DUNEDIN CITY COUNCIL | kaunihera a-rohe o Ōtepoti

Notice of Meeting:

I hereby give notice that an ordinary meeting of the Strategy, Planning & Engagement Committee will be held on:

Date:	**Wednesday 19 February 2025**
Time:	**10.00 am**
Venue:	**Council Chambers, Dunedin Public Art Gallery, The Octagon, Dunedin**

Sandy Graham
Chief Executive Officer

Strategy, Planning & Engagement Committee

PUBLIC AGENDA

MEMBERSHIP

Chairperson	Cr Sophie Barker	
Deputy Chairperson	Cr Kevin Gilbert	
Members	Cr Bill Acklin	Cr David Benson-Pope
	Mr Matapura Ellison	Cr Christine Garey
	Cr Carmen Houlahan	Cr Marie Laufiso
	Cr Cherry Lucas	Cr Mandy Mayhem
	Cr Jim O'Malley	Ms Megan Potiki
	Mayor Jules Radich	Cr Lee Vandervis
	Cr Steve Walker	Cr Brent Weatherall
	Cr Andrew Whiley	
Senior Officer	Nicola Morand, Manahautū (General Manager Māori Partnerships and Policy)	
Governance Support Officer	Wendy Collard	

Wendy Collard
Governance Support Officer

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Note: *Reports and recommendations contained in this agenda are not to be considered as Council policy until adopted.*

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1 OPENING

The meeting will open the meeting with a Karakia Timatanga.

2 PUBLIC FORUM

At the close of the agenda no requests for public forum had been received.

3 APOLOGIES

At the close of the agenda no apologies had been received.

4 CONFIRMATION OF AGENDA

Note: Any additions must be approved by resolution with an explanation as to why they cannot be delayed until a future meeting.

DECLARATION OF INTEREST

EXECUTIVE SUMMARY

1. Members are reminded of the need to stand aside from decision-making when a conflict arises between their role as an elected representative and any private or other external interest they might have.

2. Elected members are reminded to update their register of interests as soon as practicable, including amending the register at this meeting if necessary.

RECOMMENDATIONS

That the Committee:

a) **Notes/Amends** if necessary the Elected Members' Interest Register attached as Attachment A; and

b) **Confirms/Amends** the proposed management plan for Elected Members' Interests.

