

Climate Report 2026

Te Whakapuakanga ā-Āhuarangi



Christchurch
City Holdings
Limited

A WHOLLY OWNED SUBSIDIARY OF CHRISTCHURCH CITY COUNCIL

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Reporting entity and statement of compliance

This climate-related disclosure is for the parent company Christchurch City Holdings Limited and its subsidiaries (together referred to as ‘the Group’) for the year ended 30 June 2026 (FY26). The document is prepared in compliance with the Aotearoa New Zealand Climate Standards. CCHL has elected to use the following adoption provisions in NZ CS 2 in this reporting period: Adoption provision 2 (anticipated financial impacts); adoption provision 4 (scope 3 GHG emissions (select scope 3 emissions reported)); adoption provision 5 (comparatives for scope 3 GHG emissions); adoption provision 7 (analysis of trends); adoption provision 8: (Scope 3 GHG emissions assurance) (assurance over select scope 3 emissions has been undertaken).

Foreword and Board Statement

Through its portfolio of subsidiary companies, Christchurch City Holdings Limited (CCHL) supports essential services that help communities remain connected, powered, supplied and resilient.

Climate change presents a material long-term challenge for the infrastructure systems, services and communities that underpin regional prosperity. As steward of a long-term portfolio of essential assets, CCHL has a responsibility to understand climate-related risks and opportunities, support the transition to a lower-emissions economy, and strengthen the resilience of assets and services exposed to a changing climate.

This report describes how climate-related considerations are integrated into governance, strategy, risk management, monitoring and investment decision-making across the Group. It also highlights the contribution of CCHL’s subsidiaries to electrification, sustainable transport and freight, circular resource use, digital connectivity and climate resilience.

Progress has been made in embedding climate-related considerations into decision-making and investment planning. Continued progress will require appropriate investment, innovation and ongoing collaboration across the Group and with stakeholders. Through a long-term stewardship approach, CCHL seeks to create enduring public value while supporting a resilient, prosperous and sustainable future for Christchurch and Canterbury.

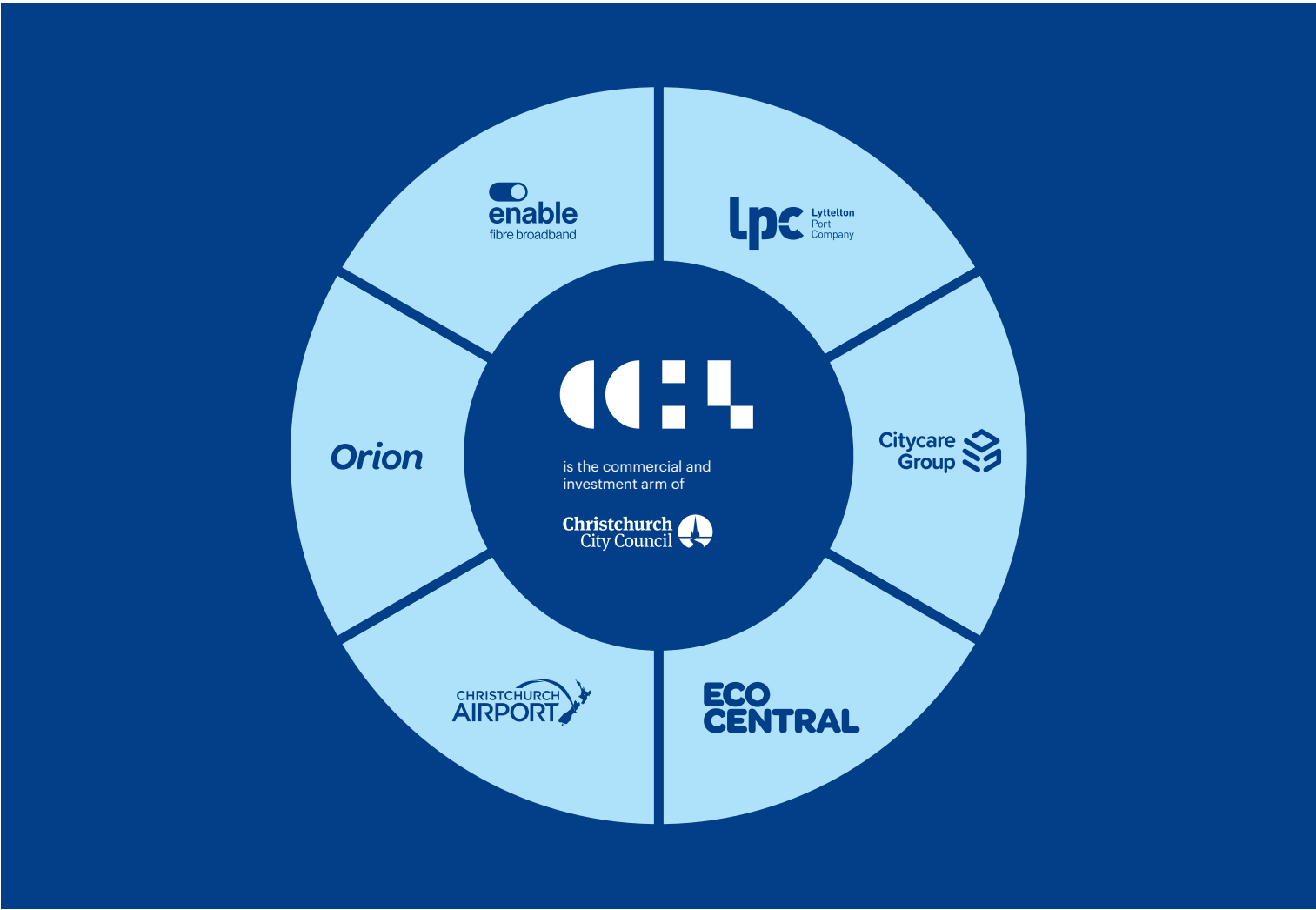
For and on behalf of the Board



BRYAN PEARSON
Chair
30 October 2026



GILL COX
Deputy Chair and Chair of Impact Committee
30 October 2026



At a Glance

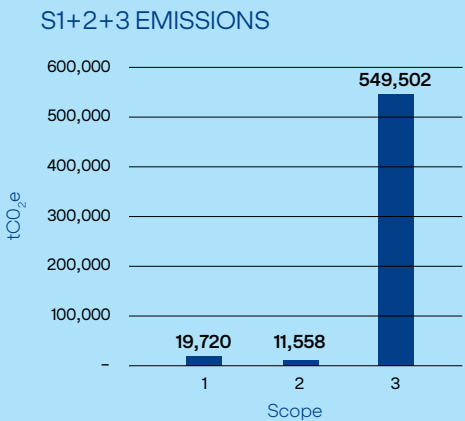
ASSETS
\$6.7
billion



CLIMATE RELATED
WEATHER IMPACTS
\$6.2 million
Experienced during FY26

\$229.3
million

Capital allocation to climate change-related risks and opportunities



5 **Subsidiaries**
Reduced their annual operational emissions



GROUP COMMITMENT TO
SCIENCE-ALIGNED TARGET

1.5° of warming

Declared 2030 target
Net zero by 2050

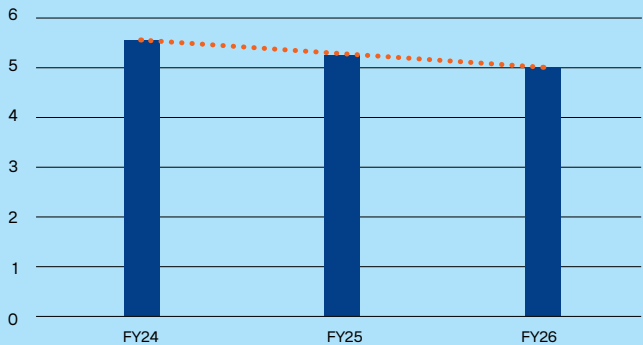
EMISSIONS INTENSITY

5.0 **tCO₂e/\$M**

FY25: 5.22; FY24: 5.54



GHG EMISSIONS INTENSITY OVER TIME



386 ha

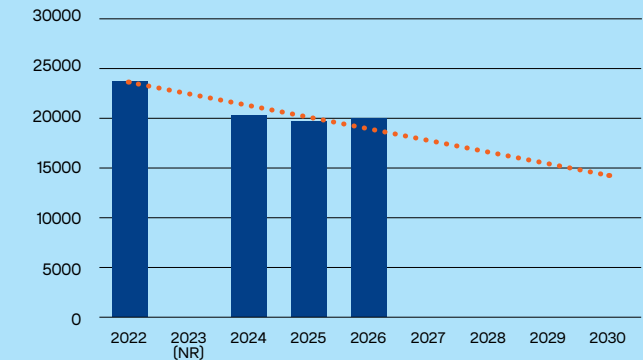
Land under active habitat restoration or protection

EMISSIONS REDUCTION
SINCE FY22 BASELINE

↓16%

[scope 1 and 2]

COHL GROUP PROGRESS TOWARDS TARGET



SCOPE 1+2 GHG EMISSIONS

33,731

tCO₂e (location-based)

down 12% on 2025





Orion substation

CCHL’s Role in Christchurch’s Future

Christchurch City Holdings Limited (CCHL) is the investment and commercial arm of Christchurch City Council. With a portfolio of subsidiary companies, CCHL oversees \$6.7 billion of assets that support the economic, social and environmental wellbeing of Christchurch and Canterbury.

Those six trading subsidiaries are Lyttelton Port Company Ltd (LPC), Enable Networks Ltd (Enable), City Care Limited (Citycare Group), and EcoCentral Ltd (EcoCentral) [all 100%], and Orion New Zealand Ltd (Orion) (10.73% owned by Selwyn District Council) and Christchurch International Airport Ltd (Christchurch Airport) (25% owned by the Crown) (Figure 2).

The Group’s subsidiaries operate and maintain infrastructure and services that are fundamental to everyday life, including electricity distribution, air and sea transport connections, resource recovery, digital connectivity and essential urban services. Together, these businesses contribute to regional prosperity while delivering long-term value for current and future generations. As a long-term investor, CCHL seeks to balance commercial performance with broader outcomes for the city, recognising that resilient infrastructure is fundamental to community wellbeing and economic success.

The Climate Challenge

Climate change is expected to influence both the operating environment and long-term value of CCHL’s portfolio. Physical risks, including more frequent extreme weather events, have the potential to disrupt operations, damage assets and increase maintenance and adaptation costs. At the same time, the transition to a lower-emissions economy is expected to reshape energy systems, transport networks, supply chains and customer expectations.

These changes affect CCHL’s subsidiaries in different ways. Increased demand for electricity will require network investment and resilience improvements. Aviation and freight businesses face changing technologies, customer expectations and regulatory settings. Infrastructure operators must prepare for increasing climate-related disruption while continuing to provide reliable services to communities.

Understanding these risks and opportunities is therefore important not only for individual businesses, but also for the long-term resilience and prosperity of Christchurch and Canterbury. See page 16-17 for risk descriptions and page 23 for risk management process.

