Christchurch City Holdings Limited

A WHOLLY OWNED SUBSIDIARY of CHRISTCHURCH CITY COUNCIL

Climate statement 2025

Te Whakapuakanga ā-Āhuarangi

Christchurch City Holdings Limited

About CCHL

Christchurch City Holdings Limited (CCHL) is the wholly owned commercial and investment arm of Christchurch City Council. The CCHL Group is made up of six trading subsidiaries (the subsidiaries) that own and operate essential infrastructure assets and services across Christchurch and Canterbury. The Group includes four 100% owned companies, Lyttelton Port Company Ltd (LPC), Enable Networks Ltd (Enable), City Care Ltd (Citycare), and EcoCentral Ltd (EcoCentral); two that are majority owned, Orion New Zealand Ltd (Orion) (10.725% owned by Selwyn District Council) and Christchurch International Airport Ltd (Christchurch Airport) (25% owned by the Crown); as well as smaller investments RBL Property and Development Christchurch. CCHL is a Climate Reporting Entity under the Financial Markets Conduct Act 2013, has $6.3 billion in total assets as at 30 June 2025, and is an NZDX issuer with two listed bonds on the NZDX, totalling $300 million.

About this climate statement

This report constitutes CCHL's Climate-Related Disclosures (CRD) for the period 1 July 2024-30 June 2025 under the Financial Markets Conduct Act 2013 (FMCA). The climate-related disclosures are in relation to Christchurch City Holdings Limited and its subsidiaries (Group). References to CCHL should be taken to include the Group, as appropriate.

The report is intended to describe CCHL's understanding of, and approach to climate-related risks and opportunities in relation to its interests and operations over the short, medium and long term, in support of a smoother transition to a low-emissions, climate resilient future.

This document has been prepared in compliance with the Aotearoa New Zealand Climate Standards and thus covers four thematic areas: Governance, Strategy, Risk Management and Metrics & Targets. CCHL has chosen to use the following adoption provisions outlined in NZ CS 2 for this FY2025 reporting period.

Adoption provision 2: Anticipated financial impacts (paragraph 15b,c,d of NZ CS 1)
Adoption provision 4: Scope 3 GHG emissions (select Scope 3 emissions reported)
Adoption provision 5: Comparatives for Scope 3 GHG emissions (preceding reporting periods unavailable)
Adoption provision 6: Comparatives for metrics (preceding reporting periods unavailable)
Adoption provision 7: Analysis of trends (preceding reporting periods unavailable)
Adoption Provision 8: Scope 3 GHG emissions assurance (assurance over Scope 3 emissions has not been undertaken)

For and on behalf of the Board

BRYAN PEARSON
Chair
30 October 2025

GILL COX
Director
30 October 2025

Disclaimer

This report sets out CCHL's approach to scenario analysis, CCHL's understanding of, and response to climate-related risks and opportunities and current and anticipated impacts of climate change in relation to the Group. This reflects CCHL's current understanding as at 30 October 2025. We acknowledge that this will evolve over time. Climate-related risk management is an emerging area, and as such may rely on data and methodologies that are developing and uncertain. This report contains forward looking statements, including climate-related scenarios, targets, assumptions, climate projections, forecasts, statements of CCHL's future intentions, estimates and judgements that may not evolve as predicted. We base those statements and opinions on reasonable information known at the date of publication. We do not:

- represent those statements and opinions will not change or will remain correct after publishing this report, or
- promise to revise or update those statements and opinions if events or circumstances change or unanticipated events happen after publishing this report.

CCHL cautions reliance on climate-related forward-looking statements that are necessarily less reliable than other statements CCHL may make in its annual reporting. In particular, these statements involve assumptions, forecasts and projections about CCHL's present and future strategies and CCHL'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 report, and strategies to achieve targets, may not eventuate or may be more or less significant than anticipated. There are many factors that could cause CCHL'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 CCHL's control. CCHL gives no representation, warranty or assurance that actual outcomes or performance will not materially differ from the forward-looking statements. We do not accept 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 in Appendix 1.

This report 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 CCHL's financial performance, please refer to the Annual Report, available at **cchl.co.nz/annual-reports**.

Table of contents

Rārangi Upoko

Christchurch City Holdings Limited (CCHL) is the wholly owned commercial arm of Christchurch City Council

Governance

Te Anga o te Mana Urungi

This section describes the roles of management and governance in relation to climate-related risks and opportunities.

The CCHL Board of Directors is the governance body ultimately responsible for overseeing the implementation of CCHL's strategy in response to climate-related risks and opportunities.

The Board is responsible for establishing CCHL's strategic direction and sets its financial and non-financial objectives, including CCHL's sustainability strategy, as part of agreeing the annual Statement of Intent with its Shareholder, the Christchurch City Council (the Council). In addition, the Board is responsible for understanding and ensuring its risks, including climate-related, are managed appropriately, to ensure CCHL meets its objectives and targets. The Board is supported in its oversight of climate-related risks and opportunities by two Board sub-committees:

- The **Audit and Risk Management Committee (ARMC)** assists the Board in its oversight of CCHL's risk management framework and the monitoring of compliance within that framework, including in relation to climate-related risk and the annual assurance programme.
- The **Impact Committee** assists the Board in its oversight of climate-related risks and opportunities, including by reviewing and recommending actions to the Board and is responsible for ensuring the Group climate statements are presented in accordance with the Aotearoa New Zealand Climate Standards.

The Board (including the ARMC and Impact Committee) is informed about climate-related risks and opportunities in the following ways:

- Management provides papers and updates to the Impact Committee on climate-related topics such as the Group's emission reduction targets and plan. The Board receives a six-weekly Impact update at each meeting.
- Climate change appears as a key risk in the CCHL strategic risk register. This register is considered and reported to the ARMC quarterly. All Directors can access ARMC papers and have an open invitation to attend ARMC meetings.
- CCHL, together with its subsidiaries, first developed climate-related scenarios and related risks and opportunities in FY24. These were reviewed and defined in FY25 in consultation with the Sustainability Working Group (SWG). They are then reviewed by the Impact Committee and recommended by the Impact Committee for approval by the Board. Risks and opportunities were approved by the Board in May 2025.
- The SWG also supports greenhouse gas (GHG) emissions reduction planning and target setting, which is recommended to the Impact Committee and then to the Board.
- The Impact Committee approves CCHL's annual Impact Programme (delivering on CCHL's annual Statement of Intent) and reviews performance against the agreed Statement of Intent targets on a quarterly basis. The Impact Committee is also provided with regular updates on progress towards deliverables directly related to the impact programme and non-financial targets.
- The Impact Committee met four times in FY25. The Impact Committee Chair updates the Board on material ESG/climate-reporting matters at each Board meeting, and Directors can access Impact Committee papers and have an open invitation to attend Impact Committee meetings.

Our value creation model

Tā tātou tauira hei waihanga wāriu

Vision

Creating value from publicly owned infrastructure for the people of Christchurch and Banks Peninsula

Mission

To support the future growth of Christchurch and Banks Peninsula by investing in key infrastructure assets that are commercially viable and environmentally and socially sustainable

Inputs and relationships	What we do	Outcomes/measures

Financial capital

- Christchurch City Council
- Bondholders and banks
- Local Government Funding Authority
- Subsidiary financial performance
- Retained earnings

Intellectual capital

- Leadership and governance capability
- Diversity of thought
- External assurance
- Regulation and legislation

Social & relationship capital

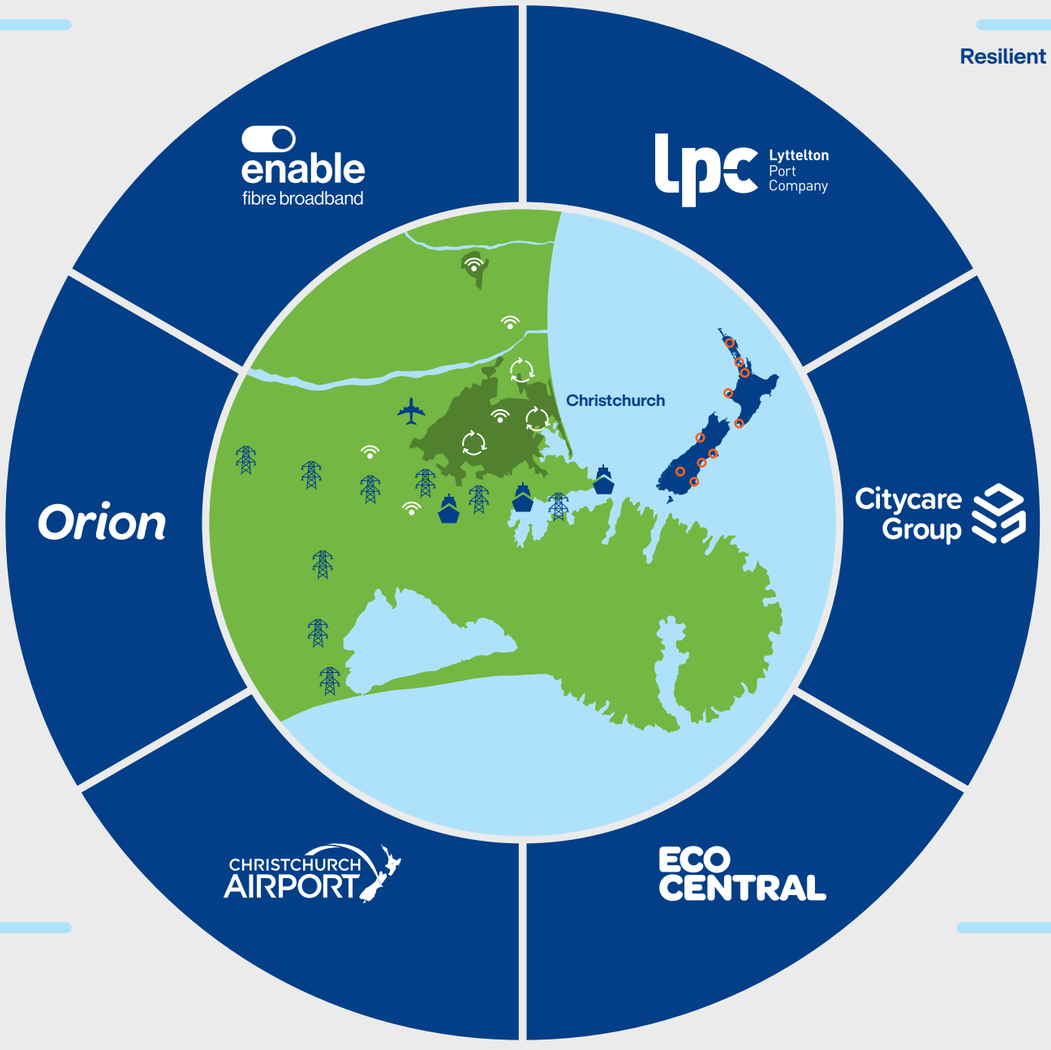
- Engaged, diverse workforce
- Manawhenua
- Christchurch City Council
- Communities and customers