Attachments

	Title	Page
⇩A	Members' Register of Interest	6

Strategy Planning and Engagement Committee Interest Register 13 February 2025				
Councillors are members of all committees				
Name	**Responsibility (i.e. Chairperson etc)**	**Declaration of Interests**	**Nature of Potential Interest**	**Member's Proposed Management Plan**
Mayor Jules Radich	Shareholder	Izon Science Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Taurikura Drive Investments Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Golden Block Developments Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Cambridge Terrace Properties Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	Southern Properties (2007) Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Arrenway Drive Investments Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Golden Centre Holdings Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	IBMS Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	Raft Holdings Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	Otago Business Coaching Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Effectivise Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Athol Street Investments Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder	Allandale Trustee Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Aberdeen St No2 Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Road Safety Action Plan	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	100% Shareholder/Director	Panorama Developments Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Hospital Local Advisory Group (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Council of Social Services (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Tertiary Precinct Planning Group (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Tertiary Sector Steering Group (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Local Government New Zealand (Zone 6 Committee) (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Member	Connecting Dunedin (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Bill Acklin	Shareholder/Director	Dunedin Brokers Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	APRA - AMCOS	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Entertainer	Various functions	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Strath Taieri Community Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Casual Employee	Insulmax	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Craigieburn Reserve Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Toitū Otago Settlers Museum Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Sophie Barker	Director	Ayrmed Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Various publicly listed companies	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Property Owner	Residential Property Owner - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Beneficiary	Sans Peur Trust (Larnach Castle)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Mentor	Business Mentors NZ	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Volunteer	Blue Penguins Pukekura	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Vegetable Growers Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Dunedin Heritage Fund (Council Appointment)	No conflict Identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Gasworks Museum Trust (Council Appointment)	No conflict Identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Otaru Sister City Society (Council Appointment)	No conflict Identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Hereweka Harbour Cone Trust (Council Appointment)	No conflict Identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Deputy Chair	Dunedin Food and Drink Tourism Story Group	No conflict Identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Te Ao Tūroa Partnership (Council Appointment)	No conflict Identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Connecting Dunedin (Council Appointment)	No conflict Identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
Cr David Benson-Pope	Owner	Residential Property Ownership in Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee and Beneficiary	Blind Investment Trusts	Duty to Trust may conflict with duties of Council Office	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Yellow-eyed Penguin Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	New Zealand Labour Party	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Heritage Fund (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Public Art Gallery Acquisitions Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Museum Trust Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Christine Garey	Trustee	Garey Family Trust - Property Ownership - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Women of Ōtepoti	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member (alternate)	Grow Dunedin Partnership (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Museum Trust Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Sophia Charter (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Study Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Ashburn Hall Charitable Trust Board	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	St Paul's Cathedral Foundation (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Theomin Gallery Management Committee (Olveston) (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Kevin Gilbert	Owner	Gipfel Limted - Bakery	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Schlubert Trust - Residential Property	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Schlup Family Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	BNI	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Business South	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Air New Zealand	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Kevin Gilbert and Esther Gilbert Partnership - Residental Rental Property	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Trustee	Biddies Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Advisors	Ronald McDonald House Supper Club Committee	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Fair Trading Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Local Government New Zealand (Zone 6 Committee) (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member (alternate)	Otago Regional Transport Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Toitū Otago Settlers Museum Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Keep Dunedin Beautiful (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Settlers Association (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Saddle Hill Community Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chair	Food Equity and Education Dunedin (FEED) Charitable Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	National Industry Advisors Group Food and Beverage (Workforce Development Council)	No conflict indentified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Connecting Dunedin (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Carmen Houlahan	Owner	Residential Property - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Rental Property - North Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Part Owner	Adobe Group Ltd, Wanaka	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Rotary Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Institute of Directors	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Property Investors Association	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Public Art Gallery Society (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Public Art Gallery Acquisitions Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Creative Dunedin Partnership (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	KBCLR Family Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Theatre Trust (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
Cr Marie Laufiso	Property Owner	Residential Property	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Moray Place Community Building Trust - Trust Owner of Property 111 Moray Place	Duty to Trust may conflict with duties of Council Office	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Otago Mental Health Support Trust	Potential grants applicant which would result in pecuniary interest. Duty to Trust may conflict with duties of Council Office	Do not participate in consideration of grants applications. If the meeting is in public excluded, to leave the room.
	Member	Women of Ōtepoti Recognition Initiative	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Family Member	Staff member a relative	Potential conflict depending on level of staff member involvement	Managed by staff at officer level if a perceived conflict of interest arises.
	Trustee	Corso Ōtepoti Dunedin Trust	Potential grants recipient	Withdraw from discussion and leave the table. If in public excluded leave the room. Seek advice prior to the meeting.
	Dunedin Branch Treasurer	P.A.C.I.F.I.C.A Inc	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Secretary	Dunedin Abrahamic Interfaith Group (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee and Secretary	Refugee Support Group	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Dunedin Former Refugee Steering Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Social Wellbeing Advisory Group (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	The Ōtepoti Community Builders Charitable Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	District Licensing Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Grants Subcommittee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Cherry Lucas	Trustee	Otago Farmers Market	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago A & P Society	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Henderson Lucas Family Trust - Residential Dunedin Property	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	NZ Institute of Chartered Accountants	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Deputy Chair	Otago Museum Trust Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Chinese Garden Advisory Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Toitū Otago Settlers Museum Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Local Government New Zealand (Zone 6 Committee) (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member (alternate)	Grow Dunedin Partnership (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Member	Taieri Airport Trust (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Mosgiel Taieri Community Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Te Poāri a Pukekura Partnership (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Mandy Mayhem	Chairperson	Waitati Hall Society Inc	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Blueskin News Committee	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Co-ordinator	Waitati Market	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Co-ordinator	Emergency response group, Blueskin area	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	FENZ Local Advisory Committee for Otago	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Waitati Music Fesitval Committee	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Blueskin Bay Amenities Society	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Blueskin A & P Society	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chairperson	Keep Dunedin Beautiful (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Zone Representative and Board Member	Keep New Zealand Beautiful	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Coastal Community Cycleway Network	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	West Harbour Community Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Disability Issues Advisory Group (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	**Dunedin Former Refugee Steering Committee (Council Appointment)**	**No conflict identified**	**Seek advice prior to the meeting if actual or perceived conflict of interest arises.**
	Member	Music Advisory Panel (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Property Owner	Residential Property	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Social Wellbeing Advisory Group (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Jim O'Malley	Owner	Biocentrix Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Residential Property Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Ayrmed Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Northern AFC	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Director	Ocho Newco Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Ice Sports Dunedin Incorporated (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Connecting Dunedin (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Hospital Local Advisory Group (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Regional Transport Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Okia Reserve Management Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Tertiary Precinct Planning Group (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Waikouaiti Coast Community Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Lee Vandervis	Director	Lee Vandervis, Antonie Alm-Lequeux and Cook Allan Gibson Trustee Company Ltd - Residential Property Ownership - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director	Bunchy Properties Ltd - Residential Property Ownership - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Vandervision Audio and Lighting - Hire, Sales and Service Business	May contract and provide service to DCC	Withdraw from discussion and leave the table. If the meeting is in public excluded leave the room. Seek advice prior to the meeting.
	Member	District Licensing Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Okia Reserve Management Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Steve Walker	Trustee	Dunedin Wildlife Hospital Trust	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in public excluded leave the room. Seek advice prior to the meeting.
	Member	Orokonui Ecosanctuary	Potential grants recipient	Withdraw from discussion and leave the table. If the meeting is in public excluded leave the room. Seek advice prior to the meeting.
	Member	Society of Beer Advocates	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	New Zealand Labour Party	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Port Chalmers Historical Society	Potential grants recipient	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Residential Property - Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Shareholder	Various publicly listed companies	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	NZ Sea Lion Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Edinburgh Sister City Society (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Music Advisory Panel (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Justice of the Peace		No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Predator Free Dunedin	No conflict	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Predator Free Dunedin (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Brent Weatherall	Member	Urban Access	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Residential Property	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Owner	Business George Street, Dunedin	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Brent Weatherall Jeweller Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Weatherall Trustee Company	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Residential Rental Properties	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Craigieburn Reserve Committee (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Public Art Gallery Society (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
Cr Andrew Whiley	Owner/Operator	Whiley Golf Inc and New Zealand Golf Travel Ltd	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Director/Shareholder 22 May 2017	Estate of Grace Limited	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Trustee	Japek (Family Trust) - Property Ownership - Dunedin	Duties to Trust may conflict with duties of Council Office.	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Golf Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin South Rotary Club	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Institute of Directors	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	National Party	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Board Chair	Volunteer South	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	New Zealand PGA (Professional Golf Association)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Chair	Dunedin Community House Executive Committee	Potential grants recipient	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Property Investors Association	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Hereweka Harbour Cone Trust (Council Appointment)	No conflict Identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Otago Peninsula Community Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Dunedin Shanghai Association (Sister City Society) (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Member	Grow Dunedin Partnership (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	NZ Masters Games Trust Board (Council Appointment)	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Member	Puketai Residential Centre Liaison Committee (Council Appointment	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.
	Board Member	Dunedin Christmas Charitable Trust	No conflict identified	Seek advice prior to the meeting if actual or perceived conflict of interest arises.

PART A REPORTS

STRATEGY, PLANNING AND ENGAGEMENT COMMITTEE FORWARD WORK PROGRAMME

Department: Civic

EXECUTIVE SUMMARY

1 The purpose of this report is to provide a regular update of the Strategy, Planning and Engagement Committee forward work programme to show areas of activity, progress and expected timeframes for decision making across a range of areas of work (Attachment A).

2 As this is an administrative report only, there are no options or Summary of Considerations.

RECOMMENDATIONS

That the Committee:

a) **Notes** the Strategy, Planning and Engagement Committee forward work programme as shown in Attachment A.

DISCUSSION

3 The forward work programme will be a regular agenda item which shows areas of activity, progress and expected timeframes for decision making across a range of areas of work.

4 As an update report, purple highlights show changes to timeframes. New items added to the schedule will be highlighted in yellow. Items that have been completed or updated are shown as bold.