How CCHL Creates Value in the Transition

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 vital infrastructure to support the needs of the region and strong financial returns to the Council over the long term. Resilience is critical to this goal. CCHL ensures strong governance processes exist for the Group. Investment decisions are planned with climate change mitigation and adaptation considerations incorporated into the business case, in line with our Responsible Investment Policy.

With regard to climate change, as well as other areas of sustainability, CCHL acts as a connector, enabler and risk steward for the Group, balancing alignment and local autonomy. CCHL monitors the performance of the subsidiaries against their stated economic, environmental and social performance objectives provided in subsidiary annual Statements of Intent as well as relevant benchmarks.

Strategic roles in climate transition

CCHL has an important role in providing reliable, resilient infrastructure into the future and in driving the transition to renewable energy.

Each subsidiary plays a role in this transition, in many cases this is central to their strategy.

 Christchurch City Holdings Limited			 Lyttelton Port Company		 fibre broadband	
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 Resilience of import/export of commodities to support economic outcomes, with multi-modal connections and supporting low emissions supply chain.	Circular economy Minimising waste to landfill and maximising the lifespan of resources by keeping them in circulation.	Digital enablement Affordable access to clean, fast, reliable connectivity- supporting technology the shift to low-emissions economy.	Climate resilience Water management, energy efficiency, green infrastructure, open space management and restoration activities.

Leadership roles in climate transition

Some subsidiaries play important advisory roles in the transition of their sector, exhibiting leadership, driving change and influencing their supply chains.

 <p>Sustainable Aviation Aotearoa – Co-Chair, Zero Emission Aviation working group</p> <p>International Industry Working Group Airport Compatibility of Alternative Aviation Fuels Task Force</p> <p>Airport Carbon Accreditation TaskForce – Technical Expert Representative</p> <p>Airport Council International Asia Pacific and Middle East – Environmental Committee Member</p> <p>NZ Airports Sustainability Working Group – Chair & Secretariat</p> <p>NZ Hydrogen in Aviation Consortium</p>	 <p>Electricity Sustainability Group – Chair</p> <p>Climate Change Commission Technical advisory group member</p> <p>Centre for Sustainable Finance – Energy Taxonomy technical advisory group covering adaptation and mitigation</p>
 <p>IAPH Technical Committee on Climate and Energy</p>	 <p>Telecommunications Carriers Forum Climate Sustainability Working Group</p>



Sustainable energy to power aviation

Christchurch Airport has several unique projects underway as it looks to support the transition of aviation to renewable energy and alternative fuels.

With 300,000 solar panels now installed on a 230-hectare site, Kōwhai Park is one of New Zealand's largest solar farms. The project on airport land delivered in partnership with Lightsource bp and Contact Energy is expected to generate 170MWh of electricity per year, equivalent to the energy needs of around 36,000 homes, now that it is fully commissioned.

Hydrogen is another key part of the aviation sector's transition. Hosting Fabrum's hydrogen liquefaction testing facility onsite, planning for permanent liquid hydrogen capability and actively participating in the New Zealand Hydrogen Aviation Consortium are all major moves to design an ecosystem that ensures New Zealand can produce, store and transport hydrogen, and build the infrastructure to fuel aircraft.



Reducing emissions while supporting communities

As a leading nationwide provider of infrastructure maintenance, asset management/optimisation and construction services, Citycare Group is focused on reducing the climate impacts of its operations while continuing to deliver services that support communities across New Zealand.

With more than 98% of Citycare's Scope 1 and 2 emissions coming from fleet fuels, primarily diesel, decarbonising the fleet is a key priority. In FY26, the number of low-emission vehicles increased from 155 to 200, representing 14% of the total fleet. Two-thirds of Citycare's passenger fleet are now low-emission vehicles, and 100% of passenger vehicles purchased or leased during the year were low emission.

Following successful trials, Citycare introduced battery electric utes, plug-in hybrid utes and hybrid trucks into its fleet. Alongside vehicle replacement, the business established the foundations needed to support electrification at scale, including home, depot and public charging solutions, while continuing to improve fleet efficiency through vehicle right-sizing, reduced idling, driver training and route optimisation.



The centre of a circular economy

EcoCentral's role at the heart of the region's circular economy highlights that the transition is not just about energy, but also about reducing waste, keeping resources in circulation and managing supply-chain risks.

In FY26, EcoCentral diverted or recycled more than 60,000 tonnes of materials, including over 13,000 tonnes of paper and cardboard, almost 13,000 tonnes of glass and more than 3,000 tonnes of plastics. The business also reused over 1,300 tonnes of items, sold through its EcoShop, which served 149,000 customers over the 12 months to June 2026.

As well as providing high-quality recyclable commodities, EcoCentral has focused on its own emissions, and in particular the electrification of its diesel loader fleet. FY26 marked a milestone in this programme, as EcoCentral took delivery of its first fully electric loader, as well as four electric cars and two electric forklifts.



Managing critical equipment

Enable's Central Offices house 24 large process coolers that keep critical equipment at the correct temperature and humidity so the network can operate reliably.

Refrigerant emissions from these units had been increasing as they age. In response, Enable is nearing completion of a \$1.8 million replacement programme of all 24 HVAC units. Work to date has already reduced HVAC refrigerant use by 56%, and subsequent fugitive emissions by 16% compared to the previous year.



Ship-to-shore power reducing diesel reliance

Typically, visiting ships burn fuel for their operations while berthed at port. New Zealand's highly renewable grid offers the opportunity to run these essential functions by renewable electricity instead.

LPC is upgrading the electrical infrastructure on its Inner Harbour jetties to provide shore power to fishing vessels so that they can fully plug into the grid, dramatically reducing diesel consumption while berthed. The Energy Efficiency & Conservation Authority (EECA) is providing in-kind support to this project, which will provide valuable information as LPC investigates longer-term development of shore power infrastructure for container vessels at the new Te Awaparahi Bay container terminal.



Meeting the long-term energy needs of the community

As decarbonisation occurs and demand for and reliance on electricity grows, Orion is central to enabling the region's transition. Orion is focused on investment in infrastructure, systems and capability that can meet the needs of a rapidly changing environment, where technology, population, operational complexity and a changing climate all play a role.

Orion is trialling ways to manage peak periods through 'flexing' demand without building more network through projects like Resi-Flex. Resi-Flex is a collaborative project between Orion and Wellington Electricity that explores how residential consumers can save on energy costs, support a resilient network and cost-effective decarbonisation as New Zealand transitions to a low-emissions economy. The project focuses on unlocking demand-side flexibility from consumer energy resources such as electric vehicle chargers and home batteries. Through engagement with consumers, flexibility providers and network operators, Resi-Flex has identified opportunities to develop commercial mechanisms that reward customers for shifting or reducing electricity demand at key times. In FY26, trials showed that households can deliver real flexibility for the energy system now: evening Savings Sessions achieved a 73% success rate, managed EV charging shifted 97% of charging away from network peaks, and early solar-export participants delivered an average of 8 kWh at peak times each day.

Climate Response and Emissions Reduction

Operational emissions (scope 1+2)

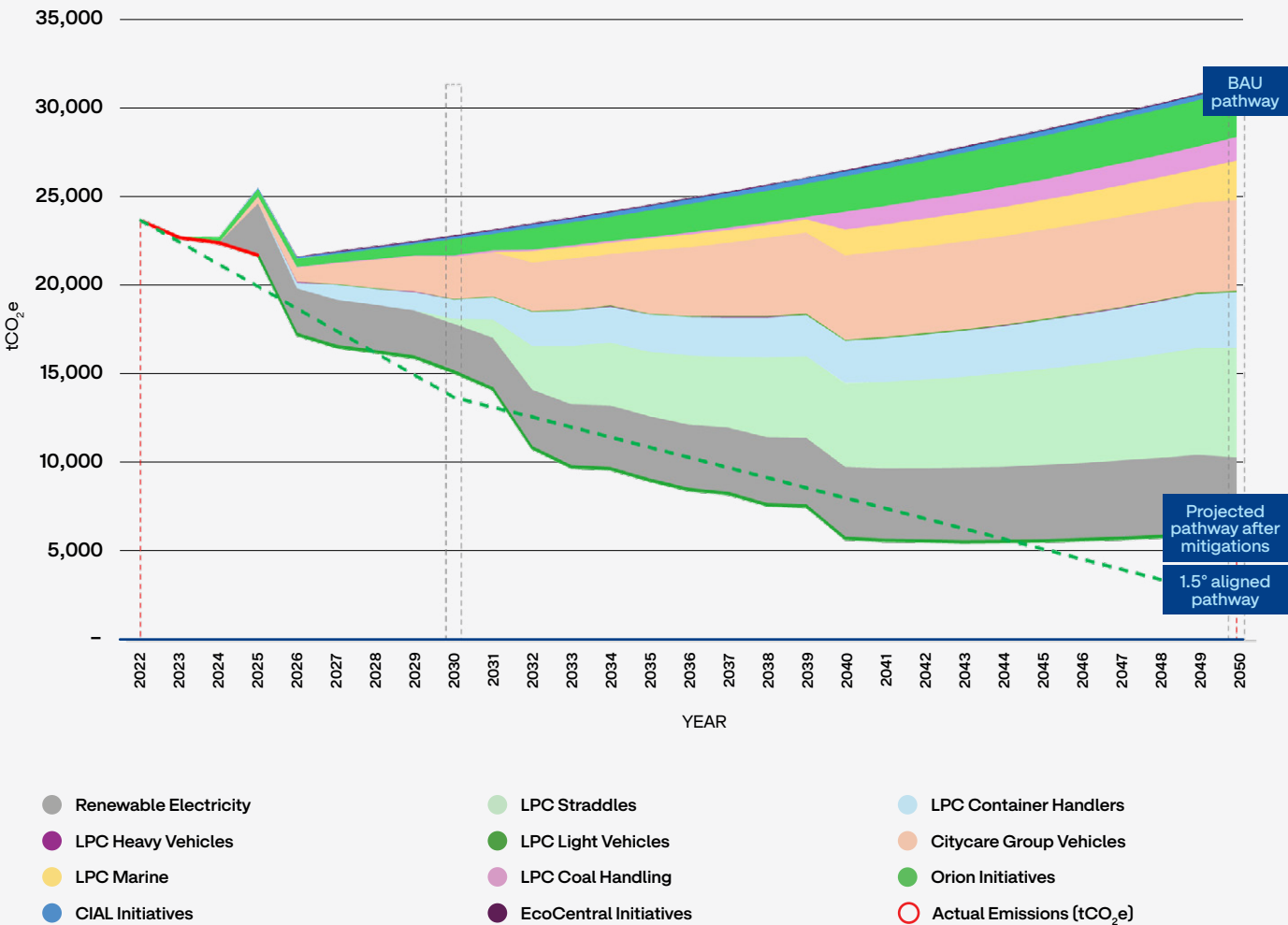
Each year, detailed modelling of greenhouse gas (GHG) emissions is undertaken to assess planned and actual mitigation efforts across the group of companies and their contribution towards the target of 42% emissions reduction by 2030.