Natural capital

- Natural environment
- Renewable and non-renewable resources
- Indigenous biodiversity
- Stable climate

Active capital management with strong assurance, risk management and responsible ownership frameworks

Ensure high quality, experienced and diverse governance and leadership, respecting operational independence of subsidiaries



Prioritise safe, inclusive and engaged workplaces and strong stakeholder relationships

Establish a platform for leadership and investment in sustainability and ESG

Resilient commercial infrastructure

- Provide sustainable dividends to the city
- Long term capital investment planning for future resilience
- Debt management
- Transparent engagement with Council
- Integrated reporting

Strong stewardship

- Diverse and highly experienced Boards of Directors
- Genuine diversity and inclusion across the Group
- Continuous staff development; investment in careers and talent
- Rigorous appointment and review process for directors
- Group collaboration to enhance best practice

Social licence

- Strong social licence
- Engaged workforce
- Safety and wellbeing of staff is prioritised
- Open, transparent communication with stakeholders
- Respect and understanding for te ao Māori

Healthy environment and low emissions

- Reduce harmful environmental impacts
- Reduced reliance on fossil fuels
- Transparent reporting and communication of performance
- Climate risk management, targets and disclosure

Orion · Enable · Lyttelton Port Company · Christchurch Airport · EcoCentral · Citycare

The risk assessment process applies to activities relating to CCHL and the six large subsidiary companies as pictured above. RBL and Development Christchurch are not included on materiality grounds.

Governance

CCHL Board of Directors

(Meets at least 10 times a year)

Governance body ultimately responsible for oversight and implementation of CCHL's strategy. CCHL's core role includes monitoring of the Council's infrastructure investments, understanding and management of the business risks, including climate-related risks and opportunities and approving the Sustainability Strategy.

Impact Committee

(Meets 4 times a year)

Responsible for overseeing CCHL's strategies, policies and practices in relation to environmental, social and governance (ESG) issues and related external reporting.

Reviews and recommends to the Board the sustainability strategy, objectives and targets. Monitors and reports to the Board CCHL's material ESG matters (including climate-related). Oversees compliance with statutory responsibilities relating to sustainability.

Audit and Risk Management Committee

(Meets at least 4 times a year)

Assists the Board with the proper and efficient discharge of its responsibilities to exercise due care, diligence and skill in relation to the oversight of (amongst other things) the risk management framework and the monitoring of compliance within that framework. Reviews CCHL's portfolio risks, including climate-related risk, on a quarterly basis. Oversees compliance with CCHL's Sustainable Finance Framework.

Management

Executive Team

Made up of the Chief Executive Officer, Head of Finance and Head of Impact, the Executive Team participates in the scenario analysis process. In FY25, this included reviewing CCHL's climate-related risks and opportunities and the impact on CCHL's strategy. The Head of Impact is responsible for day-to-day management of CCHL's sustainability strategy and climate response.

Sustainability Working Group

(Meets fortnightly throughout the year) Reports progress to the Impact Committee quarterly

The SWG is made up of representatives from each of the subsidiaries and from CCHL. It was established to progress priority areas of sustainability, including climate change mitigation and adaptation, biodiversity and circular economy. It oversees the operational implementation of climate change response across the subsidiary businesses and informs CCHL executive of climate-related risks and opportunities.

Subsidiary Boards

Orion, Christchurch Airport, LPC, Enable, Citycare and EcoCentral have primary responsibility for oversight and implementation of the operational strategies and sustainability plans (including where these relate to climate-related risks) at subsidiary level, including providing annual disclosures (with assurance) to CCHL.

Board climate skills and training

In FY25, all CCHL directors and directors of the subsidiary companies were invited to complete climate competency training provided by the NZ Institute of Directors. As a result, more than 33 of our Directors have received specific climate risk skills development.

The Board aims to ensure that it has the appropriate mix of skills and competencies to provide effective governance for CCHL, including in relation to climate-related risks and opportunities and other ESG matters. The CCHL Board uses a Board skills matrix to assess the skills and competency of the Board annually. The matrix includes ESG literacy and assesses the knowledge of and commitment of directors to key strategic ESG matters regarding the long-term sustainability of the organisation and its broader community. This includes the ability to integrate these considerations into the organisation's strategy, understand the implications for reporting, and for stakeholder engagement.

The Impact Committee accesses climate-related expertise from management and from external consultants as required.

Risk management

Te Whakamauru Tūraru

This section describes how CCHL identifies, assesses and manages transitional and physical climate change risk.

Risk identification

CCHL identified and assessed its climate-related risks and opportunities associated with the three scenarios, entitled 'orderly', 'disorderly' and 'hot house' (refer pages 18-19 for full descriptions).

This process was informed in part by each subsidiary company undertaking its own risk identification process using the agreed scenarios before CCHL conducted its own, taking account of the highest-ranking risks at the subsidiary level as well as overall portfolio risks.

In line with CCHL's annual financial reporting, CCHL undertakes annual reassessment of climate-related risks and opportunities.

Risk assessment

1. Risks are assessed across exposure, sensitivity, adaptive capacity, and consequence criteria using the formula below. The methodology used draws on the conceptual risk framework from the IPCC and ISO 31000.

Exposure x Sensitivity x Adaptive Capacity x Consequence = Risk rating

Exposure	Sensitivity	Adaptive capacity	Consequence
The degree to which an entity is exposed to the climate hazard.	**The degree to which an entity may be impacted by the climate hazard.**	**The degree to which an entity can adapt when exposed to the hazard.**	**The degree to which the risk may reasonably negatively impact financial statements.**

2. Risks identified as high or extreme by a subsidiary were identified as relevant risks for CCHL.
3. Risks were grouped by headline statements based on key hazards/drivers and impacts.
4. Where there were similar risks that existed across multiple subsidiaries, these were consolidated into one risk.
5. Risks were assessed under each scenario and time horizon (pages 18-19).

Physical risks were rated with the following logic:

- All ratings in the short term were given the same score under all scenarios.
- All ratings remained constant (i.e. did not change across the short, medium, and long term) under the Orderly scenario.
- Ratings for the medium term under the Orderly and Disorderly scenario were the same.

Transition risks were rated with the following logic:

- Generally, transition risks are expected to be most relevant and material over the short and medium term and under the Orderly and Disorderly scenarios only. This logic was applied as the transition to a low-emissions economy is expected to occur by mid-century, therefore making transition risks irrelevant in the long term.
- Transition risks are not expected to be material under the Hot House scenario given that there is little transition occurring under this scenario. Therefore, no ratings were provided for transition risks under this scenario.
- Ratings often remained constant over the short and medium terms under the Orderly scenario and were elevated in the medium term under the Disorderly scenario.

CCHL notes that there are inherent limitations to the approach used to identify and assess these climate-related risks as the subsidiaries utilised different risk management frameworks as part of their scenario analysis process, and therefore their risk definitions and outcomes may be different.

Risk management

Climate-related risk is part of CCHL's corporate risk register and managed within existing risk management processes. While CCHL identified and assessed its climate-related risks as part of a stand-alone scenario process, CCHL prioritises and manages climate-related risks with equal weighting relative to other risks, in line with its risk management policy and framework.

Strategy

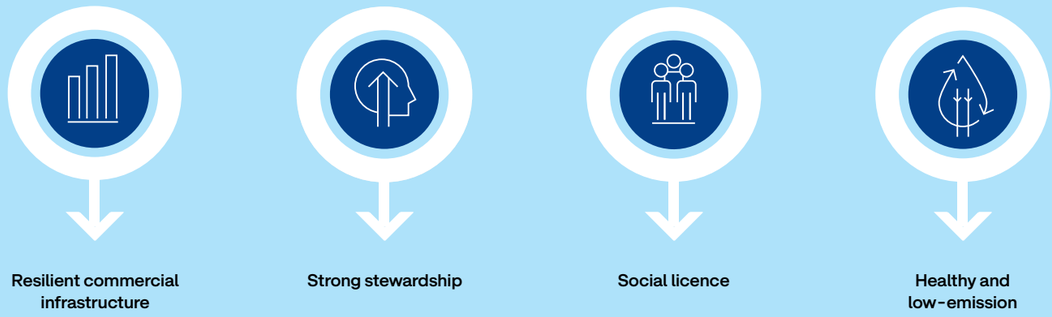
Rautaki

This section sets out the scenario analysis that CCHL has undertaken, the current and potential impacts of climate change across the portfolio and how CCHL is positioning itself for a low-emissions, climate resilient future.

The core role of CCHL is to oversee the Council's investments, which largely service the region's existing infrastructure needs. CCHL's investments are designed to deliver strong financial returns and dividends to the Council over the long term. Resilience is critical to a functioning, productive city.

CCHL is also responsible for monitoring the performance of the subsidiary companies against their stated economic, environmental and social performance objectives (provided in subsidiary annual Statements of Intent) as well as relevant benchmarks. CCHL also ensures strong governance processes exist for the Group.

CCHL's strategy delivers on four capitals:



Scenario analysis

CCHL has undertaken climate-related scenario analysis to support the identification and assessment of its climate-related risks and opportunities and test the resilience of CCHL's business model and strategy.

The three scenarios provide a set of challenging and plausible hypotheticals against which to test the strategy and explore climate-related risks and opportunities over the short, medium, and long term under different conditions.

No part of CCHL's value chain was excluded from the risk assessment process. This includes activities relating to CCHL and six subsidiary companies.

Process summary

A summary of the process is provided below.

Identify driving forces

Social	Political/ legal	Economic	Tech & Infrastructure	Environmental

Develop scenarios

Orderly 1.5°	Disorderly 2°	Hot house >3°

Set time horizons

Short 2025-2030	Medium 2030-2050	Long 2050-2100

Identify risks and opportunities

Transitional risk	Physical risk	Opportunity

Define risk assessment matrix

Insignificant	Minor	Moderate	Major	Critical

Assess risks and opportunities

Respond

Development of scenarios

The process for developing CCHL's climate-related scenarios was first undertaken in 2024 by management with the assistance of external consultants.