Signatories

Author:	Wendy Collard - Governance Support Officer
Authoriser:	Nicola Morand - Manahautū (General Manager Policy and Partnerships)

Attachments

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Key	
New item	
Changes to timeframes	
Completed; progress to date update	**Bold**

Strategy, Planning and Engagement Committee
Forward Work Programme 2024/2025 - February 2025

Area of Work	Reason for Work	Council role (decision and/or direction)	2025 Feb	Mar	Apr	May	June	July	August	Sept	Oct	Nov	Dec	2026 Jan	Feb
Strategic Refresh	Refreshing the wellbeing strategies to align to align with the 10 year plan.	Ongoing decision making throughout the review process. **Progress to date:** There is now a dependency on an SDG Sustainability framework as to when final drafts will be available for public consultation. See Advisory Panel for an update. An update report of the refresh will be presented to Council in February.	Ongoing work												
Strategic Refresh Advisory Panel	Establishment of an Advisory Panel to oversee the refresh the four wellbeing strategies	Provide governance oversight of the process for the Strategic Refresh. **Progress to date:** Staff are working with the panel to arrange a workshop to establish SDG priorities.	Report to Council												
Resident's Opinion Survey Results	Provide quarterly updates on the Residents Opinion Survey	Consider the quarterly updates of the Residents Opinion Survey **Progress to date:** A report will be presented quarterly.	Quarterly Report				Quarterly Report			Annual report to Council					
Activity Report	To provide an update on the activities.	Activity report **Progress to date:** No substantive updates ending January 2025. An update will be presented to SPEC in March		Report											

Strategy, Planning and Engagement Committee Forward Work Programme 2024/2025 - February 2025															
Area of Work	**Reason for Work**	**Council role (decision and/or direction)**	**2025**											**2026**	
			Feb	**Mar**	**Apr**	**May**	**June**	**July**	**August**	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
Te Taki Haruru Implementation Plan	To embed the principles of the Treaty of Waitangi in the work of Council through the operationalisation of Te Taki Haruru (Māori Strategic Framework).	Approve the Implementation Plan following consultation with Mana Whenua via a report presented in Council and Mana Whenua workshops **Progress to date:** A Project Steering Group has been established and a operational delivery plan for Tū Ake will be developed. An update report has been requested to be presented to Council in May 2025.				Report to Council									
Sustainable Development Framework	Develop a framework based on the United Nations Sustainable Development Goals.	**Progress to date:** An advisory panel has been established and work is underway to identify UNSDGs that are applicable for DCC. An update report will be presented to Council prior to May.	Report to Council												
Submissions to central government and other external parties.	Provide feedback on proposals from central government and other external parties.	Consider and decide on draft submission on central government and other external parties proposals. **Progress to date:** Three submissions have been considered to date.													
Climate Change Work Programme incorporating:															
Zero Carbon Plan 2030	Development of a work programme to achieve alignment with Council's Zero Carbon 2030 target.	**Progress to date:** A Zero Carbon High and Medium Investments Options report was presented to Council at its meeting held on 28 January 2025. An update report is included on the agenda. Staff are preparing advice for the May council meeting and propose to run a workshop with Councillors ahead of the meeting, pending availability.	Report												

Strategy, Planning and Engagement Committee Forward Work Programme 2024/2025 - February 2025															
Area of Work	**Reason for Work**	**Council role (decision and/or direction)**	**2025**											**2026**	
			Feb	**Mar**	**Apr**	**May**	**June**	**July**	**August**	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
South Dunedin Future	Working with the community and Otago Regional Council on the future of South Dunedin	Ongoing decision making throughout the process. **Progress to date:** Technical work on the South Dunedin Risk Assessment and Potential Adaptation Futures for South Dunedin will be completed in mid-February. Council workshops have been scheduled for late-February for ORC and early-March for DCC. Reports will be presented to Councils and released publicly on 16/17 March.			workshop										
Climate Adaptation Plan	Develop a Climate Adaptation Plan	**Progress to date:** A Citywide Climate Resilience Framework report was presented to Council as its meeting held on 28 January 2025**.** Council agreed to a staged approach which will involve staff completing a desk-top stocktake exercise by 30 June (using exisitng resources) and commencing work on the framework from July.													
Second Generation District Plan (2GP) Work Programme															
2GP - Minor Improvements plan change (Variation 3)	Variations to the 2GP - implement parts of the National Policy Statement - Urban Development, and other minor amendments	Decide on variation 3 to the 2GP to be notified for consultation purposes. Decision to adopt the variation to the 2GP. **Progress to date:** A report was presented to 24 September 2024 Council meeting for approval to notify. The Plan Change was notified on 20 November 2024 and submissions closed on 18 December. A summary of submissions will be published on 19 February and the further submissions period will run from 19 February to 4 March.		Submissions											
2GP - Heritage and multi-unit development design plan change	Variation to the 2GP - Heritage and multi-unit development design	Decide on variation 3 to the 2GP to be notified for consultation purposes. Decision to adopt the variation to the 2GP.- **Progress to date:** A report was presented to Strategy, Planning and Engagement Committee on 20 August 2024 to initate Plan Change 2. A workshop was held in September 2024. Notification of the plan change is planned for late 2025 or 2026.													
NPS - Urban Development															

Strategy, Planning and Engagement Committee Forward Work Programme 2024/2025 - February 2025														
Area of Work	**Reason for Work**	**Council role (decision and/or direction)**	**2025**											**2026**	
			Feb	**Mar**	**Apr**	**May**	**June**	**July**	**August**	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
Future Development Strategy Implementation Plan	To prepare a Future Development Strategy Implementation Plan is required under the National Policy Statement on Urban Development	Consider and approve the FDS Implementation Plan. **Progress to date:** A report on the short term actions was presented to Council at its May 2024 meeting. A joint DCC/ORC Implementation Plan will be presented to Strategy, Planning and Engagement Committee or Council for approval following the 9 year plan.													
Heritage	Develop a Ōtepoti Dunedin Heritage Action Plan Implementation Plan	Heritage Action Plan will inform the 10 year plan 2024-34. **Progress to date:** Council approved the Terms of Reference for the Ōtepoti Dunedin Heritage Action Plan Advisory Panel on 25 November 2024. A report with funding options to implement the Heritage Action Plan was presented to Council on 30 January 2025. Council agreed to add funding for 'accelerated support for building owners and actions that require financial investment and support from external consultants' for public consultation through the 9 year plan.					9YP Consultation								
Reserve Management Plans															
Reserve Management Plan Review Schedule	Noting the Reserve Management Plan review schedule	Notes the Reserve Management Plan Review Schedule for 2024-2025. **Progress to date:** A report was presented to the October 2024 meeting. Following which the changes requested were made.	Ongoing work												
Reserves Management Plan - General Policies	Adoption of management plan for reserves is required under section 41(6) of the Reserves Act 1977	Approve a Statement of Proposal and consultation process for the Reserves Management Plan, and adopt the final Plan. **Progress to date:** Public Consultation as required by Section 41(6) of the Reserves Act 1977 was held from 27 January 2025 to 31 March 2025.	Consultation												

