 ~4.4°C
Network for Greening the Financial System https://www.ngfs.net/ngfs-scenarios-portal/explore/	Orderly – Net Zero ~1.5°C	Disorderly – Delayed Transition ~1.7°C	Fragmented World – Too Little, Too Late ~2.6°C	Hot House World – current policies ~3°C
Climate Change Commission https://www.climatecommission.govt.nz/assets/Inaia-tonu-nei-a-low-emissions-future-for-Aotearoa/Inaia-tonu-nei-a-low-emissions-future-for-Aotearoa.pdf	Headwinds Pages 93 & 94	Tailwinds Pages 93 & 94	Current Policies Pages 93 & 94	Current Policies Pages 93 & 94
Climate Change Projections Summary https://environment.govt.nz/facts-and-science/climate-change/climate-change-projections/climate-projections-summary-dashboard/	N/A	NIWA Downscaled SSP1-2.6	NIWA Downscaled SSP2-4.5	NIWA Downscaled RCP -8.5
The Aotearoa Circle – Tourism Sector Climate Change Scenarios https://www.theaotearoacircle.nz/reports-resources/tourism-sector-climate-change-scenarios	Pages 25-28	Pages 30-32	N/A	Pages 35-38
New Zealand Green Building Council – Climate change scenarios for the Construction and Property sector https://nzgbc.org.nz/news-and-media/property-and-construction-sector-release-climate-scenarios-for-new-zealand	Scenario 1 Page 10	Scenario 2 Page 11		Scenario 3 Page 12
Air Transport Action Group – Waypoint 2050 https://aviationbenefits.org/environmental-efficiency/climate-action/waypoint-2050/	Waypoint 2050			
The Aotearoa Circle – Transport Sector Climate Change Scenarios https://cdn.prod.website-files.com/67d0fe67637ca866ec5f5b1f/6812d7306c201a629168ca27_Transport%20Scenarios-compressed.pdf	Fully charged Page 41 - 47	Short detour Page 34 - 40	Bypass to breakdown Page 20 - 33	

Appendix 4: GHG Emissions sources, calculations and sources of uncertainty

The 2025 GHG emission calculations utilise emission factors which are primarily sourced from the MfE Measuring Emissions: A guide for Organisations (2024 Detailed Guide), applying the 2025 Emissions Factors Workbook and Flat File as the most up to date available datasets. These 2025 emissions factors relate to the period 1 January 2024 - 31 December 2024 ('2024 calendar year'). Given our reporting period is 1 July 2024 - 30 June 2025, we have applied the 2024 calendar year emissions factors across our full reporting period, as it is the most recent information available.

Scope 1 and Scope 2

EMISSION SOURCE	ACTIVITY DATA & COLLECTION METHOD	PRIMARY DATA SOURCES	EMISSION FACTOR (EF) & SOURCE	CALCULATION APPROACH	SCOPE	DATA QUALITY RATING	KEY ASSUMPTIONS
Stationary fuel combustion	Fuel volumes (litres/kg) from procurement and asset team logs	Finance system; procurement logs	MfE 2025 (stationary combustion)	Volume x EF (by fuel type)	1	High	Direct meter or invoice data; small LPG quantities may be estimated.
Mobile/transport fuel combustion (vehicle fleet)	Fuel card data	Fleet management records; fuel supplier statements	MfE 2025 (transport fuels)	Volume x EF (by fuel type)	1	High	Fuel volume tracked.
Fire training	Volume of LPG used for training exercises; metered usage or procurement records	Fire training logs; LPG procurement invoices	MfE 2025 (LPG combustion)	Volume x EF	1	High	All LPG used assumed to be combusted; consistent training format year-on-year.
Fugitive emissions – refrigerants (HVAC)	Estimated charge per system x default annual leakage rate	HVAC asset register; equipment nameplates; maintenance records	MfE 2025 (GWP values by refrigerant type) IPCC/TEAP 2005, Tables B1–B2 (leakage rates)	Total installed charge x leakage rate x GWP	1	Medium	Gradual operational leaks only; assumes default leakage rate for stationary equipment; excludes catastrophic or decommissioning losses unless specifically identified.
Grid electricity – CIAL consumption	Metered kWh from utility	CIAL electricity invoices	MfE2025 (grid electricity EF - annual factor for 1 Jan 24-31 Dec 24)	kWh x EF (location- and market-based)	2	High	Includes all directly metered consumption under CIAL control.