The scenarios were developed by first identifying relevant driving forces and archetype. Subsidiary-level and sector-level scenarios were reviewed to further develop the narratives relevant to each scenario. The scenarios include a set of statements and drivers that are plausibly consistent with a reference emissions reduction pathway from the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6). The assumptions underlying the reference pathways have been developed by the IPCC.

This year, the same scenarios were reviewed and further developed by in-house experts in the SWG. One change was made to the scenarios this year which was the greater inclusion of anticipated climate impacts specific to the sectors that we operate in. CCHL incorporated drivers and narratives from relevant available sector-scenarios developed by sectors in New Zealand for the purposes of scenario analysis – tourism, transport and electricity (Aotearoa Circle) and construction and property (NZGBC).

The final scenarios were discussed at Board meetings and Board committee meetings and used to develop and inform CCHL's strategy and capital allocation, including aspects relating to transition planning.

Scenarios

	Orderly	Disorderly	Hothouse
IPCC SSP	SSP1-1.9	SSP2-4.5	SSP5-8.5
Headline narrative	Warming is limited to 1.5°C. Ambitious decarbonisation goals and policies are introduced immediately and emissions decline rapidly and steadily to net zero by 2050.	Significant decarbonisation is delayed until the 2030s. We succeed in limiting warming to approximately 2°C.	No additional policies are introduced to curb emissions, there is continued reliance on fossil fuel and emissions continue to rise with warming reaching >3°C.
Risk	Moderate transition risk in order to meet net zero 2050 goals and limited exposure to physical risks.	Very high transition risk in the rush to meet net zero 2050 goals. Moderate physical risk due to delayed action.	Limited transition risks but extreme physical climate risks.
Av. surface temp 2050	1.6°C	2.0°C	2.4°C
Av. surface temp 2100	1.4°C	2.7°C	4.4°C
Mean sea level 2050	+0.4m	+0.5m	+0.8m
NZ Population (5.22m 2025)	5.44 million in 2030 6.13 million in 2050	5.44 million in 2030 6.13 million in 2050	5.44 million in 2030 6.93 million in 2050
Carbon price ($60/t 2025)	By 2030 $138/t, increasing gradually to $250/t by 2050.	Remains at $60/t increasing rapidly to $250/t to 2050.	$35/t
	Sector specific considerations		
Aviation	Aviation is almost zero carbon where aircraft have been replaced by new technology, and domestic passenger numbers are increasing on smaller, more frequent flights. Electric aviation has opened up new airfields, communities and supports resilience.	Aviation still decarbonising, hit hard by high prices and dependence on more expensive, foreign low carbon fuel supply. Smaller airfields became uneconomical and close. Tourism is negatively affected.	Flights remain popular but expensive. Airlines face social pressures as the impacts of climate change visibly worsen.
Shipping and freight	Freight is low carbon, high-tech, multi-modal and more efficient with a variety of alternative fuels in use. There is more domestic production and consumption. AI platforms conduct much of the increasingly autonomous network.	Exports markets are negatively affected. Freight is mostly low carbon, but expensive, using high-tech systems for efficiency and resilience. Less mode-shift to rail/coastal shipping, creating reliance on a road network now more vulnerable to extreme weather impacts, with managed retreat happening in many locations. Some smaller ports become uneconomical. Reliance on overseas fuels and technologies creates disruption and uncertainty.	Freight network does not decarbonise but deploys technology to support efficiency and resilience. Freight is increasingly impacted by road and asset damage from extreme weather. Service speed and reliability reduces; price increases; fuel uncertainty increases; geopolitical relations (and trade relations) decline. Export markets for recyclables increasingly volatile.
Urban form, transport and connectivity	Urban mobility is cheap and safe; travel is accessible for everyone. Denser cities with integrated land use-transport planning have enabled efficient zero carbon mass-transit driven by AI. Active mobility is popular and there is a significant vehicle sharing economy. Vehicle utilisation is high, freeing up public space for nature, communities and commerce. EVs dominate regional and rural travel. Stronger waste minimisation regulation and landfill levies increase recycling rates.	Cities have high tech, low carbon transport systems integrated across on-demand, micro, and public mobility. However, another decade of sprawl and road building means urban form is less compact, infrastructure transition costs were higher, and the public sector still carries high debt. Greater reliance on private vehicles. Less public or shared mobility options.	Government-led approach to managed retreat. Urban areas are mixed density with growing populations. Many are reliant on private ICE vehicles and roads. Congestion and pollution disproportionately impact poorer communities. Investment in infrastructure has locked in traditional modes of travel. Road networks are increasingly compromised by extreme weather impacting connectivity and food supply.
Electricity	Political consensus ensures long-term planning and commitment to decarbonising through electrification, primarily of transport and industry, while building out renewable electricity generation. Distributed generation becomes widespread. Policies limit fossil fuels. Major challenges to demand-side management. Short-term increased peak load and network costs.	Low investment into smart energy infrastructure, little regulatory changes to enable a low-carbon energy system. High costs for remaining users, e.g. low-income consumers. Some businesses invest in renewable energy, energy efficiency and technology but at a high upfront cost. Companies still heavily reliant on fossil fuels are hit hard in the 2030s. Insufficient skills/labour and funding to upgrade the system result in a drop in reliability and an increase in price.	Prioritisation of domestic energy security; increased offshore oil and gas drilling, new gas fields; rise of decentralised energy systems and more use of LPG. Localised generation, storage and distribution enhances energy resilience and reduces reliance on the grid. High cost of procuring equipment internationally. Weather events reduce the reliability of the grid.

Source: Aotearoa Circle, Tourism sector scenarios, Transport sector scenarios, Energy sector scenarios, NZGBC Property and Construction sector scenario

Current climate-related impacts

CCHL's current climate-related impacts have been identified by assessing any current impacts identified by each subsidiary and assessing their materiality to CCHL. The current impacts were then aligned with the consolidated headline drivers for consistency. Table 1 (page 22) sets out material current climate-related impacts alongside climate related risks. CCHL defines its current climate-related impacts as those that have been experienced by the Group within the reporting period.

Risks & Opportunities

The following seven climate-related risks were determined to have the potential to lead to significant impacts on the portfolio and/or organisation. Each risk is described in more detail in table 1.

Transitional Risks

- Misalignment with shareholder expectations and response
- Renewable energy supply, capacity and demand
- Litigation and reputational damage
- Not keeping up with technology change and sector-wide transitions

Physical Risks

- **Acute**
  Damage to key assets e.g. runway, transmission lines, transfer station, access routes
- **Chronic**
  Flood/insurance risk from storm and sea level rise resulting in stranded assets

Opportunities

- Take a leadership role to drive the transition in the Canterbury region

Table 1: CCHL climate-related risks and opportunities

Category	Risk Description	CCHL strategic risk category	Description of potential impact (without controls)		Relative time frame			Current impact	Current impact ($)	Subsidiary							Management response
					S	M	L			CCHL	CIAL	Citycare	Enable	EcoCentral	LPC	Orion	
Transition	**Misalignment with shareholder expectations and response**	Finances Governance Stakeholders	If climate risk response is not aligned with CCC or adaptation is poorly implemented, then CCHL faces high operating costs, reduced returns and reputational damage. Flow on economic difficulty for CCHL as industries and residents who support CCC functions lose their homes / assets / livelihoods. Possible downgrade in credit rating.	S1 S2 S3				No impacts in the current year	N/A	✓							Transparency and regularity in communication Monitoring and reporting frequency Routine engagement
Physical	**Acute: physical damage to key assets**	Disruptive events Finances	As the climate changes, CCHL's assets and associated infrastructure such as access routes suffer disruption and damage from extreme weather events causing business interruption and increased R&M costs.	S1 S2 S3				No impacts in the current year	N/A		✓	✓	✓	✓	✓	✓	Hazard mapping Climate-sensitive asset management
Physical	**Chronic: ongoing flood risk resulting in stranded assets**	Climate change Portfolio	In the longer term, as compounding extreme weather events damage assets and infrastructure they become irreparable and uninsurable.	S1 S2 S3				No impacts in the current year	N/A		✓					✓	Adaptive management pathways Geographic and sectoral diversification Investment diversification
Transition	**Renewable energy supply, capacity, transmission and demand**	Finances	If the electricity network fails to respond accordingly to electrification trends, demand will outstrip supply, threatening energy security, resulting in business interruption and high costs.	S1 S2 S3				No impacts in the current year	N/A		✓	✓		✓	✓	✓	Business interruption insurance Long term asset management Long term capital investment plans
Transition	**Delayed technology uptake and falling behind on sector wide transitions**	Portfolio Climate change	If CCHL and subsidiaries do not monitor changing energy sources, operating norms and disruptive technology, then the portfolio will become less competitive, less resilient to economic shocks and climate-related disasters and may lose relevance or profitability.	S1 S2 S3				No impacts in the current year	N/A		✓	✓	✓		✓	✓	Diversified products, services and customers Long term planning approach Adaptive transition planning Kōwhai Park partnership
Transition	**Litigation and reputational damage**	Regulatory Stakeholders	A failure to meet emissions reduction targets causes reputation, stakeholder relationship damage. This may make talent, partnerships and finance more difficult to attract and retain.	S1 S2 S3				No impacts in the current year	N/A	✓	✓	✓		✓	✓		Adequate resourcing to deliver on emissions reduction and transition plans Clear monitoring and disclosure of progress. Robust emergency response plans
Transition / Opportunity	**Leadership role driving the transition in the Canterbury region**	Portfolio Climate change	Christchurch has a well-recognised and unique opportunity due to its scale, geography and connectivity to show leadership as a low emissions city with a coordinated transition which would attract tourism revenue, employment and economic prosperity, benefitting all subsidiaries and would have reputational and resilience benefits. We can also promote emissions mitigation through tourism and freight choices.	S1 S2 S3				N/A	N/A	✓	✓	✓	✓	✓	✓	✓✓	Robust emergency response plans for regional response and recovery Co-operation with and support of other stakeholders for a coordinated and accelerated climate change response and increased resilience for Christchurch

Although CCHL has chosen to take Adoption provision 2: Anticipated financial impacts, work is underway to develop methods to quantify the financial impacts of climate-related risks.

Key

S = short term (2025-2030); M = medium term (2030-2050); L = long term (2050-2100)
S1 = orderly scenario; S2 = disorderly scenario; S3 = hot house scenario

Low risk **Moderate risk** **High risk** **Critical risk**

Transition Plan

CCHL's strategy focuses on delivering the best long-term, economic social and environmental outcomes for the Council and the community, and includes a responsible approach to sustainability and investment strategy, formalised this year by commitment to the United Nations Principles for Responsible Investment (UNPRI).