Four mitigation pathways were modelled this year, each including critical mitigation efforts: purchase of renewable electricity, light vehicle fleet progressively transitioning to electric and electrification of port operations at LPC. The preferred pathway (pathway 3) pictured in Figure 1 shows the 2030 target being met in 2032. This is the best modelled pathway. It assumes that 100% renewable electricity is purchased, and that LPC replaces its diesel straddles with electric models.

While significant progress is being made and some businesses (Christchurch Airport and Enable) have far surpassed their 2030 target, science-aligned emissions reduction remains

challenging for businesses in the portfolio that are heavily reliant on mobile diesel emissions sources and CCHL’s 2030 target is not achieved across any of the four pathways. This represents a significant challenge, however, the subsidiary businesses will continue to progress with full implementation of all identified initiatives, and the modelling shows the target being reached in 2032. Despite this shortfall, the target has not been revised because it is important to continue to strive to limit warming to 1.5°C. Offsets and market mechanisms are incorporated into the model to ensure that the net impact in 2030 is limited to within 1.5°C of warming. Recognising the need for a long-term commitment to the transition, CCHL has a goal to reach net zero by 2050.

Figure 1: Preferred mitigation pathway with GHG emissions modelled to 2050



Approach to offsets

3,202 tonnes of carbon credits were purchased by subsidiary companies and cancelled/retired during or in relation to the current year to offset residual emissions of greenhouse gases. The same volume of carbon credits are modelled in Figure 1. CCHL companies continue to contribute to carbon removals while also working to reduce absolute emissions, recognising that absolute emissions and a transition from fossil fuels are fundamental to addressing the climate crisis.

Subsidiary	TCO2e	Supplier	Location	Project type	Registry	Inset/offset
Christchurch Airport	-257	Carbon NZ	Banks Peninsula	Josef Langer Charitable Trust forest project	NZ ETS	Offset
Orion	-2,354	Carbon+	New Caledonia	Renewable electricity	Gold Standard Impact Registry	Offset
Orion	-592	Carbon+	Gujarat	Renewable electricity	Gold Standard Impact Registry	Offset
Total	-3202					



Christchurch International Airport's Kōwhai Park, one of the biggest solar farms in New Zealand, ready for commissioning.

Supply chain emissions (scope 3)

Scope 3 emissions are of critical importance due to their relative scale. CCHL plays a key role in enabling sector wide transitions through sector-specific leadership roles (Table 1), through active engagement with supply chains, and with strategic projects that are designed to influence the transition of the sector. Examples of this are Christchurch Airport’s Kōwhai Park solar farm and wider energy precinct with hydrogen testing facilities (page 8); LPC’s investment in shore-to-ship power to replace diesel use with renewable electricity by enabling access to shore power infrastructure (page 8); and Orion’s work supporting smart technology to manage electricity supply and demand (page 9).

The primary scope 3 metric is that all (six) subsidiaries have an active scope 3 supplier engagement action plan summarising engagement with their supply chains on GHG mitigation measures.

Performance, Metrics and Targets

CCHL has measured its FY26 GHG emissions inventory in accordance with The Greenhouse Gas Protocol¹. EY provides limited assurance over scope 1,2 and 3 GHG emissions.

Performance

- Scope 1 and 2 (location-based) emissions decreased 12% compared with FY25.
- Scope 1-3 emissions decreased 26% compared with FY25.
- In accordance with the defined target, emissions reductions are tracking at 16% below base year
- Five of six subsidiaries reduced their annual Scope 1 and 2 market-based emissions.

CCHL’s direct operational emissions remained relatively stable in FY26. Fuel (diesel) consumption, particularly from Port operations and the Citycare fleet, remains the primary source of operational emissions. Over the past three years, emissions intensity has trended downward, indicating that business activity has grown without a corresponding increase in operational emissions.

Scope 3 emissions are large, accounting for 549,502 tCO₂e, or 94% of total reported emissions. The most significant sources within the overall inventory boundary are ship movements at the port and aircraft movements at the airport, both reported as use of

sold products. In FY26, the methodology used to calculate aircraft emissions was refined to exclude non-GHG climate effects from reported emissions. This change caused a significant reduction in reported emissions and was the single largest driver of the reduction in both Scope 3 emissions and the overall inventory.

Several other categories of Scope 3 emissions increased this year so scope 3 emissions are a key priority, with ongoing and future efforts focused on supplier engagement and collaboration across the value chain.

Total emissions decreased by 26% on the previous year. Given that aircraft emissions from Christchurch International Airport represent approximately 78% of total reported emissions, the revised flight emissions methodology was the primary factor influencing this result. As part of the transition to a lower-emissions economy, subsidiaries are encouraged to use market-based mechanisms, including renewable electricity purchases. After accounting for these measures, net emissions were 16,786 tCO₂e, compared with 15,908 tCO₂e in FY25.

Table 1: CCHL GHG emissions inventory FY26

Scope	Emissions source	CCHL	CIAL	Citycare Group	EcoCentral	Enable	LPC	Orion	FY26 Total	FY25	% change	FY24	FY22 (base year)*	% change
1	Stationary combustion	-	135	2	-	-	-	205	343	342	0	217		
1	Mobile combustion	-	40	8,190	486	5	8,312	2,060	19,093	18,884	1	19,643		
1	Fugitive emissions	-	0	-	-	13	1	271	285	191	49	177		
Subtotal S1		-	176	8,192	486	17	8,313	2,536	19,720	19,416	2	20,036	20,452	-4
2	Purchased electricity (location-based)	-	1,193	110	136	135	1,016	128	2,720	3,551	-23	2,429	3,413	-20
2	Purchased electricity (market-based)	-	-	118	146	1	-	0	268	423	-37	419	N/A	
2	Transmission and distribution losses	-	-	-	-	-	-	11,290	11,290	15,171	-26	10,932	13,608	-17
Subtotal S1+2 (location based)	<i>Includes T&D losses</i>	3	1,369	8,302	622	152	9,329	13,954	33,731	38,138	-12	33,397	37,473	-10
Subtotal S1+2 (market based)									31,278	35,010	-11			-55
3 cat 1	Purchased goods and services	-	-	-	-	530	-	-	530	486	9			
3 cat 3	Well to tank fuel	-	44	2,046	114	-	2,078	514	4,796	2,569	87			
3 cat 4	Upstream distribution	-	-	2	217	7	439	35	700	581	21			
3 cat 5	Waste to landfill	0	178	1,177	2	1	104	24	1,485	1,056	41			
3 cat 6	Business travel	4	350	252	4	26	134	335	1,104	1,086	2			
3 cat 7	Employee commuting	8	75	938	94	71	1,284	481	2,950	2,957	-0			
3 cat 9	Downstream distribution	-	-	-	2,732	-	-	-	2,732	2,065	32			
3 cat 11	Use of sold products	-	465,245	-	-	-	23,442	-	488,687	740,848	-34			
3 cat 12	End of life of sold products	-	-	-	38,370	-	-	-	38,370	NR	-			
3 cat 13	Downstream leased assets	-	7,885	-	-	-	48	-	7,933	NR	-			
3 cat 15	Investments	-	-	-	-	-	-	214	214	NR	-			
Subtotal Sc/3		12	473,777	4,415	41,532	634	27,528	1,603	549,502	751,648	-27			
S 1,2,3 total		15	475,322	20,909	42,641	803	45,170	18,093	583,233	789,786	-26			
Removals	Removals	0	-257	0	0	0	0	-2,945	-3,202	-3,931				
Net market based emissions	Net market based emissions	-	-	-	-	-	-	-	16,786	15,908	6			

GHG emissions are presented as tonnes of carbon dioxide equivalent (tCO₂e). No base year restatements have been made.

Assurance from EY covers FY26 only.

All numbers are rounded to 0 decimal points, columns may not add due to rounding.

CIAL Scope 3 category 11 emissions primarily relate to departing flight activity. In previous years, non-CO₂ effects of aviation were embedded in the multipliers applied. The methodology changed this year to better exclude non-CO₂ effects and as a result, reported FY25 use of sold products (712,021 tCO₂e) are not directly comparable to FY26 emissions (457,885 tCO₂e).

Orion's FY25 Scope 2 transmission and distribution losses emissions have been restated to correct the emissions factors used in the original calculation. This resulted in an increase of 5,161 tCO₂e.

¹The Greenhouse Gas Protocol: a Corporate Accounting and Reporting Standard [2004], The Greenhouse Gas Protocol: Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard (2015), and The Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Standard (2011) (together, the GHG Protocol).

Targets

CCHL has set interim and long term GHG emissions reduction ambitions; and a target for scope 3 emissions reduction through supply chain engagement:



Subsidiary scope 1+2 commitments and scope 3 planning progress are summarised below:

Subsidiary	Long term target set (scope 1+2)	Target date	Scope 3 engagement on emissions reduction
CHRISTCHURCH AIRPORT	Absolute zero scope 1 and 2 emissions	2035	Approved plan in implementation (updated 3-yearly)
ECO CENTRAL	Carbon neutrality across scope 1 and 2	2030	Approved plan
enable fibre broadband	Reduce scope 1 and 2 GHG emissions by 90%	2040	Approved plan
lpc Lyttelton Port Company	Reduce absolute scope 1, 2 & 3 emissions by 90%	2050	Draft plan
Orion	85% reduction in scope 1+2 emissions	2050	Undertaken within Fair Supply
Citycare Group	Reduce absolute scope 1+2 emissions by 90%	2050	Draft plan

² Note that the scope 1+2 target excludes transmission and distribution line losses, due to the need for this emissions source to increase to enable electrification

³ This 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.

⁴ Excluding ships emissions, employee commuting, purchased goods and services and one-time construction emissions that are capitalised.

Risks, Opportunities and Interdependencies

Current climate-related impacts

Table 2 describes material current climate-related impacts. CCHL defines its current climate-related impacts as those that have been experienced by the Group within the reporting period, identified by assessing any current impacts identified by each subsidiary and assessing their materiality to CCHL Group.

Financial impacts of climate-related events were experienced by LPC and Orion in FY26 as a result of an increase in storm activity.

Table 2: FY26 Climate-related impacts reported

Subsidiary	Costs reported FY26	Impact	Category
Orion	\$400,000	Emergency maintenance directly attributable to severe weather events in July, December and January	Increased R&M
LPC	\$5,240,272	Combined storm events (Jan-Apr 2026) infilling the navigational channel required a second dredge campaign in May 2026	Increased R&M
LPC	\$534,457	Extreme wind event declared a State of Local Emergency for Canterbury 23 October 2025, all LPC Lyttelton operations were suspended for four shifts.	Business interruption
TOTAL	\$6,174,729		

Scenario analysis

There have been no significant changes to the scenarios we use to assess climate risk. Refer to Appendix B for a summary of the three scenarios used: orderly, disorderly and hothouse.



Orion responds to severe weather events

During Canterbury’s wettest July on record, on 11 July a number of Orion customers in Banks Peninsula were left without power and State Highway 75 was cut off, making access difficult.