Strategy, Planning and Engagement Committee Forward Work Programme 2024/2025 - February 2025															
Area of Work	**Reason for Work**	**Council role (decision and/or direction)**	**2025**											**2026**	
			Feb	**Mar**	**Apr**	**May**	**June**	**July**	**August**	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
Signal Hill Reserve Management Plan	Adoption of management plan for reserves is required under section 41(6) of the Reserves Act 1977	Approve a Statement of Proposal and consultation process for the Reserves Management Plan, and adopt the final Plan. **Progress to date:** Public Consultation as required by Section 41(6) of the Reserves Act 1977 was held from 13 May to 15 July 2024. Hearings were held in November 2024 and deliberations on 12 February 2025	Deliberations												
Mosgiel Memorial Reserve Management Plan	Adoption of management plan for reserves is required under section 41(6) of the Reserves Act 1977	Approve a Statement of Proposal and consultation process for the Reserves Management Plan, and adopt the final Plan. **Progress to date:** Public Consultation as required by Section 41(6) of the Reserves Act 1977 was held from 27 January 2025 to 31 March 2025. Hearings will be held May/June 2025.	Consultation			Hearings									
Logan Park Reserve Management Plan	Adoption of management plan for reserves is required under section 41(6) of the Reserves Act 1977	Approve a Statement of Proposal and consultation process for the Reserve Management Plan, and adopt the final Plan. **Progress to date:** Public Consultation as required by Section 41(6) of the Reserves Act 1977. Dates for the consultation are to be confirmed.													
The Botanic Garden Plan	Adoption of the plan for the Botanic Garden Plan.	**Progress to date:** Work continues on the finalisation of the Botanic Garden Plan. Staff are working with Aukaha to ensure mana whenua input into the pla**n.**													

Strategy, Planning and Engagement Committee Forward Work Programme 2024/2025 - February 2025														
Area of Work	**Reason for Work**	**Council role (decision and/or direction)**	**2025**											**2026**	
			Feb	**Mar**	**Apr**	**May**	**June**	**July**	**August**	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
Botanic Garden Management Plan	Adoption of management plan for reserves is required under section 41(6) of the Reserves Act 1977	Approve a Statement of Proposal and consultation process for the Reserves Management Plan, and adopt the final Plan. **Progress to date:** The Botanic Garden Management Plan will be informed by the Botanic Garden Plan. When the Botanic Garden Plan is finalised, staff will begin work on the Botanic Garden Management Plan.													
Dunedin Town Belt Management Plan	Adoption of management plan for reserves is required under section 41(6) of the Reserves Act 1977	Approve a Statement of Proposal and consultation process for the Reserves Management Plan, and adopt the final Plan. **Progress to date:** Public Consultation as required by Section 41(6) of the Reserves Act 1977 was held from 21 August 2024 t0 23 October 2024. The Hearing is being held on 17 February 2025.	Hearing												
Otago Boat Harbour Reserve Management Plan and Otago Harbour Reserve Management Plan	Adoption of management plan for reserves is required under section 41(6) of the Reserves Act 1977	Approve a Statement of Proposal and consultation process for the Reserves Management Plan, and adopt the final Plan. **Progress to date:** Public Consultation as required by Section 41(6) of the Reserves Act 1977 is being held from 21 August 2024 t0 23 October 2024. The hearing is scheduled to be held in March 2025.		Hearing											
Ocean Beach Domain Reserve Management Plan	Adoption of management plan for reserves is required under section 41(6) of the Reserves Act 1977	Approve a Statement of Proposal and consultation process for the Reserves Management Plan, and adopt the final Plan. **Progress to date:** Work is scheduled to commence once advice from the Coastal Planner on the Kettle Park landfill and other remedial projects along the coastline is received.													
Hereweka Reserve Management Plan	Adoption of management plan for reserves is required under section 41(6) of the Reserves Act 1977	Approve a Statement of Proposal and consultation process for the Reserves Management Plan, and adopt the final Plan. **Progress to date:** A review of the plan is in progress. Approval of a Statement of Proposal for community consultation will be presented to the Strategy, Planning and Engagement Committee's March 2025 meeting		Report											

Strategy, Planning and Engagement Committee Forward Work Programme 2024/2025 - February 2025														
Area of Work	**Reason for Work**	**Council role (decision and/or direction)**	**2025**											**2026**	
			Feb	**Mar**	**Apr**	**May**	**June**	**July**	**August**	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
Sports Ground Reserve Management Plan	Adoption of management plan for reserves is required under section 41(6) of the Reserves Act 1977	Approve a Statement of Proposal and consultation process for the Reserves Management Plan, and adopt the final Plan. **Progress to date:** A review of the plan is in progress. Approval of a Statement of Proposal for community consultation will be presented in May 2025.					Report								

Work from last schedule:		
Area of Work	**Reason for Work**	

SUBMISSION ON RESOURCE MANAGEMENT (CONSENTING AND OTHER SYSTEM CHANGES) AMENDMENT BILL

Department: City Development

EXECUTIVE SUMMARY

1 This report seeks retrospective approval of the draft Dunedin City Council (DCC) submission (Attachment A) to the Government's Environment Committee on the Resource Management (Consenting and Other System Changes) Bill (Resource Management (Consenting and Other System Changes) Amendment Bill 105-1 (2024), Government Bill – New Zealand Legislation).

2 The bill would amend existing provisions in the Resource Management Act 1991 (RMA) relating to infrastructure and energy, housing growth, farming and the primary sector, natural hazards and emergencies, and make system improvements.