CCHL's sustainability objectives are reflected in its Statement of Intent and delivered by the Impact Programme which the Impact board sub-committee approves on an annual basis. Management reports on progress against sustainability deliverables at each Impact Committee meeting.

CCHL's Sustainable Finance Framework was established in 2021 to increase its leadership and investment in sustainability while providing the platform for future growth in this area. The Framework supported the refinancing of debt relating to CCHL's investment in Enable's fibre-optic network using a Sustainability Bond, only the second sustainability bond issued in New Zealand.

Strategic roles in climate transition

CCHL has an important role to play in providing reliable, resilient infrastructure into the future and in driving the transition to renewable energy. Each subsidiary has a role to play, in many cases this is central to their strategy as summarised below:

	CCHL	Orion	Christchurch Airport	Lyttelton Port Company	Eco Central	enable fibre broadband	Citycare Group
Core activity	Parent Company	Electricity distribution	International/ domestic passenger and cargo air transport	International and domestic shipping port	Waste sorting, recycling and recovery	Ultra-fast fibre-optic broadband network provision	Urban property maintenance, facilities & water management
Strategic role in climate transition	Responsible investment and sustainable finance practices.	**Electrification** Provide a just energy transition to renewable electricity prioritising accessibility, security of supply, affordability.	**Sustainable Aviation** Accelerate the decarbonisation of the wider aviation sector and promote the uptake of alternative fuels.	**Sustainable Freight** Enabling import/ export of commodities to support social and economic outcomes, with multi-modal connections and supporting low emissions shipping.	**Circular economy** Minimising waste to landfill and maximising the lifespan of resources by keeping them in circulation.	**Digital equity** Universal, affordable access to information, education and communications technology and connectivity.	**Climate resilience** Water management, energy efficiency, open space management and restoration activities.

Large, strategic and long-term investment decisions are planned with climate change mitigation and adaptation considerations incorporated into the business case.

CCHL has modelled an emissions reduction pathway which includes a number of mitigation measures largely focused on investment in renewable energy and reducing and electrifying vehicles, equipment and machinery. Collectively, these plans produce the Scope 1 + 2 emissions reduction reflected in Figure 1. Figure 1 models where and when these initiatives occur.

Figure 1: CCHL combined Scope 1 + 2 emissions reduction modelling to 2030

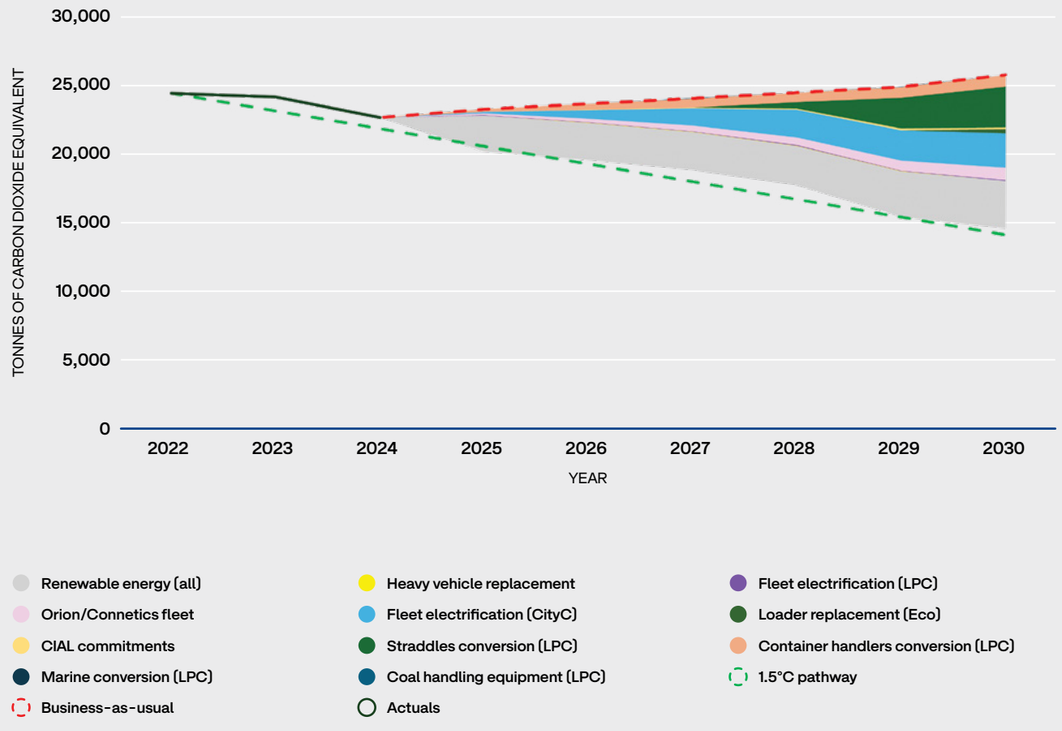


Table 2: Summary of climate change transition elements

	Climate change mitigation	Climate change adaptation	Economy wide solutions
Goal	Science-aligned reduction of Scope 1 + 2 emissions through implementation of the emissions reduction plan for the Group and each subsidiary; active engagement on Scope 3 emissions reduction.	Long-term resilience and profitability of infrastructure assets that are critical to the Christchurch economy and society.	Play a leading role in driving economy wide climate transition in the Canterbury region together with Council and other stakeholders.
Objectives	• Sound understanding of emissions sources. • Emissions intensity the same or reducing. • Year on year absolute emissions reduction. • Achieve subsidiary-level gross and net emissions reduction targets. • Achieve overall consolidated group target aligned with 1.5°C SBTi pathway i.e. 42% absolute emissions reduction by 2030.	• Assess climate change impacts of board-level business cases and investment decisions. • Commit capital investment towards asset resilience and climate-related risks and opportunities.	• Meet and maintain strategic investment commitments e.g. UN Principles of Responsible Investment. • Frequent shareholder engagement on climate change. • Frequent Board climate risk reviews/climate change agenda items. • Active involvement in industry collaboration for accelerated climate change response. • Submissions to government in support of pragmatic, appropriate policy.
Actions	All subsidiaries have emissions reduction plans in place and financial commitments made to the mitigation projects within them. Key elements are: • Procurement of high integrity renewable electricity. The emissions reduction plan ultimately aims to achieve this through close partnerships with generators and investment in new assets • Steady transition of fleets away from fossil fuels which applies across the CCHL group • Replacement of port handling equipment (container handlers, straddles, reach stackers) with electric alternatives at LPC • Supply chain emissions reduction through supplier engagement and partnership plans, supplier emissions measurement, evaluation and monitoring • Supplier code of conduct promoting low emissions products, services and supply. We have seen significant reductions in Scope 1 + 2 GHG emissions from some subsidiaries to date. Enable has achieved 84% reduction since 2020 through the uptake of EVs and renewable energy; Christchurch Airport has similarly achieved 90% reduction since 2015 largely through these actions along with the installation of a ground source heat pump in 2020 (all measures are market-based).	The risk management measures introduced to date in response to climate-related risks and opportunities are described in the table on pages 18-19. Key elements are: • Long term planning and resilience tools e.g. Resilience Explorer (Orion and CCC), hazard mapping, adaptive management and asset management planning • Emergency response planning • Clear and transparent reporting to shareholder and stakeholders • Work in cooperation and partnership with others. Climate-related risks are just one part of the bigger picture of environmental risks New Zealand is facing, including resource constraints relating to biodiversity loss, water and air pollution. We are working to include nature related risks and opportunities in this work, and to identify nature-based solutions to climate change and other challenges.	• Investing and enabling renewable electricity assets and alternative fuels e.g. Christchurch Airport's renewable energy precinct (Kōwhai Park 150MW solar farm and Fabrum hydrogen liquefaction testing facility) as a catalyst for wider investment in new technology in the region. • Significant investment by Orion in network upgrades, necessary for the electrification of New Zealand's society and economy, and transition to future electricity needs, including transition to a customised price-quality path so that we have the necessary revenue to maintain a safe, reliable and resilient network that better matches the needs of customers and community, now and in the future. • LPC long term planning in response to changing shipping patterns, critical for resilient and sustainable port operations to support the import and export of goods. Includes the supply of shore power to electrify ship emissions at berth. • Participation in regional planning such as the Canterbury Energy Inventory/ Strategy and the Canterbury Land Transport Plan.

Mitigation measures
Subsidiary case studies

Clean energy ambition

Kōwhai Park, Christchurch Airport's solar farm, is the cornerstone of the airport's wider ambition to create a clean energy hub that supports decarbonisation across the region.

Construction on the solar farm – one of New Zealand's largest solar projects – recently reached a major milestone, with the installation of the first row of solar panels, known in the industry as the 'Golden Row'. With 300,000 panels across 230 hectares, when completed, the project will generate enough renewable energy to power the equivalent of 36,000 homes.

In recognition of the airport's leadership in building a clean energy future through Kōwhai Park, Christchurch Airport has been named the Platinum Category Winner of the Airports Council International's Green Airports Recognition 2025. One of only four airports globally to receive Platinum recognition, the award celebrates the airport's role in establishing a major joint venture between Contact Energy and Lightsource bp to develop the solar farm.

As part of the Kōwhai Park energy precinct, Christchurch Airport has also entered into a partnership with Fabrum – a New Zealand company that is leading the world in zero-emissions transition technologies – to establish a hydrogen testing facility.

Fabrum's facility will enable the development of hydrogen technology for the aviation sector, as part of a consortium with Airbus, Fortescue Future Industries (FFI), Air New Zealand and Hiringa Energy. The collaboration between the airport and Fabrum will also position Christchurch as a hub for liquid hydrogen activity.

Citycare tackling vehicle emissions

Over 98 percent of Citycare Group's Scope 1 + 2 emissions come from the fuel use of the fleet, making this the primary focus of Citycare's Emissions Reduction Plan.

Citycare's fleet is diverse, comprising trucks, utes, vans, cars, and off-road specialist equipment such as mowers – with almost half of the fleet comprising of trucks and utes alone.

A key current challenge is sourcing fit-for-purpose electric vehicle technology that can meet the varied operational requirements of the business. Citycare is optimistic that technological advancements will provide more solutions over time.

Citycare has made significant progress on its journey, with over 55 percent of passenger vehicles now classified as low-emission vehicles, and looking ahead is committed to no longer procuring pure internal combustion engine (ICE) vehicles unless no other option exists.

Additionally, Citycare is working hard to optimise its existing fleet by improving driver behaviour and reducing fleet size. The organisation is also conducting electric vehicle trials and preparing for the electrification of its utes and trucks as suitable models come to market.