Strong winds brought down powerlines and trees across the region, leaving a total of 5,200 homes in Christchurch and Banks Peninsula without power by around 9pm that evening. Over the next three days, Orion’s operators and service delivery providers worked to restore power to all affected areas. Wild weather continued over the summer of FY26, with a series of active fronts bringing thunderstorms to the region. During December and January, lightning strikes knocked out 41 transformers, requiring rapid repairs by the Orion team.



Storms impact Port operations

When severe north-west gales hit the region on 23 October 2025, with gusts up to 150 km/h recorded across the city, a local State of Emergency was declared for Canterbury. The unsafe conditions led to the suspension of all LPC Lyttelton operations for four shifts, with associated disruptions to vessel movements, cargo handling activities causing revenue loss.

The impacts of storm events were not only felt on land. A series of significant storms with heavy swells resulted in high sediment infill within the navigational channel and berth pockets, with a storm on 27 March 2026 moving over 430,000 cubic metres of silt in just a few days. As a result, LPC undertook an additional maintenance dredging campaign in May to restore the navigation channel to full capacity, at a cost of approximately \$5.2 million.

Risks & Opportunities

The following four 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 below.

Risk 1: Changing Government Policy and Regulatory Settings

Risk type	Transition
Scenario(s)	Orderly, Disorderly
Time horizon	Short/medium
Current Impact (\$)	None to minor
Subsidiaries	CCHL, CIAL, Citycare Group, EcoCentral, Enable, LPC, Orion
What it is	Governments continue to adjust climate, energy, transport and environmental policies in response to evolving economic conditions, technological developments and emissions reduction commitments. Changes in regulation, pricing mechanisms, disclosure requirements and investment priorities affect the operating environment for CCHL's subsidiaries.
Why it matters	Policy settings influence infrastructure planning, asset values, operating costs and investment decisions. Shifts in regulation can create both risks and opportunities by affecting demand for services, access to capital, customer expectations and the pace of the low-emissions transition.
How CCHL is responding	<p>CCHL and its subsidiaries monitor policy developments and incorporate potential regulatory changes into strategic planning, investment decisions and scenario analysis. Maintaining a diversified portfolio and a long-term investment approach helps build resilience to policy uncertainty while enabling participation in emerging opportunities.</p> <p>As a group, CCHL actively engages with government agencies, regulators, industry bodies and sector stakeholders to help understand and respond to evolving policy settings. This includes participation in consultations, sector working groups, industry partnerships and collaborative initiatives that support the development of practical and effective climate, energy and infrastructure policy.</p>



Risk 2: Increasing Electricity Demand & Energy System Resilience

Risk type	Transition
Scenario(s)	Disorderly
Time horizon	Medium
Current Impact (\$)	None to minor
Subsidiaries	Orion
What it is	A successful transition to a lower-emissions economy depends on a reliable, affordable and resilient electricity system as transport, industrial processes and other activities become increasingly electrified. At the same time, the electricity system must remain reliable and resilient in the face of growing demand and climate-related disruption.
Why it matters	Electrification is central to New Zealand's emissions reduction pathway. Increased demand will require investment in generation, distribution networks, digital systems and resilience measures. Failure to maintain a reliable electricity system could affect economic activity, service delivery and regional resilience.
How CCHL is responding	<p>Orion is investing in network capacity, resilience and system flexibility to support increasing electrification across transport, industry and communities. We also support initiatives that help unlock demand flexibility, distributed energy resources and emerging technologies that can improve system resilience and reduce pressure on the network. Climate and energy transition considerations are incorporated into business planning and investment decisions across the portfolio, recognising that many subsidiaries will become increasingly dependent on electricity as they pursue their own decarbonisation pathways.</p> <p>Collaboration across the Group helps identify shared opportunities and interdependencies associated with electrification, ensuring that infrastructure investment supports both regional resilience and long-term emissions reduction objectives.</p>



Risk 3: Direct Physical Impacts on Assets and Operations

Risk type	Physical
Scenario(s)	Hothouse
Time horizon	Medium/long
Current Impact (\$)	Low
Subsidiaries	CIAL, Citycare Group, EcoCentral, Enable, LPC, Orion
What it is	Climate change is expected to increase the frequency and severity of extreme weather events, including storms, flooding, heatwaves and coastal hazards. These hazards can disrupt operations, damage infrastructure and increase maintenance and recovery costs.
Why it matters	Physical disruption can affect service reliability, business continuity, asset performance and financial outcomes. Climate-related events may also increase insurance costs, accelerate asset deterioration and require additional adaptation investment.
How CCHL is responding	<p>Climate-related physical risks are being integrated into asset management, risk management and investment planning processes. Subsidiaries assess the potential impacts of extreme weather when planning future investment and maintenance programmes. Recent weather-related disruption has reinforced the importance of resilience planning and helped inform preparedness measures, emergency response procedures and future resilience investments.</p> <p>Climate scenario analysis and risk assessments improve understanding of potential future impacts and support long-term decision-making. CCHL continues to support investment that strengthens the resilience of critical infrastructure and helps maintain service continuity during and after disruptive events.</p>



Risk 4: Supply Chain Disruption and Changing Market Conditions

Risk type	Transition
Scenario(s)	Disorderly, hothouse
Time horizon	Short/medium/long
Current Impact (\$)	Moderate impacts of this nature but not climate-related
Subsidiaries	CIAL, Citycare Group, EcoCentral, Enable, LPC, Orion
What it is	Climate change and the low-emissions transition may affect the availability, cost and reliability of goods, services, fuel, materials and international transport networks. Global supply chains may also experience disruption from extreme weather, geopolitical instability and changing market expectations.
Why it matters	Supply chain disruption can delay projects, increase costs and affect operational performance. Businesses may also face changing customer expectations, technological disruption and new competitive pressures as markets adapt to a lower-emissions future.
How CCHL is responding	<p>CCHL and its subsidiaries are taking steps to strengthen resilience by diversifying markets, exploring alternative fuel pathways and reducing dependence on single technologies or suppliers where practical.</p> <p>Across the portfolio, businesses are working with stakeholders to better understand and support future market trends and transition pathways. This includes sustainable aviation, lower-emissions freight, electrification and broader decarbonisation opportunities across value chains (page 8-9).</p> <p>By exploring future energy and technology solutions, CCHL aims to reduce exposure to transition uncertainty while positioning the portfolio to benefit from emerging opportunities associated with a lower-emissions economy.</p>



Nature, Resilience and Place

Why nature matters

Healthy natural systems underpin the long-term resilience and prosperity of Christchurch. Ecosystems provide services that support economic activity, community wellbeing and infrastructure performance, including water regulation, flood mitigation, soil stability, biodiversity and recreational value. Climate change and nature loss are interconnected challenges, meaning that the degradation of natural systems can increase physical climate risks and reduce community resilience. Christchurch's attractiveness as a place to live, work and visit is closely linked to its natural environment, including its parks, rivers, coastline, Port Hills, Banks Peninsula and proximity to the Southern Alps. These natural assets contribute to tourism, community wellbeing, talent attraction and the city's reputation as a desirable place to invest and live.

Nature-related risks and opportunities

Nature-related risks may arise where business activities depend on, impact or are affected by natural systems. For CCHL's portfolio, these risks include changing water availability and quality, biodiversity and habitat loss, sourcing of raw materials and increasing pressure from climate change.

At the same time, investment in natural systems can create opportunities to strengthen resilience, protect infrastructure, support biodiversity, enhance community wellbeing and contribute to long-term value creation.

CCHL's approach

CCHL is building its understanding of nature-related risks and opportunities across the portfolio. Nature-related risks and opportunities were assessed using principles aligned with the Taskforce on Nature-related Financial Disclosures (TNFD) framework. Initial assessments have focused on identifying key dependencies and impacts associated with subsidiary operations and infrastructure assets. This work supports better decision-making and helps ensure that climate resilience and natural capital considerations are incorporated into long-term planning and investment.

The Group's subsidiaries are also contributing to nature-positive outcomes through initiatives that support ecosystem restoration, biodiversity protection and responsible environmental stewardship.



Banks Peninsula Conservation Trust demonstrating the extent of their pest control work on the Peninsula, Stony Bay Peak.

Other Climate-related Performance Metrics

Metric	2026 performance	2025	2024	Description of performance
Emissions intensity (asset value)	With an asset value of \$6.7 billion for financial year ending 30 June 2026, CCHL Group's emissions intensity is 5.01 tCO ₂ e/\$m	5.22 tCO ₂ e/\$M	5.54 tCO ₂ e/\$M	● Reduction achieved
Year on year emissions reduction (location-based)	Scope 1+2 GHG emissions (location-based) is 33,731 tCO ₂ e down 12% on 2025	38,138 tCO ₂ e	33,396 tCO ₂ e	● Year on year reduction achieved
Year on year emissions reduction (market-based)	Scope 1+2 GHG emissions (market-based) is 31,278 tCO ₂ e down 11% on 2025 including T&D losses	35,010 tCO ₂ e	N/A	● Year on year reduction achieved
Total emissions reduction (gross)	Scope 1+2 (location-based) down 10% since 2022	Up 14%	Down 11%	● 2030 target is 42% down since 2022
Subsidiaries reporting year on year reduction	5/6 (CIAL, Citycare Group, EcoCentral, Enable, LPC (and CCHL))	N/A	N/A	● Target 6/6
Total emissions reduction (net)	Net scope 1+2 GHG emissions (market-based) down 55% on 2022	Down 31% on 2022	N/A	● Target is absolute but impact can in the short term be offset with market mechanisms
Capital allocation	\$229,319,000 in FY26. See breakdown page 20	\$105,067,000	N/A	
Actual climate-related impact	\$6,174,729 in FY26. See breakdown table 4	\$0	N/A	
Internal carbon price	CCHL uses a marginal abatement cost of \$71/t in line with the 2026 auction reserve price of the NZ ETS to assess mitigation options	\$68/t	N/A	
Executive remuneration	Performance metrics related to climate change (and other aspects of sustainability) are excluded from CCHL executive and other senior management remuneration	N/A	N/A	
Land area under active habitat restoration or protection	386 hectares	N/A	N/A	

● Achieved ● In progress ● Not achieved



Protecting ecosystems

LPC has a goal to protect 45 ha of land, equivalent to 30% of the total land area owned by LPC, by 2030.

The establishment of a 17ha perpetual conservation covenant with the Banks Peninsula Conservation Trust in December 2025 on the Port Saddle marked an enduring milestone in the protection and enhancement of biodiversity for the Port Hills. The Port Saddle is an important connector with neighbouring walking and mountain biking tracks and natural spaces. The site, which has been actively restored since 2017, is delivering measurable ecological gains. Local volunteers, businesses and school children have planted over 5,000 native trees supported by significant weed and predator control.



Intergenerational partnership for reforestation

Tautoru Mautai is a landmark partnership between Wairewa Rūnanga and Orion, established in 2024 to restore indigenous forest at scale on Horomaka/Banks Peninsula.