3 Consultation on the bill opened on 27 January 2025 and closed on 10 February 2025. A draft of the submission was sent to Select Committee Secretariat before the closing date on 10 February 2025. This report seeks retrospective approval of the draft submission.

RECOMMENDATIONS

That the Committee:

a) **Approves** the draft Dunedin City Council submission, with any amendments, to the Environment Committee on the Resource Management (Consenting and Other System Changes) Bill.

b) **Authorises** the Chief Executive to make any minor editorial amendments to the submission.

c) **Notes** that the Mayor or delegate will speak to any hearings in regard to the submission.

BACKGROUND

4 The DCC previously submitted on the "Natural and Built Environments Bill" and the "Spatial Planning Bill" in February 2023, which were passed into law in August 2023. These pieces of legislation have subsequently been repealed as part of the Government's intention to reform resource management in Aotearoa New Zealand. In June 2024, the DCC submitted on the first part of the reform of the resource management system; the Resource Management (Freshwater and Other Matters) Amendment Bill.

5 This bill would amend existing provisions in the Resource Management Act 1991 (RMA) relating to infrastructure and energy, housing growth, farming and the primary sector, natural hazards and emergencies and system improvements.

6 Specifically, the bill would:

- specify default maximum time frames for consent processing and establish default consent durations for renewable energy and infrastructure consents to improve process and outcome certainty for system users.
- make it optional for councils to implement the medium density residential standards (MDRS) and provide plan-making processes that are more flexible and support housing growth.
- clarify the relationship between the RMA and the Fisheries Act 1996 to balance marine protection with fishing rights.
- provide more tools to deal with natural hazards and emergency events to improve decision-making and efficiency.
- increase penalties for noncompliance, remove insurance against penalties, enable cost recovery for councils, and enable the consideration of an applicant's compliance history in consent decisions.

DISCUSSION

7 The DCC supports several of the amendments proposed within the Bill but has some general and specific comments. To date consultation has been limited and the timeframe of this process has not enabled wide Council engagement ahead of making a submission.

8 The DCC is also concerned with the practicalities and costs of implementing these changes with the impending proposed changes to national directions and Phase 3 reforms. Staff consider that more time for consultation with local government on the reform packages is required. In general with the reform process it also considers that more attention needs to be given to cost of change within the Resource Management framework and the challenges of implementation of national direction and other changes, particularly the tension between progressing changes to the RMA while also preparing for a replacement system. The cost of reform must be appropriately accounted and should consider the cost to local government of Environment Court processes that are triggered or made more complex when national direction is introduced with immediate effect when plan change processes are in progress. It is important that the reform process provides for a cost effective, smooth and lasting transition. The desirability for bi-partisan support for change to increase the chances of reform being lasting is emphasised.

Infrastructure and Energy

9 The DCC supports the default 35-year consent period for the duration of resource consents for renewable energy and long-lived infrastructure. While there are examples of long-lived infrastructure in the definition, the DCC considers that the minimum length of time that long-lived infrastructure is expected to last should be included e.g. 100 years.

Housing Growth

10 The DCC supports the proposal to make implementation of the medium density residential standards (the MDRS) optional. Although Dunedin is not a tier 1 or specified tier 2 territorial authority under the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 currently, this status may change in the future with internal migration as the effect of change on local climate encourages southward migration and the DCC would prefer to consider all residential density options that may be appropriate for Dunedin.

11 The Bill seeks to introduce new powers for the Minister for the Environment to ensure compliance with national direction and require councils to prepare plan changes to give effect to national direction.

12 The DCC supports the proposed amendments to the RMA to clarify the establishment, powers, functions, and duties of Streamlined Planning Process (SPP) panels, however it does not support the exclusion of elected members of local authorities from appointment to SPP panels. Experienced elected members have been involved in the development of district plan and plan changes. They have an intimate knowledge of the territorial authorities' internal activities regarding city planning and the delivery of critical infrastructure. Indeed, it is current practice for specific elected members to be appointed to panels that similar roles to the anticipated SPP activity, for example Future Development Strategy panels. The removal of elected members from the SPP panels has an implication that the government either does not respect or does not trust qualified local authority councillors. This is an unfortunate position, and we request that the Select Committee carefully consider the reasoning for excluding elected officials.

13 The DCC notes that the Bill proposes to enable the use of the SPP for applications for the descheduling of heritage buildings. Dunedin values its cultural heritage as a vital part of its history and identity, its contribution to our communities' sense of place; and for the economic value it brings to our city from visitors and business (including the film industry). The DCC does not oppose the proposed change (provided these processes retain the ability of elected members to sit on these processes). The DCC considers that if this approach is taken, there is a need for clear guidance within the proposed National Direction for Historic Heritage about the criteria to be considered when making scheduling and de-scheduling decisions that appropriately reflect the economic and social value of heritage to communities whilst also providing for strategically significant projects that may be locationally restricted (for example in Dunedin – the New Hospital site required demolition of a scheduled heritage building).

Farming and Primary Sector

14 The DCC has no comment on these proposed changes.

Natural Hazards and Emergencies

15 The DCC strongly supports the proposed changes to enable councils to decline land use consents where there are significant natural hazard risks, and for new natural hazard rules to have immediate legal effect from notification of a plan change. The alignment of language and definitions with the foreshadowed National Direction for Natural Hazards needs to be carefully considered. These changes are supported as the delay between identifying and documenting the risk from natural hazards and applying them through current planning processes can result in land use decisions being made without considering current natural hazard risk information.

System Improvements

16 The DCC supports the proposed changes to the compliance regime to deter offences, and other changes related to further information requests, applicants' ability to review consent conditions prior to a decision being issued, and the ability for council to recover costs when reviewing consents required as a result of a national direction.

Additional comments

17 The DCC notes that the Bill does not address the implementation of the National Planning Standards in an environment of change, which the DCC is currently required to implement by May 2026. The DCC wrote to the Minister for RMA reform and the Minister for the Environment in June 2024 requesting that the requirement to implement the standards was suspended until after the Government's RMA reforms are completed. This is because the implementation as required by the planning standards will require a full or near-full review of the 2GP. The DCC considers that the costs of this exercise would be high and benefits low, especially so if they are undertaken prior to the Government's planned reforms to the RMA and national direction. The DCC again respectfully requests that the requirement to implement the RMA national planning standards is suspended until after the completion of the RMA reforms. The costs and benefits of these standards should also be fully explored within the broader reform process.