Enable meets emissions target five years ahead of schedule

A highlight of the 2025 year for Enable was the reduction of total Scope 1 and Scope 2 greenhouse gas emissions to 38 tCO_2e (market-based reporting), meeting the 2030 target.

As a Certified B-Corp, Enable is intentional about generating positive impact for the community and the environment. This includes considering the way network infrastructure is deployed and maintained, while seeking ways to minimise any negative impact on the environment.

Total Scope 1 + 2 GHG emissions for the organisation are down by 85% from the FY20 baseline of 258 tCO_2e. This has been achieved with a full transition of the vehicle fleet, with all bar one vehicle now battery electric powered, and by a commitment to certified renewable electricity.

Enable's next focus is its supply chain emissions, by working closely with field service contractors to support lower vehicle emissions and to minimise waste, while also encouraging employees to reduce their own travel emissions and waste streams.

Flexible energy control as part of a smarter, more affordable energy transition

Orion's ripple control system is evolving as part of the energy transition. Combined ripple control and retailer control of hot water delivers customer and climate benefits through better alignment of hot water heating demand with times of low-carbon electricity.

Ripple control sends electrical signals over the distribution network to switch water-heater circuits on or off. This manages peak demand and emergency demand while optimising the amount of physical infrastructure Orion needs to build.

Orion's 'hot water trial' in collaboration with electricity retailers has around 14,000 customers already signed up to benefit. While ripple control has been used for decades, the trial combines ripple control and retailer control of hot water. Retailers can reward customers to shift consumption into lower-cost or high-renewable generation time and aggregate the capacity created to optimise the electricity market, keeping the cost of community energy infrastructure down while balancing energy demand across the region.

Reuse and recycling to reduce emissions

EcoCentral's focus on recycling and giving a range of objects a second life also contributes significant greenhouse gas emissions reductions by diverting thousands of tonnes of material from landfill.

EcoCentral's EcoShop plays an important role in Christchurch's circular economy, with 1,423 tonnes of waste reused in the 2025 year. EcoCentral's rigorously audited recycling programme, which processes plastic to up to 99.8% purity, recycled 2,726 tonnes of plastics over the year, as well as over 13,500 tonnes of glass and 13,200 tonnes of paper and cardboard.

In total, for the 2025 financial year, EcoCentral diverted 61,245 tonnes of material from landfill either through reuse or recycling. With transport emissions deducted, this represents an emissions reduction of 10,367 tCO_2e.

EcoCentral is also reducing emissions within its own operation. With 725 tonnes of GHG emissions in 2025, the organisation is focusing on its most significant sources, beginning transitioning its vehicle fleet to low- and zero-emission alternatives.

LPC switching to electrical infrastructure

Lyttelton Port Company is taking steps to reduce its Scope 3 emissions, those generated across its wider value chain, with upgrades to its Inner Harbour electrical infrastructure. Supported by co-funding from the Energy Efficiency and Conservation Authority (EECA), this initiative will enable visiting fishing vessels to plug into LPC's electrical network, reducing reliance on diesel generators while at berth.

By switching to shore power, vessels can operate using renewable electricity supply, cutting diesel consumption and lowering greenhouse gas emissions. This directly supports LPC's emissions reduction targets and contributes to improved air quality for port workers and the surrounding community. The upgrades are also expected to reduce noise pollution.

Smart meters installed at each connection point will help track energy use. These upgrades are part of LPC's broader commitment to sustainable port practices and to align with regional and national goals for low-emission transport infrastructure.

Metrics and Targets

Ngā Waeine me ngā Ūnga

This section describes CCHL's climate change impact and the effectiveness of its response by quantifying greenhouse gas emissions and other key performance measures.

GHG emissions

CCHL has prepared its FY25 GHG emissions inventory in accordance with the *The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard, The Greenhouse Gas Protocol: GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard,* and *The Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Standard* (together, the GHG Protocol). CCHL has sought assurance over only Scope 1 + 2 emissions totals in FY25.

CCHL applies an operational control consolidation approach in the preparation of its GHG emissions inventory, as defined by the GHG Protocol. Under the operational control approach, CCHL accounts for 100% of the GHG emissions over which it or one of its subsidiaries has operational control. The scope of this control approach is not materially different from the approach taken in the previous year.

The organisational boundary includes Christchurch City Holdings Limited and its subsidiaries as shown below:

Figure 2: CCHL's organisational boundary including % ownership by CCHL (if not 100%)

The operational boundary of the GHG emissions inventory includes all direct business activities within the operational boundaries of Christchurch City Holdings Limited. It excludes Development Christchurch on materiality grounds (its emissions generating activities are minor).

CCHL measures emissions associated with the following categories:

- Scope 1 – Direct GHG emissions: emissions from sources that are operationally controlled by CCHL/its subsidiaries.
- Scope 2 – Indirect GHG emissions: emissions from consumption of purchased electricity, heat, or steam.
- Scope 3 – Other indirect GHG emissions that are a consequence of CCHL's activities but occur at sources owned or controlled by another company.

A materiality exercise was undertaken to assess Scope 3 emissions sources supplied by subsidiaries based on five criteria: availability of data, magnitude, level of control, ability to measure and industry practice. See table 3 for a list of Scope 3 emissions which are within the operational scope.

All GHG emissions are presented as tonnes of carbon dioxide equivalent (tCO_2e). No base year or other restatements have been made.

Table 3: CCHL GHG emissions inventory FY25

Scope	Emissions source	CCHL	CIAL	City Care	EcoCentral	Enable	LPC	Orion	FY25	FY24	% change	FY22 (base year)	% change
1	Stationary combustion	0	198	4	0	4	0	136	342	217	+57%		
1	Mobile combustion	0	49	8,192	528	4	8,032	2,079	18,884	19,643	-4%		
1	Fugitive emissions	0	10	0	0	29	38	114	191	177	+8%		
Subtotal Sc/1		**0**	**257**	**8,196**	**528**	**37**	**8,070**	**2,329**	**19,416**	**20,036**	**-3%**	**20,452**	**-5%**
2	Purchased electricity (location-based)	5	1,503	138	197	195	1,341	173	3,551	2,429	+46%	3,413	4%
2	Purchased electricity (market-based)	5	0	155	221	1	0	41	423	419	N/A	N/A	N/A
2	Transmission and distribution losses	0	0	0	0	0	0	10,010	10,010	10,932	-8%	13,608	-26%
Subtotal Sc/1+2 (location-based)		**5**	**1,760**	**8,334**	**725**	**231**	**9,410**	**12,513**	**32,978**	**33,397**	**-1%**	**37,473**	**-12%**
3 cat 1	Purchased goods and services					486			486				
3 cat 3	Well to tank fuel		176	2,038	123			231	2,569				
3 cat 4	Upstream distribution				209	18	94	260	581				
3 cat 5	Waste to landfill		107	763	1	1	156	27	1,056				
3 cat 6	Business travel	3	351	281	4	27	116	305	1,086				
3 cat 7	Employee commuting	7	84	1,168	142	73	1,229	255	2,957				
3 cat 9	Downstream distribution				2,065				2,065				
3 cat 11	Use of sold products		712,021				28,827		740,848				
Subtotal Sc/3		**10**	**712,739**	**4,251**	**2,545**	**604**	**30,422**	**1,078**	**751,648**				

* Assurance from AuditNZ covers FY25 Scope 1 + 2 (location-based). All numbers are rounded to 0 decimal points , columns may not add due to rounding.

Methodology

GHG emissions were calculated using emissions factors from the following sources:

- New Zealand Ministry for the Environment's: *Measuring emissions: A guide for organisations: 2025 detailed guide* (GWP100, IPCC Fifth Assessment Report; 2024 factor used for electricity)
- Australian Governance Department of Climate Change, Energy, the Environment and Water: *2024 greenhouse account factors* (GWP100, AR5, IPCC Fifth Assessment Report)
- BraveTrace residual supply mix (GWP100)
- New Zealand Environmental Protection Authority: Notice of approval of unique emission factors (GWP100)
- Fair Supply (GWP100)
- The Airport Council International's Airport Carbon and Emissions Reporting Tool version 7.2338 (GWP100)
- ICAO CORSIA CO_2 Estimation and Reporting Tool (GWP100)
- United States Environmental Protection Agency: *Ports emissions. Methodologies for estimating port-related and goods movement mobile source emissions* (GWP100).

Uncertainty is assessed based on two factors, data quality and calculation methodology. Primary calculation methods are preferred, being more accurate than secondary methods. All Scope 1 + 2 emissions are calculated using direct activity-based measurement and therefore have low uncertainty.

Analysis of data quality is undertaken by each subsidiary with limited or reasonable assurance.

Exclusions

No significant Scope 1 or 2 GHG emission sources have been excluded from the CCHL inventory. Emissions associated with Development Christchurch are not significant and have been excluded from the inventory.

Progress towards targets

FY22 is CCHL's base year against which progress on Scope 1 + 2 GHG reductions are measured. This was the first year in which GHG emissions inventories were calculated across the CCHL Group.

Some subsidiaries have been working to reduce their impact on climate change for many years and can demonstrate significant emissions reduction, with both Christchurch Airport and Enable having reached their 2030 targets. Some have less time to achieve emissions and some operate in challenging environments but all have planned initiatives in place to reach targets and monitor developing markets, suppliers and technologies to support this transition (refer pages 21-25).

CCHL's FY25 GHG emissions shows absolute Scope 1 + 2 emissions to be down by 1% on the previous year and down by 12% since FY22. Scope 1 + 2 emissions are down by 31% since FY22 with additional market-based mechanisms applied (renewable energy certificates and carbon credit purchases).

CCHL's focus is on reducing absolute emissions, however we also monitor emissions on a market and intensity basis to fully understand our impact on climate change relative to business performance. With an asset value of $6.3 billion for financial year ending 30 June 2025, CCHL Group's emissions intensity is 5.22 tCO_2e/$m (last year 5.54 tCO_2e/$M).

This year a robust screening process has been undertaken to set a meaningful boundary for what is included and reported under Scope 3 in FY25. Scope 3 totals 751,648 tCO_2e, most of this is associated with use of the services provided by the businesses. In particular, 701,977 $tCOe_2$ (94%) is associated with aircraft emissions from Christchurch Airport.

Target

CCHL has set a GHG emissions reduction ambition as follows:

42% **absolute GHG emissions reduction in Scope 1 + 2 GHG emissions by 2030 on a FY22 base year aligned with the global goal of limiting warming to 1.5°C**

The target was set using the Science-Based Targets initiative (SBTi) absolute contraction method (Corporate Near-term Tool v2.3), it has not been submitted to or validated by the SBTi.