Combining mātauranga Māori, long-term stewardship and climate action, the 35-year co-governed initiative will transform up to 280 hectares of Te Kaio farm into thriving indigenous forest, delivering lasting benefits through carbon sequestration, habitat restoration and biodiversity enhancement for future generations. The kaupapa brings together Wairewa land, knowledge and leadership with Orion's project delivery expertise, commitment to community and managing emissions. By the end of FY26, the project had already delivered 652 New Zealand Units (NZUs), with over 200,000 indigenous seedlings already planted and establishing across the site.

Allocation of Capital

The amount of capital expenditure, financing, or investment deployed in FY26 toward climate-related risks and opportunities is disclosed by subsidiary.

Subsidiary	FY26 expenditure	Description	Climate impact	
Orion	65,500	Fleet decarbonisation and optimisation	Capex	Mitigation
Orion	80,000	Scope 3 emissions stakeholder engagement	Capex	Mitigation
Orion	12,000	Renewable electricity	Capex	Mitigation
Orion	40,000	VERs	Capex	Mitigation
Orion	195,000	Forest restoration	Capex	Mitigation
Orion	9,652,000	Network safety and reliability	Capex	Adaptation
Orion	77,215,632	Network growth and transformation	Capex	Adaptation
Orion	68,332,000	Network replacement & renewals including asset hardening	Capex	Adaptation
Orion	983,595	Equipment upgrades to mitigate risk	Capex	Adaptation
Orion	13,776,000	Routine and corrective maintenance and inspection	Opex	Mitigation
Orion	21,208,000	System operations and network support	Opex	Adaptation
Orion	5,189,000	Vegetation management	Opex	Mitigation
Enable	5,000	Scope 3 emissions stakeholder engagement	Opex	Mitigation
Enable	184,147	Insurance for material damage and business interruption	Opex	Adaptation
Enable	5,000	Flood risk mapping and mitigation systems	Opex	Adaptation
EcoCentral	531,136	Plant upgrades	Capex	Mitigation
EcoCentral	141,689	Car/Ute fleet upgrades	Capex	Mitigation
LPC	94,553	Shore to ship power	Capex	Mitigation
LPC	381,409	Plant upgrades to electric	Capex	Mitigation
LPC	90,340	Fleet upgrades to electric	Capex	Mitigation
LPC	19,221,311	Terminal expansion	Capex	Mitigation/adaptation
LPC	492,187	Water treatment plant upgrades	Capex	Adaptation
LPC	1,549,917	Stormwater upgrades	Capex	Adaptation
Citycare	2,302,093	Low emission vehicle fleet	Capex	Mitigation
Citycare	20,000	EV readiness	Capex	Mitigation
CIAL	8,500,000	Kōwhai Park substation, EV energy hub, LED lighting, BMS upgrades, fleet electrification	Capex	Mitigation
CIAL	35,000	Water and drainage infrastructure	Capex	Adaptation
TOTAL	\$229,318,913			



Governance

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 Impact programme, as part of agreeing the annual Statement of Intent with its Shareholder, Christchurch City Council. The Board is responsible for understanding CCHL’s risks, including climate-related and nature-related risks, and ensuring such risks are managed appropriately in order that CCHL meets its objectives and targets. The Board is supported in its oversight of 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, monitoring of compliance within that framework including in relation to climate-related risk through annual assurance programmes.
- The **Impact Committee** assists the Board in its oversight of specific risks and opportunities, including those related to climate change, nature, and social and cultural outcomes by reviewing and recommending policies, actions and reports to the Board. The Impact Committee also ensures that the CCHL Group Climate Report presents an accurate and transparent record, in accordance with the Aotearoa New Zealand Climate Standards and industry expectations.

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

- Management provides regular papers and updates to the Impact Committee on relevant topics such as the Group’s GHG emission reduction targets and plan.

- The Board receives a six-weekly Impact update at each meeting.
- Climate change is listed as a 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.
- Climate-related scenarios and related risks and opportunities are reviewed annually, 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 July 2026.
- The SWG also supports greenhouse gas (GHG) emissions reduction planning and target setting, and monitoring of wider environmental performance 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 FY26. 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.

Governance

CCHL Board of Directors
(Meets 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 business risks including climate-related risks and opportunities and approving the Sustainability Strategy.

Impact Committee
(Meets 4 times a year)

Oversees 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 impact programme and its related policies, plans, objectives and targets. Monitors and reports to the Board on material ESG matters (including climate change and nature). Oversees compliance with statutory responsibilities relating to ESG matters^{9c}.

Audit and Risk Management Committee
(Meets 5 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, Head of Impact, Head of Corporate Services and Portfolio Manager, the Executive Team participates in the scenario analysis process. In FY26, 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 through the Impact Programme.

Sustainability Working Group
(Regular fortnightly meeting, strategic workshop quarterly) Reports progress to the Impact Committee quarterly

The SWG is made up of Sustainability Leads from each of the subsidiaries and CCHL. The SWG 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 the CCHL executive and board of climate-related risks and opportunities.

Subsidiary Boards

Orion, Christchurch Airport, LPC, Enable, Citycare Group and EcoCentral have primary responsibility for oversight and implementation of the operational strategies and sustainability plans (including where these relate to climate change) at subsidiary level, including providing annual inventories (with assurance) and communicating material climate-related risks and other ESG risks 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, 33 Directors 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

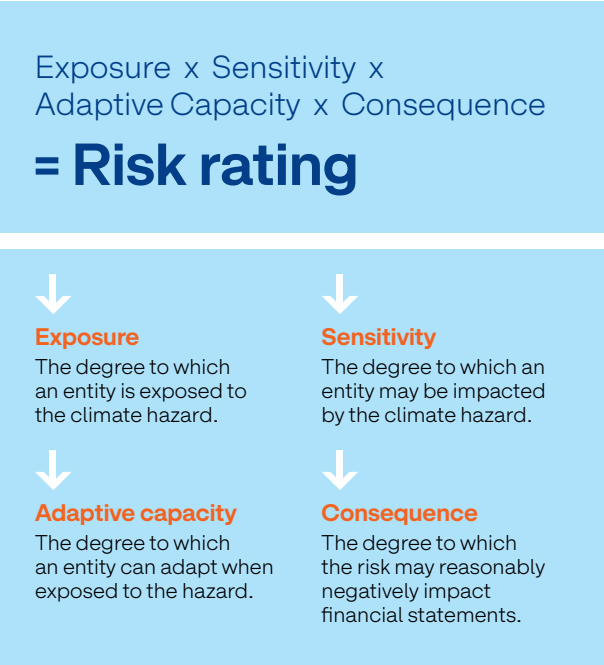
Risk Identification

CCHL identifies and assesses climate-related risks and opportunities associated with three scenarios: ‘orderly’, ‘disorderly’ and ‘hot house’, (refer Appendix B for 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. Climate risk workshops were undertaken in 2026 to review approaches, discuss identified risks and importantly, to consider interdependencies and overlapping risks between the subsidiaries. For priority risk themes that were identified see page 16–17.

Risk Assessment

Like Christchurch City Council, CCHL uses physical hazard modelling from Resilience Explorer, a climate and natural hazard risk intelligence platform designed to help councils, infrastructure providers and asset owners understand and manage risk exposure from hazards such as flooding. Of the subsidiaries, Orion has the most expansive network of assets, they use Resilience Explorer for asset management, risk assessment and decision support. Resilience Explorer operates as a risk screening tool, working to understand the risk profile of different geographic areas and assets, to identify areas where risk is most imminent, and which assets are most vulnerable to which hazards, over what time period.

1. Risks were assessed across exposure, sensitivity, adaptive capacity, and consequence criteria. This methodology draws on the conceptual risk framework from the IPCC and ISO 31000.



Reporting Basis, Assurance, & Methodology

This climate-related disclosure is written 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.

The document is prepared in compliance with the Aotearoa New Zealand Climate Standards. CCHL has chosen to use the following adoption provisions outlined in NZ CS 2 for this reporting period.

- ➔ **Adoption provision 2:**
Anticipated financial impacts
(available reporting periods 1-4)
- ➔ **Adoption provision 4:**
Scope 3 GHG emissions
(select scope 3 emissions reported)
(available reporting periods 1-4)
- ➔ **Adoption provision 5:**
Comparatives for scope 3 GHG emissions
- ➔ **Adoption provision 7:**
Analysis of trends
- ➔ **Adoption Provision 8:**
Scope 3 GHG emissions assurance
(assurance over select scope 3 emissions
has been undertaken)

Methodology

CCHL's GHG inventory measures scope 1, 2 and 3 emissions. Greenhouse gases covered by the inventory are the seven gases specified in the Kyoto Protocol and defined in NZ CS 1: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃. Emissions are reported in tonnes of CO₂-equivalent using the applicable global warming potentials. Where possible, the New Zealand Ministry for the Environment's (MfE) Measuring emissions: A Guide for Organisations: 2026 guide (GWP100, AR5) is used for sourcing relevant emissions factors. See Appendix A for the full methodology followed to compile the inventory.

Inventory boundaries

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 the GHG inventory presented in FY26 is not materially different from the approach taken in previous years.

The organisational boundary includes Christchurch City Holdings Limited and its subsidiaries (Figure 2). The operational boundary of the GHG emissions inventory includes all direct business activities of CCHL. In 2026, RBL Property and Development Christchurch were amalgamated and therefore are not entities in Figure 2. GHG emissions associated with RBL Property and Development Christchurch are minor to none. CCHL's share in Port Hills Leisure represents a minor source of emissions, not material to the inventory as a whole.

A screening exercise is undertaken annually to assess scope 3 emissions sources supplied by subsidiaries based on five criteria: completeness, availability of data, magnitude, level of control, ability to measure and industry practice. See Appendix A for a list of scope 3 emissions which are within the operational scope and for a list of those that are outside the operational boundary.

A location-based emission factor was used to measure emissions from purchased electricity for all subsidiaries. Market-based scope 2 emissions are also calculated to more accurately demonstrate the emissions associated with purchasing decisions, and because electrification is an important aspect of the transition plan.

Data quality is assessed based on calculation method. Primary calculation methods are preferred over secondary methods for higher accuracy. All scope 1 and 2 emissions are therefore calculated using direct activity-based measurement and have low uncertainty.