OPTIONS

Option One – Recommended Option – Approve the draft submission

18 Under this option, Council approves the draft DCC submission to the Government's Environment Committee on the Resource Management (Consenting and Other System Changes) Bill, with any agreed amendments.

Advantages

- Opportunity to contribute to the discussion of resource management reform at a national level.
- Opportunity to advocate for protecting the unique environment and ecosystems in Ōtepoti Dunedin.

Disadvantages

- There are no identified disadvantages for this option.

Option Two – Do not approve the draft submission

Do not approve the draft Dunedin City Council submission:*Advantages*

- There are no identified advantages.

Disadvantages

- Missed opportunity to contribute to the discussion of resource management reform at a national level.
- Missed opportunity to advocate for protecting the unique environment and ecosystems in Ōtepoti Dunedin.

NEXT STEPS

19 If the submission is approved staff will advise the Select Committee Secretariat that the submission is final.

20 If the submission is approved with amendments, staff will amend the submission and send a final submission to the Select Committee Secretariat.

Signatories

Author:	Paul Freeland - Principal Policy Advisor
Authoriser:	Dr Anna Johnson - City Development Manager

Attachments

There are no attachments for this report.

SUMMARY OF CONSIDERATIONS

Fit with purpose of Local Government

This decision promotes the environmental, economic, social, and cultural well-being of communities in the present and for the future.

Fit with strategic framework

	Contributes	Detracts	Not applicable
Social Wellbeing Strategy	☐	☐	✓
Economic Development Strategy	☐	☐	✓
Environment Strategy	✓	☐	☐
Arts and Culture Strategy	☐	☐	✓
3 Waters Strategy	✓	☐	☐
Future Development Strategy	✓	☐	☐
Integrated Transport Strategy	☐	☐	✓
Parks and Recreation Strategy	✓	☐	☐
Other strategic projects/policies/plans	✓	☐	☐

There is also a strategic fit with the Zero Carbon Policy, Te Taki Haruru – Māori Strategic Framework, Biodiversity Strategy, and the Dunedin Future Development Strategy 2024-2054.

Māori Impact Statement

There are no known impacts for Māori.

Sustainability

Proposals in the Bill have potential implications for sustainability, particularly for environmental resilience and protecting indigenous biodiversity in Ōtepoti Dunedin, and the DCC's commitment to its Zero Carbon Policy.

Zero carbon

The proposal is unlikely to impact on city-wide or DCC emissions, and greenhouse gas emissions are likely to stay the same.

LTP/Annual Plan / Financial Strategy /Infrastructure Strategy

There are no implications for current levels of service and/or performance measures.

Financial considerations

There are no financial implications.

Significance

This decision is considered low in terms of the Council's Significance and Engagement Policy.

Engagement – external

There has been no external engagement on this submission.

Engagement - internal

Staff from City Development and Corporate Policy have been involved in the preparation of this submission.

SUMMARY OF CONSIDERATIONS
Risks: Legal / Health and Safety etc. There are no identified risks.
Conflict of Interest There are no known conflicts of interest.
Community Boards

RESIDENTS' OPINION SURVEY QUARTERLY REPORT OCTOBER-DECEMBER 2024

Department: Corporate Policy

EXECUTIVE SUMMARY

1 This report provides a summary of the Residents' Opinion Survey (ROS) quarterly results (the Quarterly results) for the October-December 2024/25 quarter (Attachment A).

2 The Quarterly results show a comparison between the first quarter (July-September 2024) and the second quarter (October-December 2024). The previous report was presented to the Strategy, Planning, and Engagement Committee (the Committee) on 16 October 2024.

3 The Quarterly results show quarter-on-quarter changes in:

- residents' overall satisfaction and dissatisfaction with ten (10) DCC services/facilities areas.
- residents' overall satisfaction with five (5) aspects of the DCC and elected members.

4 Changes in overall satisfaction (increase or decrease from the previous quarter) were not found to be statistically significant in any of the 15 areas of overall satisfaction, therefore they are indicative only.

5 Overall satisfaction with each facilities/service area continues to be generally high and steady, with the level of overall satisfaction with 'Communication channels' further increasing from 50% to 61%.

6 Dissatisfaction with Roading related infrastructure increased by 9%, and with Regulatory services by 7%. Similar to positive changes, those fluctuations from quarter one to two were not found to be statistically significant.

7 The new contract will include a refreshed survey tool that is compliant with the recommendations of the Auditor General Office on measuring performance.

RECOMMENDATIONS

That the Committee:

a) **Notes** the Residents' Opinion Survey quarterly results for the period of October-December 2024 (Quarter Two 2024/25).

b) **Notes** the current contract expiry date of 31 August 2025 and the need for a new contract. A new open market procurement plan is underway.

BACKGROUND

8 The ROS is a monitoring tool utilised by the DCC to collect statistically reliable results on residents' satisfaction with DCC services and facilities and perceptions of Council's performance. It has been commissioned by the DCC every year since 1994 in varying forms and provides an annual snapshot to Council.

9 On 13 February 2023, the Committee requested quarterly updates on the ROS.

10 The Quarterly results have been prepared by GravitasOPG in consultation with Corporate Policy.

11 Three quarterly updates were presented in 2024 to the Committee, and the previous annual survey results were presented to Council in September 2024.

12 A variation to the five-year contract with GravitasOPG for the ROS was agreed to in June 2024, and will end with the delivery of a 2024/25 annual survey results (sampling ends on 30 June 2025). Quarterly updates were added as a variation to the five-year contract with GravitasOPG for the ROS and were to end with the delivery of the 2023/24 annual survey results. The contract with GravitasOPG was extended for the financial year (2024/25) to allow for the ROS to be appropriately informed by data requirements identified by reviews currently underway.

13 The current contract extension (2024/25) will expire on 31 August 2025 with no further extension permitted under the current Dunedin City Council (DCC) Procurement Policy. A new procurement plan for an open market contract is underway.

DISCUSSION

14 The annual ROS is based on a sample of randomly selected residents aged 18 years and over from the general electoral roll, with a target sample size of 1,200 residents each year.