Approach to offsets

CCHL's principal focus is on gross emissions reductions and progress towards targets is measured in this way. Additionally, some subsidiaries purchase carbon credits to voluntarily offset residual emissions. In 2025, Christchurch Airport voluntarily purchased and permanently cancelled 1,287 tonnes of New Zealand Units (NZUs) under the New Zealand Emissions Trading Scheme (ETS). NZUs were sourced from indigenous forest projects through Ekos (Flax Hill in Canterbury and Maruia on the West Coast). Ekos cancels NZUs on behalf of its clients quarterly and has its unit cancellation independently audited.

In 2025, Orion retired 2,644 verified emission reduction units associated with a 40MW wind power project supporting villages around Maliya and Miyana to offset residual operational emissions. The VERs are certified by the Gold Standard Foundation and monitored in their efficacy in delivery.

Other metrics:

Metric	2025 performance	Description of performance against target
Emissions intensity (asset value)	With an asset value of $6.3 billion for financial year ending 30 June 2025, CCHL Group's emissions intensity is 5.22 tCO_2e/$m.	🟢 2024 5.54 tCO_2e/$M.
Year on year emissions reduction (location-based)	Scope 1 + 2 (location-based) down 1% on 2024.	🟢 Year on year reduction.
Year on year emissions reduction (market-based)	Scope 1 + 2 GHG emissions (market-based) down 5% on 2024.	🟢 Year on year reduction.
Total emissions reduction (gross)	Scope 1 + 2 (location-based) down 12% since 2022.	🟢 2030 target is 42% down since 2022.
Total emissions reduction (net)	Net Scope 1 + 2 GHG emissions (market-based) down 31% on 2022.	🟡 Target is absolute, but in the short term the impact can be offset with market mechanisms.
Capital allocation (total $000)	$105,067	
Transition risks: Amount/percentage of assets/business activities at risk	CCHL has begun to understand its exposure through quantification of climate-related risk undertaken by each subsidiary and continues to work on quantification of anticipated financial impact.	
Physical risks: Amount/percentage of assets/business activities at risk	CCHL has begun to understand its exposure through quantification of climate-related risk undertaken by each subsidiary and continues to work on quantification of anticipated financial impact.	
Opportunities: Amount/percentage of assets/business activities aligned with opportunity	CCHL considers that all business activities are potentially linked to climate-related opportunity and has begun to value such opportunities through quantification of climate-related risk by each subsidiary.	
Internal carbon price	CCHL uses a marginal abatement cost of $68/t in line with the 2025 auction reserve price of the NZ ETS to assess mitigation options.	
Executive remuneration	Performance metrics related to climate-related risks and opportunities are excluded from CCHL executive and other senior management remuneration.	
Board training	Percentage of directors who have completed Institute of Directors Climate Change Governance Essentials Course – 80%.	

🟢 Achieved 🟡 In progress 🔴 Not achieved

Allocation of capital

CCHL has elected to disclose the amount of capital expenditure, financing, or investment deployed toward climate-related risks and opportunities at the subsidiary level.

Subsidiary	2025 expenditure $000		Nature of spend Capex	Opex	Climate impact Mitigation	Adaptation
LPC	145	Electrical systems	✓			✓
LPC	565	Stormwater improvements	✓			✓
LPC	10	Coal yard water treatment	✓			✓
LPC	7,181	Te Awaparahi Bay reclamation	✓			✓
LPC	296	Maintenance and resilience (wharves, jetties)		✓		✓
LPC	4,106	Fleet replacement		✓	✓	
Enable	2	Flood protection	✓			✓
Enable	326	HVAC and solar	✓		✓	
EcoCentral	96	2 x electric forklifts	✓		✓	
Citycare Group	1,662	Low emission vehicles, emissions management software, technical support	✓	✓	✓	
Orion	87,137	Network resilience and upgrades	✓	✓	✓	✓
CIAL	3,400	Energy solutions: Kōwhai Park solar farm, EV energy hub, LED lighting upgrade, fleet upgrades (incl Fire vehicle)	✓		✓	
CIAL	142	Water and drainage initiatives	✓			✓
TOTAL	**105,067**					

Assurance

Limited assurance has been sought over only Scope 1 + 2 (location-based) emissions totals (pages 36-37), this assurance has been undertaken by AuditNZ.

Group Assurance Report

AUDIT NEW ZEALAND
Mana Arotake Aotearoa

Independent Limited Assurance Report

To the readers of Christchurch City Holdings 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 City Holdings Limited and its subsidiaries and controlled entities (together referred to as the group). The Auditor-General has appointed me, Chantelle Gernetzky, 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, in metric tonnes of carbon dioxide equivalent, classified as Scope 1 and Scope 2 (calculated using the location-based method), in Table 3 on pages 36 to 37.
- The statement describing the standards that the GHG emissions have been measured in accordance with, on page 35.
- The approach used to consolidate GHG emissions (operational control) on page 35.
- The sources (or references to sources, where applicable) of emission factors and the global warming potential rates used, on page 36 and Table 6 on page 53.
- The summary of specific exclusions of Scope 1 and Scope 2 (calculated using the location-based method), emissions sources, including facilities, operations or assets with a justification for their exclusion, on page 38 and Table 2 on page 49.
- 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, in sections 5 to 7 on pages 52 to 55.
- 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 36 and in section 6 on pages 53 to 54.

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 2022 (base year) GHG disclosures in Table 3 on pages 36 to 37, 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.

AUDIT NEW ZEALAND
Mana Arotake Aotearoa

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 CS 1 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.

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) disclosures.

To support our limited assurance conclusion we engaged with component assurance practitioners to obtain evidence over GHG emissions information from entities within the group reporting boundary.

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 54, 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.

The other information comprises all of the information included in the Group's Climate Statement other than the items specifically stated as subject to assurance in the Scope of the engagement section above.

Our assurance engagement does not extend to any other information included, or referred to, in the Climate Statement 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.

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.

AUDIT NEW ZEALAND
Mana Arotake Aotearoa

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.

Chantelle Gernetzky
Audit New Zealand
On behalf of the Auditor-General
Christchurch, New Zealand
30 October 2025

Appendix 1

CCHL Group Greenhouse Gas Inventory Preparation

1. Purpose

CCHL subsidiaries' GHG emissions are consolidated along with CCHL's corporate emissions using the methodology described here. The consolidated GHG inventory is referred to as the CCHL Group inventory.

2. Reporting standard

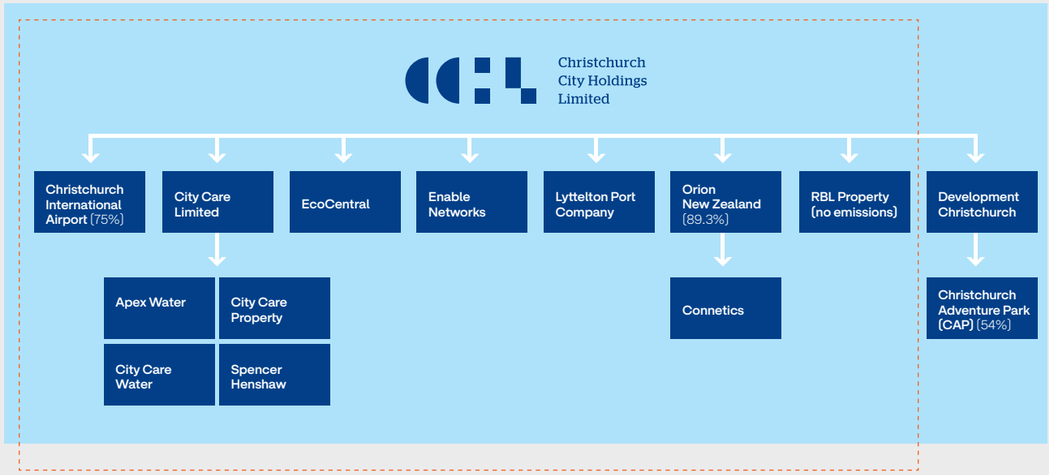
This consolidated account follows guidance and principles of *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)* (GHG Protocol). This is the preparation standard used by each subsidiary for their respective emissions inventories.[1]

3. Consolidation approach

Organisational Boundary

The operational control approach is used to consolidate CCHL's organisational boundary. Under this approach, the CCHL inventory includes all GHG emissions sources from its subsidiaries (Fig 2). It is considered that CCHL has operational control over the emissions associated with subsidiary activities. *"A company has operational control over an operation if the former or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation"*[2]. The consolidation of GHG emissions data will only result in consistent data if all levels of the organisation follow the same consolidation policy, so once a consolidation policy has been selected, it shall be applied to all levels of the organisation. Thus, all subsidiary boundaries follow operational control to account for their emissions. Development Christchurch is excluded from this boundary on materiality grounds (its emissions generating activities are minor). The scope of this control approach is not materially different from the approach taken in the previous year.

Figure 1: CCHL's organisational boundary including % ownership by CCHL if not 100%.



Operational Boundary

CCHL measures emissions associated with the following categories:

- Scope 1 (included): Direct GHG emissions from activities operationally controlled by CCHL/its subsidiaries e.g. fuel use.
- Scope 2 (included): Indirect GHG Emissions from the generation of purchased electricity that CCHL consumes.
- Scope 3 (included but not assured): Select indirect emissions that are a consequence of CCHL's activities but occur at sources owned or controlled by another company (Table 3).

[1] Some subsidiaries have additionally prepared their GHG emissions inventories in accordance with ISO 14064-1:2018
[2] https://ghgprotocol.org/corporate-standard-frequently-asked-questions

Scope 1 + 2

Scope 1 + 2 emission sources included in the operational boundary are listed in Table 1.

Table 1: Scope 1 + 2 emission source inclusions

Business unit	Scope	Category	Emission source
CCHL Corporate	1		No emission sources
	2	Purchased electricity	Purchased electricity
Christchurch International Airport	1	Stationary combustion	Diesel
			Fire extinguishers
			LPG
			CO_2
		Mobile combustion	Diesel
			Regular petrol
		Fugitive sources	R1234ze
			R22
			R417A
			De-icing
	2	Purchased electricity	Purchased electricity
Lyttelton Port Company	1	Mobile combustion	Diesel
			Regular petrol
			Premium petrol
		Fugitive sources	R410a
			R32
			Welding gases
	2	Purchased electricity	Purchased electricity
Citycare	1	Stationary combustion	LPG
			Petrol
		Mobile combustion	Diesel
			Regular petrol
			Premium petrol
			Lubricants
	2	Purchased electricity	Purchased electricity
Orion	1	Stationary combustion	Diesel
			LPG
			Petrol
			Premium petrol
		Mobile combustion	Diesel
		Fugitive sources	R134a
			R407c
			Sulphur hexafluoride
	2	Purchased electricity	Purchased electricity
	2	Transmission & distribution line losses (Orion)	
EcoCentral	1	Mobile combustion	Diesel
			Regular petrol
	2	Purchased electricity	Purchased electricity
Enable	1	Stationary combustion	Diesel
		Mobile combustion	Diesel
			Regular petrol
		Fugitive	R407c
	2	Purchased electricity	Purchased electricity

Scope 1 + 2 emission sources excluded from the operational boundary are listed in Table 2.