Exclusions

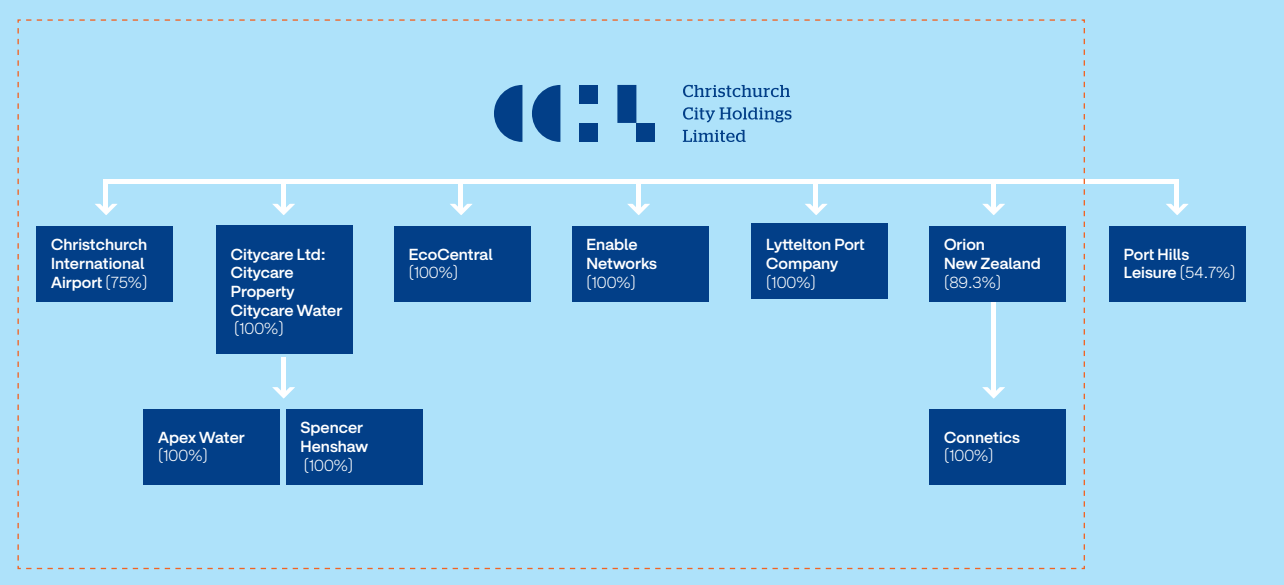
No significant scope 1 or 2 GHG emission sources have been excluded from the CCHL inventory. Scope 3 emissions sources were systematically assessed for materiality. Notable unreported scope 3 emissions sources are listed in Table 2. For more information, please refer to the full inventory methodology (Appendix A).

GHG Protocol Scope 3 category	Emissions Source
1 – Purchased goods & services	Goods and services for which only spend-based estimates are available
5 – Waste generated in operations	All recycled and water waste disposal
6 – Business travel	Minor business travel by taxi, rental or private car
9 – Downstream transportation and distribution	Kerbside collection of rubbish by third party for EcoCentral processing
11 – Use of sold products	Aircraft non-CO ₂ effects (CIAL only) Energy consumed by broadband fibre use (Enable only) Offshore processing of recycled material (EcoCentral only)

*Transmission and distribution line losses are accounted for in Orion's accounts (under scope 2)

Christchurch Airport calculates emissions from aircraft movements based on flight-level data, aircraft type, engine configuration, distance flown, and airport-specific operational conditions for 100% of outgoing flights, with the emissions of the full flight included. The reported figure includes CH₄ and N₂O components. In previous inventories the additional climate impacts of aviation beyond direct GHG emissions were represented. The revised approach this year recognises that non-CO₂ effects are not GHGs, replaces a generic multiplier with modelling specific to CIAL, and avoids combining other metrics with the GHG inventory.

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



Disclaimer

This report sets out 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 June 2026 and is evolving over time. Climate-related risk has inherent uncertainty and as such must rely on best available data, methodologies and assumptions at the time of writing. 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 undue 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.

This disclaimer should be read along with the methodologies, assumptions and uncertainties and limitations appended to this report.

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 cchl.co.nz/annual-reports.

Independent limited assurance report to Christchurch City Holdings Limited

Assurance conclusion Scope 1, Scope 2 (location based and market based) and Scope 3 GHG emissions

Based on our limited assurance procedures performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Christchurch City Holdings Limited’s consolidated gross scope 1, 2 (location based and market based) and scope 3 Greenhouse Gas (“GHG”) emissions, related additional required disclosures of gross GHG emissions and gross GHG emissions methods, assumptions and estimation uncertainty, within the scope of our limited assurance engagement (as outlined below) (together “GHG disclosures”) included in Climate Report 2026 for the year ended 30 June 2026 (“Climate Statement”) are not fairly presented and not prepared, in all material respects, in accordance with the Aotearoa New Zealand Climate Standards (“NZ CS”) issued by the External Reporting Board (XRB).

Scope

Ernst & Young Limited (“EY”) has undertaken a limited assurance engagement, to report on Christchurch City Holdings Limited’s (the “Company” or “CCHL”):

- ▶ Consolidated gross GHG emissions:
 - ▶ Scope 1 on pages 12 and 13;
 - ▶ Scope 2 (location based and market based) on pages 12 and 13;
 - ▶ Scope 3 on pages 12 and 13;
- ▶ Related additional requirements for the disclosure of consolidated GHG emissions on pages 30 to 32, 34 to 35 and 37 to 38;
- ▶ Related GHG emissions methods, assumptions and estimation uncertainty on pages 36 to 39

included in the Climate Statement for the year ended 30 June 2026 (the “Subject Matter” or “GHG disclosures”). The reported amounts and disclosures relate to the Company and its subsidiaries (together the “Group”) as explained in the Climate Statement.

Our assurance engagement does not extend to any other information included, or referred to, in the Climate Statement on pages 1 to 25, 30 to 33, 36 and 39 to 41. We have not performed any procedures with respect to the excluded information and, therefore, no conclusion is expressed on it.

Criteria applied by CCHL

In preparing the GHG disclosures, CCHL applied NZ CS (the “Criteria”). In applying the Criteria the methods and assumptions used are described on pages 36 to 39 of the GHG disclosures, as are the estimation uncertainties inherent in the methods and assumptions used.

Key matters

In this section we present those matters that, in our professional judgement, were most significant in undertaking the assurance engagement over GHG Disclosures. These matters were addressed in the context of our assurance engagement, and in forming our conclusion. We did not reach a separate assurance conclusion on each individual key matter.

Scope 3 – Full-flight emissions

Why significant	Procedures to address key matter
<p>Christchurch International Airport Limited (“CIAL”, which is a subsidiary of CCHL) uses PACE, a third-party aviation emissions provider, to estimate the emissions associated with flights departing from Christchurch Airport. These emissions are reported within Scope 3 Category 11 (Use of Sold Products) and make up 84% of CCHL’s reported Scope 3 emissions and 79% of CCHL’s reported Scope 1, 2 and 3 emissions.</p> <p>The emissions are estimated using the PACE fuel burn methodology, which uses actual flight movement data from Christchurch airport to the flight’s destination and estimates fuel consumption and associated emissions based on factors including aircraft type, engine type and flight distance. As a result, the calculated emissions are subject to inherent estimation uncertainty and may differ from emissions calculated using actual fuel consumption data. In addition, CCHL changed their measurement methodology in the current year to no longer include the non-CO_{2e} effects of aviation, resulting in a decrease to the emissions year on year.</p> <p>Given the significance of these emissions to CCHL’s reported GHG inventory, together with the estimation uncertainty, this was considered a key focus area of our assurance engagement.</p>	<p>In performing our limited assurance procedures in relation to the measurement and disclosure of flight emissions, we:</p> <ul style="list-style-type: none"> ▶ Obtained an understanding of the methodology, assumptions and estimation uncertainty associated with the flight emissions calculation. ▶ Assessed the consistency of the flight activity data for the year ending 30 June 2026 provided to PACE with CIAL’s records. ▶ Selected a limited sample of flights, estimated the fuel consumption using third party information and compared this to the modelled fuel consumption from PACE. ▶ Compared the fuel consumption factors and emission factors used within the methodology to third party information. ▶ Performed analytical procedures over reported flight emissions and investigated significant unexpected movements. ▶ Considered the appropriateness of excluding the non-CO_{2e} effects of aviation and the adequacy of disclosures explaining its impact on reported emissions. <p>Considered the disclosures related to the calculation method, assumptions and uncertainties in estimating measuring this emissions source included on page 38.</p>

CCHL’s responsibility

The Directors are responsible, on behalf of the Company for the preparation and fair presentation of the GHG disclosures in accordance with NZ CS. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the GHG disclosures, such that they are free from material misstatement, whether due to fraud or error.

EY’s responsibility

Our responsibility is to express a limited assurance conclusion on the GHG disclosures based on the procedures we have performed and the evidence we have obtained.

Our engagement was conducted in accordance with New Zealand Standard on Assurance Engagements 1 *Assurance Engagements over Greenhouse Gas Emissions Disclosures* (“NZ SAE 1”) and in accordance with the International Standard for Assurance Engagements (New Zealand): *Assurance Engagements on Greenhouse Gas Statements* (“ISAE (NZ) 3410”). Those standards require that we plan and perform this engagement to obtain limited assurance about whether the GHG disclosures have been prepared, in all material respects, in accordance with the Criteria. The nature,

timing and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

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

As we are engaged to form an independent conclusion on the GHG Disclosures prepared by management, we are not permitted to be involved in the preparation of the GHG information as doing so may compromise our independence.

Ernst & Young provides taxation, remuneration advice, infrastructure advice and other assurance related services to the Group. Partners and employees of our firm may deal with the Group on normal terms within the ordinary course of trading activities of the business of the Group. We have no other relationship with, or interest in, the Group.

Our independence and quality management

We have complied with the independence and other ethical requirements of NZ SAE 1 *Assurance Engagements over Greenhouse Gas Emissions Disclosures* issued by the External Reporting Board (XRB) and the Professional and Ethical Standard 1 *International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand)* issued by the New Zealand Auditing and Assurance Standards Board, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Professional and Ethical Standard 3 *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Description of procedures performed

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

Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

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

Our procedures included:

- Obtaining, through inquiries, an understanding of CCHL's control environment, processes and information systems relevant to the preparation of the GHG Disclosures. We did not evaluate the design of particular control activities, or obtain evidence about their implementation;

- Evaluating whether CCHL'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 CCHL's estimates;
- Selecting a limited number of items to test to, or from, supporting records, as appropriate;
- Performing analytical procedures on particular emission categories by comparing the expected GHGs emitted to reported GHGs emitted and made inquiries of management to obtain explanations for any significant differences we identified; and
- Considering the presentation and disclosure of the GHG disclosures.

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

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls.

Inherent uncertainties

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

Other matters

The comparative GHG disclosures (that is GHG disclosures for the period ended 30 June 2024 and the Scope 2 (market-based) and Scope 3 emissions for 30 June 2025) have not been subject to assurance. As such, these disclosures are not covered by our assurance conclusion.

The comparative GHG disclosures (that is Scope 1 and Scope 2 (location-based) GHG disclosures for the period ended 30 June 2025) have been subject to limited assurance by another assurance provider, with their unmodified assurance report dated on 30 October 2025.

Use of our assurance report

We disclaim any assumption of responsibility for any reliance on this assurance report to any persons other than CCHL, or for any purpose other than that for which it was prepared.

The engagement partner on the engagement resulting in this independent assurance conclusion is Matthew Cowie.