15 The results are weighted to known population distributions based on the 2018 Census data for age, gender, ethnicity, and location. This is to reduce sample bias and represent the demographics of Ōtepoti Dunedin.

16 The 2023 Census results are now available, pending one confirmation for ethnicity data for Ōtepoti Dunedin which the supplier has requested from Stats NZ. The 2018 Census data will be used throughout the next two quarters to maintain consistency through to the 2024/25 annual report.

17 Participation in the ROS is voluntary and the response count to each question varies.

18 The total base (number of respondents who participated in the survey) for the October-December 2024 quarter was 261, which is the smallest quarterly number of respondents of the last five quarterly updates.

19 The response count ranged from 81 to 260 across the 15 questions. This wide range of response counts to the questions could be due to any combination of the following three reasons:

- The response count for any question does not incorporate the ''Don't know" answer. Only answers on the satisfaction scale were analysed. For example, the response count to the question about '3 Other public facilities' was 232 out of the total base of 261, meaning some participants might have clicked on "Don't know" for that question.

- A question was left unanswered, regardless of whether it was on purpose or an oversight.
- The question '10. Handling enquiries' was only asked if a respondent indicated in the previous question that they had contacted the DCC staff in the last three months.

20 Like the ROS annual results, quarterly results are statistically tested. The results for this quarter have a higher margin of error of +/- 6.1% compared to previous quarters due to the smaller total number of respondents this time. It is important to note that the Quarterly results have a greater margin of error because of the smaller number of respondents, compared to around +/- 2.6% for annual results.

21 Statistically significant differences from the previous quarter would be denoted in quarterly ROS reports with a red arrow. There were no statistically significant differences noted between the two quarters.

22 It is recommended to exercise caution when considering any increase or decrease in satisfaction ratings that are not statistically significant as they may not be reliable.

23 The overall satisfaction with each facilities/service area continues to be generally high and steady, with the level of overall satisfaction with 'Communication channels' further increasing from 50% to 61%. Although the granular analysis is out of the scope of the quarterly reporting, the current analysis indicates this increase was not found statistically significant.

24 Dissatisfaction with Roading related infrastructure increased by 9%, and with Regulatory services by 7%. Again, those fluctuations from quarter one to two were not found statistically significant and the level of overall satisfaction remains steady over time.

Clarification on terms

25 'Statistically significant' means a result is unlikely due to a random chance in sampling and is likely due to some factor of interest (for example, a meaningful change that requires attention).

26 There is a strong relationship between determining what is statistically significant, the sample size and margin of error. The bigger the sample, the smaller the margin of error (uncertainty about results). In a large sample size, a small percentage change could be deemed as significant because the level of uncertainty (margin of error) is small. The change (even if it is small) is deemed significant as the change is likely due to a factor of interest.

27 In a smaller sample size, a large change may fail to be deemed significant due to a greater level of uncertainty. For example, a large percentage change (14%) for question '10: Handling enquiries' in the October-December quarter was deemed not statistically significant due to its small sample size and a greater margin of error.

Findings of ROS quarterly results: October-December 2024 quarter

28 There were no statistically significant changes to overall dissatisfaction or satisfaction in this quarter.

29 As for overall satisfaction with the five aspects of the DCC and elected members, results for quarter two are generally steady and consistent with previous quarters.

OPTIONS

29 There are no options as this is a report for noting.

NEXT STEPS

30 Staff will provide the next quarterly report, January-March 2025, at next Committee meeting in June 2025.

31 A new open market procurement process is underway to maintain continuity of the ROS.

Signatories

Author:	Nadia Wesley-Smith - Corporate Policy Manager - Acting
Authoriser:	Nicola Morand - Manahautū (General Manager Policy and Partnerships)

Attachments

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⇩A	DCC Residents' Opinion Survey - Quarterly Tables Dec 2024	39

SUMMARY OF CONSIDERATIONS

Fit with purpose of Local Government

The ROS supports democratic local decision making and action by, and on behalf of communities.

Fit with strategic framework

	Contributes	Detracts	Not applicable
Social Wellbeing Strategy	✓	☐	☐
Economic Development Strategy	✓	☐	☐
Environment Strategy	✓	☐	☐
Arts and Culture Strategy	✓	☐	☐
3 Waters Strategy	✓	☐	☐
Spatial Plan	✓	☐	☐
Integrated Transport Strategy	✓	☐	☐
Parks and Recreation Strategy	✓	☐	☐
Other strategic projects/policies/plans	✓	☐	☐

The ROS contributes to all aspects of the strategic framework as it gauges residents' satisfaction with DCC services and performance.

Māori Impact Statement

The current ROS does not qualify to receive Māori decent electoral roll data under section 112 of the Electoral Act 1993. Where response rates are not proportional to the Ōtepoti Dunedin population for Māori, the results are weighted to known population distributions based on the 2018 Census data to reduce sample size and cost.

Sustainability

The ROS asks about residents' perception of Dunedin as a sustainable city, and whether the DCC is leader in encouraging the development of a sustainable city.

Zero carbon

The ROS has no impact on the city-wide and DCC emissions.

LTP/Annual Plan / Financial Strategy /Infrastructure Strategy

The ROS asks about residents' satisfaction with the 'value for money' of the services provided by the DCC. ROS new survey tool for 2025 onwards will be appropriately informed by data requirements for future monitoring and reporting, identified by the Levels of Service review conducted in 2024.

Financial considerations

There are no direct financial considerations.

Significance

The significance of this report is low, in terms of Council's Significance and Engagement Policy, as it is for noting only.

Engagement – external

The ROS is a form of external engagement.

SUMMARY OF CONSIDERATIONS
Engagement - internal The ROS results are available to management and staff monthly. Reporting of the ROS results will be considered as part of future work on non-financial reporting, levels of service, and Strategic Framework Refresh.
Risks: Legal / Health and Safety etc. There are no known legal/ health and safety risks.
Conflict of Interest There are no known conflicts of interest.
Community Boards The ROS asks about overall satisfaction with performance of Community Board members as noted in the results.