Table 2: Scope 1 and 2 emission source exclusions

Business unit	Scope	Category	Emission source	Estimated size (t CO_2e)	Justification for exclusion
City care	1	Fugitive sources	Welding gases	Unknown	Gases used contain a small % of CO_2 gas.
			Refrigerants – Vehicles	7.00	Access to data, magnitude of emissions low and shareholder interest low.
			Refrigerants – Fridges	0.69	Difficult to obtain data. Not considered significant source.
	2	Purchased electricity	Leased sites - Kioreroa Rd, Great South Rd, Braeside Ave	Unknown	No information available to determine electricity usage. Not a significant source of emissions.
Enable	1	Fugitive sources	Refrigerants – Vehicles	0.046	Access to data, magnitude of emissions low, stakeholder interest low.
			Refrigerants – Fridges	0.066	Difficult to access data, not a significant emission source.
Christchurch Adventure Park (CAP)	1	Mobile combustion	Fleet	5 x vehicles	Magnitude of emissions and level of control
	2	Purchased electricity	Purchased electricity	32.83	Magnitude of emissions and level of control

Scope 3

Scope 3 emission sources included in the operational boundary are listed in Table 3.

Table 3: Scope 3 emission source inclusions

Business unit	Category	Emission source
CCHL Corporate	Category 3: Fuel- and Energy-related activities	Transmission and distribution losses - Electricity
	Category 5: Waste Generated in Operations	Waste to landfill
	Category 6: Business travel	Air travel
		Accommodation
	Category 5: Waste Generated in Operations	Waste to landfill
	Category 6: Business travel	Air travel
		Accommodation
CIAL	Category 3: Fuel- and Energy-related Activities	Well-to-tank – Petrol
		Well-to-tank – Diesel
	Category 5: Waste Generated in Operations	Waste to landfill
	Category 6: Business travel	Air travel
		Accommodation
	Category 7: Employee commuting	Employee commuting
		Working from home
	Category 11: Use of Sold Products	APU usage
		Engine run ups
		Full flight emissions
		Tenant/contractor vehicles
		Ground access, business and shuttles
		Ground access, cars and taxis
Lyttelton Port Company	Category 4: Upstream Transportation and Distribution	Transmission and distribution losses - Electricity
		Road freight
		Rail freight
		All other freight and distribution
	Category 5: Waste Generated in Operations	Waste to landfill
	Category 6: Business Travel	Air travel
		Accommodation
	Category 7: Employee Commuting	Employee Commuting
		Working from home
	Category 10: Use of Sold Products	Shipping emissions

Business unit	Category	Emission source
Citycare	Category 3: Fuel- and Energy-related Activities	Well-to-tank – Diesel
		Well-to-tank – Petrol
	Category 5: Waste Generated in Operations	Waste to landfill
	Category 6: Business Travel	Air travel
		Accommodation
	Category 7: Employee Commuting	Employee commuting
		Working from home
Orion	Category 3: Fuel- and Energy-related Activities	Well-to-tank – Diesel
		Well-to-tank – Petrol
	Category 4: Upstream Transportation and Distribution	Road freight
		Air freight
		All other freight and distribution
	Category 5: Waste Generated in Operations	Waste to landfill
	Category 6: Business Travel	Air travel
		Accommodation
	Category 7: Employee Commuting	Employee Commuting
		Working from home
	Category 11: Use of Sold Products	Use of sold products
EcoCentral	Category 3: Fuel- and Energy-related Activities	Well-to-tank – Diesel
		Well-to-tank – Petrol
	Category 4: Upstream Transportation and Distribution	Road freight
	Category 5: Waste Generated in Operations	Waste to landfill
	Category 6: Business Travel	Air travel
		Accommodation
	Category 7: Employee Commuting	Employee commuting
		Working from home
Enable	Category 4: Upstream transportation and distribution	Road freight
		Sea freight
		Rail freight
		Air travel
		Contractor fuel
	Category 5: Waste Generated in Operations	Waste to landfill
	Category 6: Business Travel	Air travel
		Accommodation
	Category 7: Employee Commuting	Employee commuting
		Working from home

Scope 3 emission sources excluded from the operational boundary are listed in Table 4. Category 14: Franchises and Category 15: Investments are not included as they are not relevant to CCHL.

Table 4: Scope 3 emission source exclusions

	Scope	Category	Emission source	Estimated size of exclusion (tCO_2e)
Christchurch International Airport	3	5: Waste Generated in Operations	Wastewater	156.01
	3	1: Purchased Goods and Services	All purchased goods & services	58.92
	3	3: Fuel- and Energy-related Activities	Well-to-tank - LPG	22.96
	3	13: Downstream Leased Assets	Downstream leased assets	5163.44
	3	2: Capital Goods	All capital goods	8447.75
	3	3: Fuel- and Energy-related Activities	Transmission and distribution losses – Electricity	137.32
Lyttelton Port Company	3	5: Waste Generated in Operations	Waste not sent to landfill	399.63
	3	1: Purchased Goods and Services	All purchased goods & services	7042.78
	3	2: Capital Goods	All capital goods	1159.33
	3	8: Upstream leased assets	Container handlers and reach stackers	1307.32
	3	13: Downstream Leased Assets	Downstream leased assets	49.31
	3	6: Business Travel	Rental car	0.62
	3	3: Fuel- and Energy-related Activities	Transmission and distribution losses – Electricity	70.69
Citycare	3	5: Waste Generated in Operations	Waste not sent to landfill	122.47
	3	1: Purchased Goods and Services	All purchased goods & services	38890.25
	3	2: Capital Goods	All capital goods	12.98
	3	4: Upstream Transportation and Distribution	Inbound freight of purchased goods, equipment, and vehicles	Unknown
	3	6: Business Travel	Rental cars	Unknown
	3	6: Business Travel	Staff air travel - Apex	Unknown
	3	6: Business Travel	Accommodation - Apex	Unknown
	3	6: Business Travel	Taxi travel	Unknown
	3	6: Business Travel	Private vehicle travel	Unknown
	3	7: Employee Commuting	Employee commuting - Apex	Unknown
	3	7: Employee Commuting	Working from home - Apex	Unknown
	3	7: Employee Commuting	Contractor fuel	Unknown
	3	8: Upstream leased assets	Refrigerant use from leased buildings (HVAC)	Unknown
	3	3: Fuel- and Energy-related Activities	Transmission and distribution losses – Electricity	10.56
Orion	3	5: Waste Generated in Operations	Recycling waste	2.25
	3	1: Purchased Goods and Services	All purchased goods & services	7532.09
	3	2: Capital Goods	All capital goods	7080.69
	3	6: Business Travel	Rental car	5.83
	3	6: Business Travel	Taxi travel	1.06
	3	6: Business Travel	Staff mileage	7.16
	3	10: Processing of Sold Products	Processing of sold products	33673.86
	3	8: Upstream leased assets	Upstream leased assets	16.35
	3	9: Downstream Transportation and Distribution	Downstream transportation and distribution	54.80
	3	12: End-of-Life Treatment of Sold Products	End of life of sold products	0.97
	3	3: Fuel- and Energy-related Activities	Transmission and distribution losses – Electricity	5.25
EcoCentral	3	3: Fuel- and Energy-related Activities	Well-to-tank - Electricity	15.16
	3	6: Business Travel	Taxi travel	0.03
	3	6: Business Travel	Private vehicle travel	0.20
	3	6: Business Travel	Rental car	Unknown
	3	1: Purchased Goods and Services	All purchased goods & services	929.37
	3	2: Capital Goods	All capital goods	253.26
	3	12: End-of-Life Treatment of Sold Products	Disposal of paint and compost from resource recovery centre	Unknown
	3	4: Upstream Transportation and Distribution	Road freight - Waste transfer to Kate Valley Landfill	Unknown
	3	5: Waste Generated in Operations	Wastewater	Unknown
	3	9: Downstream Transportation and Distribution	Downstream transportation and distribution	2065.22
	3	9: Downstream Transportation and Distribution	Incoming waste to EcoCentral	Unknown
	3	9: Downstream Transportation and Distribution	Customer travel to EcoDrop/EcoShop facilities	Unknown
	3	3: Fuel- and Energy-related Activities	Transmission and distribution losses – Electricity	14.97

	Scope	Category	Emission source	Estimated size of exclusion (tCO_2e)
Enable	3	6: Business Travel	Taxi travel	0.22
	3	6: Business Travel	Rental car	0.63
	3	6: Business Travel	Staff personal vehicle use	15.00
	3	6: Business Travel	Staff mileage	2.99
	3	1: Purchased Goods and Services	All purchased goods & services	Unknown
	3	2: Capital Goods	All capital goods	Unknown
	3	11: Use of Sold Products	Energy consumed by customer premise equipment	1770.00
	3	11: Use of Sold Products	Energy consumed by city Wi-Fi	Unknown
	3	12: End-of-Life Treatment of Sold Products	Customer premise equipment end-of-life	Unknown
	3	3: Fuel- and Energy-related Activities	Transmission and distribution losses – Electricity	14.71
CCHL Corporate	3	5: Waste Generated in Operations	Recycled waste	0.03
	3	6: Business Travel	Air travel	2.44
	3	6: Business Travel	Taxi/Uber travel	0.03
	3	3: Fuel- and Energy-related Activities	Transmission and distribution losses – Electricity	0.36

4. Scope 3 screening assessment

A screening assessment is undertaken to determine which scope 3 emission sources are to be included in the operational boundary. Emission sources are assessed for completeness based on how many subsidiaries have included that emission source. Emissions sources are then scored 1-3 on the criteria included in Table 5. All emission sources that scored 2 or above (as an average of all factors) were included in the operational boundary of the inventory, except where an emission source was identified as de minimis (i.e. not significant). Results of this scoring are recorded in the Group consolidated emissions spreadsheet.