Ernst & Young Limited
Auckland
30 October 2026

Appendix A

Group Greenhouse Gas Inventory Preparation

1. Purpose

CCHL subsidiaries’ GHG emissions for the 1 July 2025 – 30 June 2026 (FY26) period 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. Standards followed

This consolidated account follows guidance and principles of The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), the Greenhouse Gas Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard, and the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard: Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (together, the GHG Protocol) (GHG Protocol). This is the measurement standard used by each subsidiary and CCHL for their respective emissions inventories. Aotearoa New Zealand Climate Standards 1–3 (NZ CS) are the reporting standards used.

The inventory accounts for emissions of the seven UNFCCC/Kyoto Protocol greenhouse gases (CO₂, SF₆, CH₄, N₂O, NF₃, HFCs, PFCs) and are expressed as CO₂e (CO₂ equivalent).

3. Base year

CCHL has a base year of FY22 (1 July 2021 – 30 June 2022). 2022 was chosen as it is the first year in which the inventories have been consolidated across the CCHL Group.

4. Consolidation approach

The **operational control** consolidation approach is used to consolidate CCHL’s GHG emissions inventory. Under an operational control approach, CCHL accounts for the GHG emissions over which it has operational control.

It is considered that CCHL has operational control over the emissions associated with its subsidiary activities on the basis that “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”.

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 prepare their GHG emissions inventories.

5. Organisational boundary

Under an operational control consolidation approach, CCHL’s organisational boundary includes all of its subsidiaries: Lyttelton Port Company Ltd (LPC), Enable Networks Ltd (Enable), City Care Ltd (Citycare), EcoCentral Ltd (EcoCentral), Orion New Zealand Ltd (Orion) and Christchurch International Airport Limited (Christchurch Airport). The Citycare Group is comprised of CityCare Water, CityCare Property, Apex Water and Spencer Henshaw. Orion includes 100%-owned subsidiary, Connetics boundary is included in Fig 2, in blue, and in Table 1.

Table 1: Organisational boundary

Group	Business activities	Effective ownership Included/Excluded	
Christchurch City Holdings Limited	Holding company	100%	Included
Christchurch International Airport Limited	Airport	75%	Included
CIAL Holdings Number 1 Ltd			Excluded
CIAL Holdings Number 2 Ltd			Excluded
CIAL Holdings Number 3 Ltd			Excluded
CIAL Holdings Number 4 Ltd			Excluded
CIAL Holdings Number 5 Ltd			Excluded
City Care Ltd City Care Property Ltd City Care Water Ltd	Contracting and city maintenance	100%	Included Included Included
Apex Water Ltd			Included
Spencer Henshaw Ltd			Included
Orion New Zealand Ltd	Electricity distribution business	89.3%	Included
Connetics Ltd			Included
HCB Solar New Zealand Limited (joint venture)			Included
Orion New Zealand Ventures Ltd			Excluded
EcoCentral Ltd	Waste recycling	100%	Included
Enable Networks Ltd	Ultra-fast broadband network	100%	Included
Lyttelton Port Company Ltd	Sea port	100%	Included
CCHL (2) Ltd	Not trading	100%	Excluded
CCHL (4) Ltd	Not trading	100%	Excluded
CCHL (5) Ltd	Not trading	100%	Excluded
Christchurch City Networks Ltd	Not trading	100%	Excluded

¹ <https://ghgprotocol.org/corporate-standard-frequently-asked-questions>

6. Operational boundary

- CCHL measures emissions associated with the following scopes:
- **Scope 1:** Direct GHG emissions from sources that are owned or controlled by CCHL.
 - **Scope 2:** Indirect GHG emissions from the generation of purchased electricity that CCHL consumes.
 - **Scope 3:** Other indirect emissions that are a consequence of CCHL’s activities but occur at sources owned or controlled by another company.

Scope 1 and 2

Scope 1 and 2 emission sources included in the operational boundary are outlined in Table 2.

Table 2: Scope 1 and 2 emission source inclusions

Scope	Category	Emission source	Business unit CIAL	LPC	ECO-CENTRAL	CITYCARE GROUP	ENABLE	ORION	CCHL
1	Stationary combustion	Diesel	✓	De minimus	N/A	N/A	✓	✓	N/A
		Fire extinguisher	✓	N/A	N/A	N/A	N/A	N/A	N/A
		LPG	✓	N/A	N/A	✓	N/A	✓	N/A
		CO ₂	✓	N/A	N/A	N/A	N/A	N/A	N/A
	Mobile combustion	Diesel ¹	✓	✓	✓	✓	✓	✓	N/A
		Regular petrol	✓	✓	✓	✓	✓	✓	N/A
		Premium petrol	N/A	✓	N/A	✓	N/A	N/A	N/A
		Lubricants	N/A	De minimus	N/A	✓	N/A	N/A	N/A
	Fugitive sources	Refrigerants	✓	✓	De minimus	De minimus	✓	✓	✓
		De-icing	✓	N/A	N/A	N/A	N/A	N/A	N/A
		Welding gases	N/A	✓	N/A	N/A	N/A	N/A	N/A
		Sulphur hexafluoride	N/A	N/A	N/A	N/A	N/A	✓	N/A
2	Purchased electricity	Purchased electricity	✓	✓	✓	✓	✓	✓	✓
	Purchased electricity	Renewable Energy Certificates	✓	✓	N/A	N/A	✓	✓	✓
	Transmission & distribution line losses	T&D losses [S2]	N/A	N/A	N/A	N/A	N/A	✓	N/A

Scope 1 and 2 emission sources excluded from the operational boundary are outlined in Table 3.

Table 3: Scope 1 and 2 emission source exclusions

Scope	Category	Business	Emission source	Justification for exclusion
1	Process emissions	Citycare Group	Welding gases	Welding gases are used which contain a small percentage of carbon dioxide gas. Not a significant source of emissions.
2	Purchased electricity	Citycare Group	Purchased electricity – Kioreroa Rd, Great South Rd, Braeside Ave	Citycare pays for electricity at these sites based on sqm occupancy. There is no information available to determine electricity usage. Not a significant source of emissions.

¹ Citycare has reported mobile and stationary combustion together under mobile combustion due to inability to split these out. Diesel is for mobile combustion in controlled vehicles except for a very small volume is used for generators.

Scope 3

Scope 3 emission sources included in the operational boundary are outlined in Table 4. Category 12: End-of-life treatment of sold products
Category 13: Downstream leased assets, and Category 15: Investments are new in FY26.

Table 4: Scope 3 Emission source inclusions

Category	Emission source	Business unit CIAL	LPC	ECO-CENTRAL	CITYCARE GROUP	ENABLE	ORION	CCHL	GHG Protocol Scope 3 Minimum Boundary
Category 1: Purchased goods and services	Civtec contractor fuel	X	X	X	X	✓	X	X	Minimum boundary
Category 3: Fuel - and Energy-Related Activities	Well-to-tank – diesel	✓	✓	✓	✓	N/A	X	N/A	Minimum boundary
	Well-to-tank – petrol	✓	✓	✓	✓	N/A	N/A	N/A	Minimum boundary
Category 4: Upstream Transportation and Distribution	Road freight	N/A	✓	✓	✓	✓	✓	N/A	Minimum boundary
	Rail freight	N/A	✓	N/A	N/A	✓	N/A	N/A	Minimum boundary
	Air freight	N/A	N/A	N/A	N/A	✓	✓	N/A	Minimum boundary
	Sea freight	N/A	N/A	N/A	N/A	✓	✓	N/A	Minimum boundary
	All other freight and distribution	N/A	✓	N/A	N/A	N/A	✓	N/A	Minimum boundary
Category 5: Waste Generated in Operations	Waste to landfill	✓	✓	✓	✓	✓	✓	✓	Minimum boundary
Category 6: Business Travel	Air travel	✓	✓	✓	✓	✓	✓	✓	Minimum boundary
	Accommodation Accommodation	✓	✓	✓	✓	✓	✓	✓	Optional
Category 7: Employee Commuting	Employee commuting	✓	✓	✓	✓	✓	✓	✓	Minimum boundary
	Working from home	✓	✓	✓	✓	✓	✓	✓	Optional
Category 9: Downstream transportation and distribution	Downstream distribution – Domestic	N/A	N/A	✓	N/A	N/A	N/A	N/A	Minimum boundary
Category 11: Use of Sold Products	Shipping emissions	N/A	✓	N/A	N/A	N/A	N/A	N/A	Optional
	APU usage	✓	N/A	N/A	N/A	N/A	N/A	N/A	Optional
	Engine run ups	✓	N/A	N/A	N/A	N/A	N/A	N/A	Optional
	Full flight emissions	✓	N/A	N/A	N/A	N/A	N/A	N/A	Optional
	Tenant/contractor vehicles	✓	N/A	N/A	N/A	N/A	N/A	N/A	Optional
	Ground access	✓	N/A	N/A	N/A	N/A	N/A	N/A	Optional
Category 12: End-of-life treatment of sold products	Waste to landfill – EcoCentral	N/A	N/A	✓	N/A	X	N/A	N/A	Minimum boundary
Category 13: Downstream leased assets	Downstream leased assets	✓	✓	N/A	N/A	N/A	N/A	N/A	Minimum boundary
Category 15: Investments	Joint ventures	N/A	N/A	N/A	N/A	N/A	✓	N/A	Minimum boundary

CCHL has taken Adoption Provision 4 to disclose select scope 3 emissions in this reporting period. Scope 3 emission sources that are not reported here are outlined in Table 5.