Appendix 4: GHG Emissions sources, calculations and sources of uncertainty *cntd*

Scope 3 - Energy and operations

EMISSION SOURCE	ACTIVITY DATA & COLLECTION METHOD	PRIMARY DATA SOURCES	EMISSION FACTOR (EF) & SOURCE	CALCULATION APPROACH	SCOPE	DATA QUALITY RATING	KEY ASSUMPTIONS
Aircraft – full flight	Departing flights, aircraft type, origin-destination pairs (PACE model)	CIAL movement data; PACE outputs	PACE modelled fuel burn; uplift factor for non-CO_2 effects	Fuel burn model x EF (+ uplift)	3	Medium	Fuel allocation by departure; uplift factor 1.7 applied for effective radiative forcing.
APU usage	APU use per movement (estimation based on ops schedules)	APU Summary; CIAL flight		Estimated avg. hours x EF	3	Medium	Average runtime per aircraft.
Engine run-ups	Number & duration logged	ETMS Maintenance Logs; CIAL Ops		Duration x typical consumption x EF	3	Medium	Standardised L/h per engine type; average durations used.
Tenant vehicles (airside)	Estimated number of vehicles and fuel		MfE 2025 (transport fuels)	Estimated litres x EF	3	Low	Based on access estimates; minimal direct tenant data.
Ground access	Traffic counts; modal split; average trip distances		ACERT v7.2338	Trips x distance x EF	3	Medium	
Tenant electricity	CIAL sub-metering and finance	CIAL finance and meter	MfE 2025 (grid electricity EF)	kWh x EF (location- and market-based)	3	High	Based on internal sub-metered data and invoiced energy use. Assumes all recorded consumption is attributable to tenant operations.
Tenant fuel (stationary)			MfE 2025 (stationary combustion)		3	High	Based on estimates for known tenant operations where fuel is consumed on-site but not under CIAL operational control.
Staff commuting & WFH	Staff mode split, distances, WFH				3	Medium	Derived from staff survey data, extrapolated to total workforce. Commuting distances calculated using average values by transport mode.

APPENDICES *cntd*

Appendix 4: GHG Emissions sources, calculations and sources of uncertainty *cntd*

Scope 3 - Procurement & waste

EMISSION SOURCE	ACTIVITY DATA & COLLECTION METHOD	PRIMARY DATA SOURCES	EMISSION FACTOR (EF) & SOURCE	CALCULATION APPROACH	SCOPE	DATA QUALITY RATING	KEY ASSUMPTIONS
Purchased goods & services	Spend records by category	CIAL finance system	EEIO factors for NZ	Spend × sector EF	3	Medium	Grouped by procurement type (e.g., cleaning, ICT, uniforms).
Capital goods	Capital expenditure records	CIAL finance system	Material-based or EEIO EFs	Capex × EF	3	Medium	Includes major infrastructure projects; e.g., EV truck procurement.
Water supply	Metered water consumption	Council water bills	MfE 2025	kL × EF	3	High	Direct metering from utility.
Wastewater treatment	Metered wastewater volume (if available) or estimated as % of water use	Council water bills	MfE 2025	kL × EF	3	Medium	Assumes 90% of water used becomes wastewater.
Operational waste	Waste type and weight by collection contractor	Waste contractor records	MfE 2025 (by waste type)	Weight × EF	3	High	Covers landfill, recycling, green waste; regular reporting from contractors.
Business travel – flights & accommodation	Travel bookings and finance records	Travel portals; expense systems	MfE 2025	Segment × EF by class + room nights × EF	3	High	Departing CHC flights excluded to avoid double-counting; hotel stays added.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