Table 5: Screening criteria

Assessment factor	Score		
	1	2	3
Size	<100 tCO_2e	100-2,000 tCO_2e	>2,000 tCO_2e
Level of control	Subsidiaries have no control over the activity in the value chain	CCHL can influence	Subsidiary has some form of limited control.
Ability to measure	No data, no clear methodology	Poor data or methodology difficulties	Good quality data and clear methodology
Industry practice	Rarely reported in NZ carbon inventories	Sometimes reported in NZ carbon inventories	Commonly reported in NZ carbon inventories

5. Calculations

Each CCHL subsidiary performs their own GHG emissions calculations when developing their GHG emissions inventories. Emissions are typically calculated using the following formula. In a limited number of instances, supplier specific GHG emissions calculations have been used.

Activity/spend data x emissions factor = GHG emissions

GHG emissions are reported and calculation in tonnes of carbon dioxide equivalent (CO_2e), which allows the different greenhouse gases to be compared on a like-for-like basis relative to one unit of CO_2. CO_2e is calculated by multiplying the emissions of each GHG by its 100-year global warming potential (GWP) as specified in the IPCC's Fourth Assessment Report (2014) as per MfE (2025) methodology.

Emission factors

Where possible, the New Zealand Ministry for the Environment's (MfE) *Measuring emissions: A Guide for Organisations: 2025 detailed guide*[3] (GWP100, AR5) is used for sourcing relevant emissions factors. Other emission factors used in the calculation of CCHL's GHG emissions have been sourced from the following sources:

Table 6: Emissions Factors in use (GWP100)

Source	Year	Application	Subsidiary
UK Government: GHG conversion factors for company reporting GWP100, AR5	2025 – EcoCentral 2025 – Citycare 2023 - LPC	Well-to-tank – Diesel/Petrol	LPC Citycare EcoCentral
Australian Department of Climate Change, Energy, Environment and Water: Australian national greenhouse accounts factors GWP100, AR5	2024	Well-to-tank – Diesel/Petrol	CIAL Citycare
BraveTrace residual supply mix factor	24/25	Market-based residual electricity supply	CCHL Citycare Orion EcoCentral
NZ Environmental Protection Authority: Notice of approval of unique emission factors	2023	Waste to landfill (Victoria Flats and Porirua Spicer landfills)	Orion
Fair Supply	N/A	Purchased goods & services Transportation & distribution Fuel & energy-related activities	Orion
The Airport Council International's Airport Carbon and Emissions Reporting Tool 7.2338	Unknown	Use of Sold Products	CIAL
ICAO CORSIA CO_2 Estimation and Reporting Tool	Unknown	Use of Sold Products	CIAL
United States Environmental Protection Agency: Ports emissions. Methodologies for estimating port-related and goods movement mobile source emissions	2022	Use of Sold Products	LPC

A location-based emission factor (MfE, 2025 – 2024 calendar year) was used to measure emissions from purchased electricity. Subsidiaries may adopt market-based mechanisms to further reduce the emissions associated with electricity use, partly because electrification is an important aspect of the transition.

6. Data quality

Uncertainty is assessed based on data quality and calculation methodology. Calculation methodology can increase uncertainty, with primary methods being more accurate than secondary methods. A range of calculation methods are available:

Primary method – based on the data specific for the reporting organisation:

- Direct activity-based method: measurement of direct consumption e.g. of fuel, electricity or refrigerants) - low uncertainty.
- Indirect activity-based method: calculations derived from distance and type of transport, nights of accommodation, kg of waste, time in port and other activity data – low uncertainty.
- Spend-based method: calculations derived from value chain spend– high uncertainty.

Secondary method: based on national or sector averages (e.g. national statistic on employee commuting) – high uncertainty.

Uncertainty ratings are assigned using the rating framework in Table 7 and based on both the calculation methodology and assessed quality of data. The analysis of data quality by CCHL is limited as this is undertaken by each subsidiary with limited (or reasonable) assurance.

Table 7: Data quality

Calculation methodology	Robust	Satisfactory	Questionable
Primary: Direct activity-based method	Low uncertainty	Medium uncertainty	Medium uncertainty
Primary: Indirect activity-based method	Low uncertainty	Medium uncertainty	Medium uncertainty
Primary: Spend-based method	High uncertainty	High uncertainty	High uncertainty
Secondary: Sector/national average method	High uncertainty	High uncertainty	High uncertainty

[3] https://environment.govt.nz/publications/measuring-emissions-guide-2025/

All significant Scope 1 + 2 emissions are calculated using direct activity-based method and therefore have low uncertainty.

Scope	Category	Emission sources	Calculation methodology	Data quality	Uncertainty
1	**Stationary combustion**	Diesel	Direct activity-based method	Robust	Low
		Fire extinguishers	Direct activity-based method	Robust	Low
		LPG	Direct activity-based method	Robust	Low
		CO_2	Direct activity-based method	Robust	Low
	Mobile combustion	Diesel, petrol, premium petrol	Direct activity-based method	Robust	Low
		Lubricants	Direct activity-based method	Robust	Low
	Fugitive	Refrigerants	Direct activity-based method	Questionable	Medium
		Welding gases	Direct activity-based method	Questionable	Medium
		De-icing	Direct activity-based method	Questionable	Medium
		SF_6	Direct activity-based method	Satisfactory	Low
2	**Purchased electricity**	Purchased electricity (location-based)	Direct activity-based method	Robust	Low
		Purchased electricity (market-based)	Direct activity-based method	Robust	Low
	Transmission and distribution losses	Electricity transmission and distribution losses associated with Orion's network	Direct activity-based method	Robust	Low
3	**Purchased goods and services**	Enable contractor Civtec	Indirect activity-based method	Robust	Low
	Fuel- and energy-related activities	Diesel and petrol well-to-tank	Direct activity-based method	Robust	Low
	Waste generated in operations	Waste to landfill	Indirect activity-based method	Satisfactory	Medium
	Business travel	Air travel	Indirect activity-based method	Robust	Low
		Accommodation	Indirect activity-based method	Robust	Low
	Employee commuting	Employee commuting	Indirect activity-based method	Satisfactory	Medium
		Working from home	Indirect activity-based method	Satisfactory	Medium
	Downstream transport and distribution	Downstream freight associated with EcoCentral	Indirect activity-based and spend-based method	Robust	Low
	Use of sold products	Full flights at Christchurch Airport	Indirect activity-based method CCHL air travel excluded to avoid double counting	Satisfactory	Medium
		Auxiliary power unit usage at Christchurch Airport	Indirect activity-based method	Robust	Low
		Engine run-ups at Christchurch Airport	Indirect activity-based method	Robust	Low
		Landside ground access at Christchurch Airport	Indirect activity-based method	Questionable	Medium
		Ship movements at Lyttelton Port	Indirect activity-based method	Satisfactory	Medium

Inherent uncertainties

There is inherent uncertainty in the measurement and reporting of GHG emissions. This is because the scientific knowledge and methodologies used to determine the emissions factors and processes used to calculate or estimate quantities of GHG emissions sources are continuously evolving, as are GHG reporting standards and the interpretation of them. Efforts have been made to minimise this uncertainty through the use of high-quality activity data, consistent methodologies, and the most up to date available emissions factors available at the time of reporting

7. Double counting policy

In preparing the Group GHG inventory, emissions from services exchanged between subsidiaries must be counted only once. The approach to double counting is as follows:

Principles

- Each subsidiary reports as a stand-alone entity under the GHG Protocol, recognising emissions from services received as Scope 3.
- At the Group consolidated level, intra-group service flows are eliminated where they would otherwise be double-counted. Such cases are material in the areas of transmission and distribution losses and air travel.
- Transparency and consistency in reporting will be maintained across all entities.

Application

Subsidiary-level inventories

- When a subsidiary receives services from another subsidiary, the provider reports the direct emissions under Scope 1, 2 or 3 as appropriate.
- The recipient reports the associated emissions under Scope 3.
- This may result in the same emissions appearing in more than one subsidiary's inventory, which is expected and permissible.

Group-level inventory

- When consolidating to the Group portfolio, all Scope 1 and Scope 2 emissions are rolled up once.
- Efforts have been made to ensure that intra-group service transactions are counted only once in consolidated reporting to avoid duplication. The following rules apply:
  - **Transmission and distribution of electricity (Orion):** The electricity transmission and distribution losses associated with purchased electricity by subsidiaries will be accounted for by Orion (Scope 2). As there is no way to identify the proportion of transmission and distribution losses already measured by Orion, transmission and distribution losses have been excluded in subsidiary Scope 3, category 3.
  - **Air travel (CIAL):** Any air travel arriving or departing Christchurch International Airport has been measured by CIAL in category 11: use of sold products. Almost all group air travel has been measured by CIAL due to the limited geographic spread of the Group, therefore CCHL has subtracted the total air travel emissions across the group from CIAL's full flight emissions measurement (Scope 3, category 11).
  - **Waste to landfill (EcoCentral):** Waste to landfill via EcoCentral services across the group is not double counted as this is not within EcoCentral's inventory boundary.
  - **Upstream freight (CIAL and LPC):** CCHL is unable to identify where instances of double counting occur across the group via sea freight through LPC and air freight in or out of Christchurch International Airport. There is therefore an immaterial risk of double counting across the group (Scope 3, category 4 and Scope 3, use of sold products).
  - **Electricity for broadband (Enable):** Electricity use associated with the use of Wi-Fi is not double counted as Enable does not measure this emission source.

8. Recalculation policy

CCHL will recalculate base year GHG emissions under the following conditions:

Portfolio changes:

- Acquisition or divestment of subsidiaries or major assets
- Mergers, dissolutions, or changes in the financial or operational control of group companies
- Reorganisations that materially affect the boundary of GHG reporting.

Changes in methodology or data accuracy:

- Updates to emission factors or calculation methodologies
- Improved availability or quality of activity data.

Significant errors or omissions:

- Identification of material misstatements or missing data in previously published GHG inventories.

Materiality Threshold

Recalculations will be made when cumulative changes from any of the above triggers result in an estimated impact of 5% or more on total reported emissions. Smaller changes may be documented but not recalculated unless they significantly impact reported trends or performance against emissions targets. No recalculation of base year or previous year emissions has been undertaken in the current year.

Application to Subsidiaries

Each subsidiary is expected to maintain consistent 2022 base year data and adopt this recalculation policy or an equivalent aligned approach.

Documentation and Disclosure

Any recalculation will be clearly documented, including:

- The reason for recalculation
- Scope of change (e.g., entity affected, scope of emissions)
- Impact on previously reported figures
- Changes will be transparently disclosed in annual climate-related reporting and emissions inventories.

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