Table 5: Scope 3 emission source exclusions

Category	Entity	Emission source
Category 1: Purchased Goods and Services	Christchurch Airport	All purchased goods and services
	Lyttelton Port Company	All purchased goods and services
	Citycare	All purchased goods and services
	Orion	All purchased goods and services
	EcoCentral	All purchased goods and services
	Enable	Purchased goods and services (excluding Civtec fuel and waste to landfill)
	CCHL Corporate	All purchased goods and services
Category 2: Capital Goods	Christchurch Airport	All capital goods
	Lyttelton Port Company	All high value capital goods
	Citycare	All capital goods
	Orion	All capital goods
	EcoCentral	All capital goods
	Enable	All capital goods
	CCHL Corporate	All capital goods
Category 3: Fuel- and Energy-related Activities	Christchurch Airport	Well-to-tank - LPG
		Transmission and distribution losses - Electricity
	Lyttelton Port Company	Transmission and distribution losses - Electricity
		Well-to-tank - Electricity
	Citycare	Well-to-tank - LPG
		Transmission and distribution losses - Electricity
	Orion	Transmission and distribution losses - Electricity
	EcoCentral	Well-to-tank - Electricity
		Transmission and distribution losses - Electricity
	Enable	Transmission and distribution losses - Electricity
		Well-to-tank - Fleet fuel
	CCHL Corporate	Transmission and distribution losses - Electricity
Category 4: Upstream Distribution	Citycare	Citycare Water and Apex freight
Category 5: Waste Generated in Operations	Christchurch Airport	Wastewater
	Lyttelton Port Company	Recycling waste
		Waste - other
	Citycare	Hazardous waste
		Organic waste
		Recycling waste
		Wastewater
		Apex waste to landfill
	Orion	Recycling waste
	EcoCentral	Wastewater
		Organic waste
	CCHL Corporate	Recycling waste

(Table 5 continued)

Category	Entity	Emission source
Category 6: Business Travel	Christchurch Airport	Taxi travel
	Lyttelton Port Company	Rental cars & taxi travel
	Citycare	Rental cars
		Staff air travel - Apex
		Accommodation - Apex
		Taxi travel
		Private vehicle travel
	Orion	Rental car
		Taxi travel
		Staff mileage
	EcoCentral	Taxi travel
		Private vehicle travel
	Enable	Taxi travel
		Rental car
		Staff personal vehicle use
		Staff mileage
	CCHL Corporate	Air travel
		Taxi/Uber travel
Category 7: Employee Commuting	Citycare	Employee commuting - Apex
		Working from home - Apex
Category 8: Upstream leased assets	Citycare	Refrigerant use from leased buildings (HVAC)
	Orion	Upstream leased assets
Category 9: Downstream Transportation and Distribution	Orion	Downstream transportation and distribution
	EcoCentral	Downstream transportation and distribution - International
		Incoming waste to EcoCentral
		Customer travel to EcoDrop/EcoShop facilities
Category 10: Processing of Sold Products	Orion	Processing of sold Connetics products
	EcoCentral	Processing sold products
Category 11: Use of Sold Products	Enable	Energy consumed by broadband fibre use
	Orion	Use of sold Connetics products
Category 12: End-of-Life Treatment of Sold Products	Orion	End of life of sold products
	Enable	End-of-life of equipment on customer premise
Category 14: Franchise	None	Not applicable

7. Scope 3 screening assessment

Screening is undertaken annually to identify any new sources of emissions within the operational boundary. Emission sources are scored and weighted using the criteria below. Typically, emission sources that score above 2 as an average across all factors are included in the boundary of the inventory

Emission sources that scored below a 2 on average that have been included in the boundary:

- **Category 1/Purchased Goods & Services (Enable only):** Enable’s contractor, Civtec has been included as this is a significant outsourced service.
- **Category 7/Working from home (all subsidiaries):** This is a complete emission source (i.e. all subsidiaries have measured this source).
- **Category 9/Downstream transportation and distribution (EcoCentral only):** Included as this is a significant source of emissions that is able to be measured using activity-based data.

Results of this scoring are contained within the Group consolidated emissions spreadsheet.

Table 6: Screening criteria

Assessment factor	Weighting	Score		
		1	2	3
Size (Group level):	30%	<1000 tCO ₂ e	100-5,000 tCO ₂ e	>5,000 tCO ₂ e
Influence:	10%	Subsidiary has no control over the activity in the supply chain	Subsidiary has some form of limited influence on GHG emission	Purchasing decisions can influence supply chain activities
Relevance:	10%	1-2 subsidiaries	3-4 subsidiaries	5+ subsidiaries
Ability to measure:	40%	No activity data available	Poor data, methodology difficulties or estimation necessary	Good quality data and clear methodology
Industry practice:	10%	Rarely or never reported in GHG inventories	Sometimes reported in GHG inventories	Identified as significant by sector-specific guidance or commonly reported in GHG inventories

8. Methods, assumptions and limitations

Each CCHL subsidiary performs their own GHG emissions calculations when developing their GHG emissions inventories. Emissions are typically calculated using the following formula:

Activity/spend data x emissions factor = GHG emissions (tCO₂e)

In a limited number of instances, supplier specific GHG emissions calculations have been used (upstream transportation and distribution). Subsidiaries largely use BraveGen software to manage data and calculate emissions, except for EcoCentral (Excel) and Christchurch Airport (Excel + PACE (airport specific tool). GHG emissions are reported and calculated in tonnes of carbon dioxide equivalent (tCO₂e), which allows the different greenhouse gases to be compared on a like-for-like basis relative to one unit of CO₂. CO₂e is calculated by multiplying the emissions of each GHG by its 100-year global warming potential (GWP).

Emission factors

Where possible, the New Zealand Ministry for the Environment’s (MfE) Measuring emissions: A Guide for Organisations: 2026 guide (GWP100, AR5) is used for sourcing relevant emissions factors. Emission factors used in the calculation of CCHL’s GHG emissions sourced from elsewhere are in Table 7.

Table 7: Emissions Factors in use

Source	Year	Application	Business unit
UK Government: GHG conversion factors for company reporting GWP100, AR5	2026	Well-to-tank – Diesel/Petrol	EcoCentral
		Waste to landfill – select industrial categories	LPC
	2025	Employee commuting – Motorbike	Orion
Australian Government Department of Climate Change, Energy, Environment and Water: Australian national greenhouse accounts factors GWP100, AR5	2024	Well-to-tank – Diesel/Petrol	CIAL
	2025	Well-to-tank – Diesel/Petrol	Citycare
BraveTrace residual supply mix factor	Jan-Dec 2025	Market-based residual electricity supply	CCHL Citycare EcoCentral
NZ Environmental Protection Authority: Notice of approval of unique emission factors	2023	Waste to landfill (Victoria Flats and Porirua Spicer landfills)	Orion
The Airport Council International’s Airport Carbon and Emissions Reporting Tool 7.2532 (ACERT 7.2532)	Unknown	Use of Sold Products	CIAL
		Employee commuting	CIAL
PACE modelled fuel burn and emissions (TtW CO ₂ -e including CH ₄ and N ₂ O) and ICAO Carbon Emissions Calculator Methodology Version 13.1 (PACE)	Unknown	Use of Sold Products	CIAL
		Air travel	CIAL
United States Environmental Protection Agency: Ports emissions. Methodologies for estimating port-related and goods movement mobile source emissions (USEPA)	2022	Use of Sold Products	LPC
ThinkStep v1.1, spend-based factor for road Freight factor adjusted for inflation.	2025	Upstream freight	EcoCentral

A location-based emission factor was used to measure emissions from purchased electricity for all subsidiaries. Market-based scope 2 emissions are also calculated to more accurately demonstrate the emissions associated with our purchasing decisions, and because electrification is an important aspect of the transition plan.

9. Data quality

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.

The assessment of data quality was undertaken by each subsidiary based on the calculation methodology used. No review of data collection, sources or detailed calculations was undertaken by CCHL. The selected calculation methodology can increase the level of 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.

The analysis of data quality by CCHL is limited as this is undertaken by each subsidiary with limited (or reasonable) assurance. All scope 1 and 2 emissions are calculated using direct activity-based method and therefore have low uncertainty.

Table 8: Data quality

Calculation methodology	Data Quality
Primary: Direct activity-based method	High
Primary: Indirect activity-based method	Medium
Primary: Spend-based method	Low
Secondary: Sector/national average method	Low

10. Data collation

Subsidiary processes and documentation are based on a framework supplied by CCHL to guide the climate-related risk work in line with the Aotearoa New Zealand Climate Standards (NZ CS) as well as the GHG Protocol. Subsidiaries are required to prepare their own GHG emissions inventories as part of the framework requirements.

The inventory data is entered, monitored and managed in purpose-built software and supported by separate data collection excel workbooks from each subsidiary, which are analysed in the preparation of CCHL’s inventory.

Table 9: Inventory methodology summary

Scope/ category	Emissions source	Subsidiary	Emissions factor source (refer Table 7)	Calculation method	Data source(s)	Assumptions limitations & uncertainties
1	Stationary diesel	All	MfE (2026)	Direct activity based	Diesel purchased (financial accounts)	Includes all fuel purchased whether burnt or not
1	Mobile diesel/petrol	All	MfE (2026)	Direct activity based	Diesel purchased (financial accounts and fuel cards)	Includes all fuel purchased whether burnt or not
1	Fugitive emissions (refrigerants)	All	MfE (2026)	Direct activity based	Service records	
2	Purchased electricity (market- based)	All	BraveTrace 2025 Q4	Direct activity based	Metered electricity purchased (accounts)	
2	Purchased electricity (location based)	All	MfE (2026)	Direct activity based	Metered electricity purchased (accounts)	
2	Transmission & distribution line losses	Orion	MfE (2026)	Direct activity based	Transpower GXP data; Electricity Authority Reconciliation Manager	
3/1	Outsourcing (Civtec fleet)	Enable	MfE (2026)	Direct activity based	Diesel purchased (accounts)	
3/3	Well-to-tank diesel	All	UK Govt 2026, 2025. Australian Govt 2025, 2024	Direct activity based	Diesel purchased (accounts)	Scope 1 fuel only
3/4	Upstream freight	All	MfE (2026) supplier specific Fair supply (Orion); ThinkStep 2025 (EcoCentral)	Direct activity based	Invoices (accounts)	
3/5	Waste to landfill	All	MfE (2026)	Direct activity based	Supplier reporting or waste audit	
3/6	Business travel	All	MfE (2026)	Direct activity based	Financial accounts	
3/7	Employee commuting and WFH	All	MfE (2026) ACERT 7.2532 (CIAL)	Direct activity based	Staff survey or regional averages	
3/9	Downstream distribution	EcoCentral	MfE (2026)	Indirect activity based	Accounts	
3/11	Aircraft emissions	CIAL	PACE, ACERT 7.2532	Indirect activity based (modelled))	CIAL operational flight data modelled using PACE software	Includes full outgoing flight emissions, APU usage, engine run-ups. Excludes non-GHG emissions. Fuel consumption is modelled rather than measured
3/11	Landside ground access	CIAL	MfE (2026)	Indirect activity based	Survey	
3/11	Shipping emissions	LPC	US EPA 2022	Indirect activity based	Port Control system	Ship movements within LPC boundary only. Fuel consumption is modelled, not measured
3/12	Process waste to Landfill	EcoCentral	MfE (2026)	Indirect activity based	Kate Valley Landfill	Assumed general waste
3/13	Downstream leased assets	CIAL, LPC	MfE (2026)	Direct activity based	Onsold electricity invoices, stock counts	
3/15	HBC Solar (investment)	Orion	MfE (2026)	Direct activity based	Fuel invoices	

11. 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, air travel and waste to landfill.
- 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. **Estimated exclusion:** 219.13 tCO₂e
 - 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) to avoid double counting.
 - Waste to landfill (EcoCentral):** Waste to landfill in the Christchurch region has been measured by EcoCentral in category 12: end-of-life of sold products. Almost all group waste to landfill has been measured by EcoCentral due to the limited geographic spread of the Group, therefore CCHL has subtracted the total waste to landfill emissions across the group from EcoCentral's category 12 emissions to avoid double counting.
 - 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 use by broadband (Enable):** Electricity use associated with the use of Wi-Fi across the group is not double counted as Enable does not measure this emission source.

12. Recalculation policy

No recalculation of base year emissions has been undertaken in FY26.

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.

Application to Subsidiaries

Each subsidiary is expected to maintain a consistent base year 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.

Appendix B

Climate 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 by 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 air fields 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.	Export 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 hightech, 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



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