DUNEDIN CITY COUNCIL | kaunihera a-rohe o Ōtepoti

Quarterly Reporting by Quarter: October - December 2024 gravitasOPG

Quarter	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
Total base	*349*	*298*	*323*	*262*	*261*
Margin of error (MoE) at 95% confidence interval	5.3%	5.7%	5.5%	6.1%	6.1%

Overall satisfaction with each facilities/service areas (10)		Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Satisfaction (7-10) Over Time
1 Parks, reserves and open spaces	Total dissatisfied	6%	3%	6%	1%	3%	
	Total satisfied	**78%**	**80%**	**79%**	**81%**	**78%**	
	Base	*339*	*288*	*315*	*250*	*247*	
2 Sports and recreation facilities	Total dissatisfied	1%	2%	2%	1%	4%	
	Total satisfied	**76%**	**75%**	**72%**	**78%**	**76%**	
	Base	*312*	*260*	*285*	*220*	*221*	
3 Other public facilities	Total dissatisfied	0%	3% ⬆	2%	1%	1%	
	Total satisfied	**85%**	**82%**	**81%**	**84%**	**81%**	
	Base	*318*	*267*	*294*	*232*	*232*	
4 Water related infrastructure	Total dissatisfied	11%	10%	14%	13%	14%	
	Total satisfied	**61%**	**64%**	**60%**	**61%**	**61%**	
	Base	*326*	*280*	*301*	*246*	*250*	
5 Roading related infrastructure	Total dissatisfied	46%	40%	40%	27% ⬇	36%	
	Total satisfied	**25%**	**27%**	**30%**	**34%**	**33%**	
	Base	*340*	*288*	*316*	*258*	*260*	
6 Waste management	Total dissatisfied	12%	11%	14%	9%	11%	
	Total satisfied	**61%**	**63%**	**63%**	**65%**	**68%**	
	Base	*343*	*286*	*316*	*256*	*256*	
7 Regulatory services	Total dissatisfied	12%	9%	9%	7%	14%	
	Total satisfied	**54%**	**61%**	**57%**	**56%**	**54%**	
	Base	*309*	*264*	*290*	*236*	*239*	
8 Planning and urban design	Total dissatisfied	17%	10%	16%	10%	12%	
	Total satisfied	**57%**	**64%**	**58%**	**65%**	**63%**	
	Base	*340*	*289*	*316*	*253*	*259*	
9 Communication channels	Total dissatisfied	8%	5%	9%	5%	7%	
	Total satisfied	**57%**	**57%**	**57%**	**50%**	**61%**	
	Base	*296*	*246*	*275*	*217*	*228*	
10 Handling enquiries	Total dissatisfied	13%	14%	26%	18%	6%	
	Total satisfied	**70%**	**75%**	**61%**	**59%**	**73%**	
	Base	*127*	*88*	*101*	*88*	*81*	

Overall satisfaction with the DCC and elected members (5)		Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Satisfaction (7-10) Over Time
1 Performance of the Mayor and Councillors	**Total satisfied**	**28%**	**30%**	**26%**	**30%**	**32%**	
	Base	*287*	*242*	*263*	*220*	*220*	
2 Performance of Community Board members	**Total satisfied**	**36%**	**35%**	**34%**	**38%**	**33%**	
	Base	*242*	*198*	*226*	*196*	*182*	
3 Dunedin City Council	**Total satisfied**	**50%**	**51%**	**49%**	**50%**	**48%**	
	Base	*332*	*286*	*314*	*251*	*251*	
4 Value for money of DCC services and activities	**Total satisfied**	**40%**	**36%**	**38%**	**38%**	**37%**	
	Base	*330*	*279*	*293*	*240*	*243*	
5 Facilities, infrastructure and services	**Total satisfied**	**61%**	**63%**	**64%**	**63%**	**65%**	
	Base	*335*	*282*	*312*	*249*	*259*	

⬇⬆ arrow denotes a statistically significant increase or decrease from the previous quarter

ZERO CARBON UPDATE

Department: Sustainability Group

EXECUTIVE SUMMARY

1 The purpose of this report is to provide an update on elements of the Zero Carbon work programme. It presents a report on the DCC's organisational emissions for the 2023/24 financial year (Attachment A). Other Zero Carbon Plan actions are also updated: a cruise emissions baseline for Dunedin (Attachment B), phase 1 findings of a Zero Carbon business support pilot, and the most recent Zero Carbon Alliance Collaboration Group report (Attachment C).

2 DCC's most recent organisational emissions inventory shows good progress against emissions targets. Data for the 2023/24 financial year shows DCC has achieved a 29.75% reduction in overall emissions compared to 2018/19.

3 This reduction represents significant progress towards the 2026/27 interim emissions target of a 30% reduction in annual tCO_2e emissions relative to 2018/19, with the DCC falling only 208 tCO_2e short of this target in 2023/24.

4 Updates on Zero Carbon Plan actions are also provided:

a) A Dunedin city cruise ship emissions baseline has been calculated. This shows cruise ships emitted 59,158 tonnes of carbon dioxide equivalent in 2018/19. This is the equivalent of 3.4% of Dunedin city's total gross emissions in that year. For context, the cruise industry is an important part our regional economy with the economic impact to Otago / Southland from the 23/24 season estimated to be $156 million.

b) The DCC is piloting a Zero Carbon business support initiative. Phase 1 findings, and their implications for Phase 2 of the pilot, are summarised.

c) Collaboration between Zero Carbon Alliance partners continues, with actions related to transport and waste. At its most recent Collaboration Group meeting, there was unanimous support for inviting Business South to join the Alliance.

RECOMMENDATIONS

That the Committee:

a) **Notes** the report

b) **Notes** the attached reports on Zero Carbon work programme actions, including:

i) DCC Inventory Management Report for 2023/24 (Attachment A)

ii) the Ōtepoti Dunedin's Greenhouse Gas Emissions Inventory: Cruise Ship Emissions report (Attachment B)

iii) the Zero Carbon Alliance Collaboration Group report (Attachment C)

BACKGROUND

DCC organisational emissions

5 In July 2022 Council adopted the Zero Carbon Policy **(CNL/2022/049).** The DCC's Zero Carbon Policy states that 'the DCC will monitor, measure, report, manage, verify and publicly report DCC emissions on a regular basis in line with the requirements of ISO 14064'.

6 In giving effect to this, the DCC's maintains an operational Emissions Management and Reduction Plan (EMRP, which sets organisational targets and actions), and produces an annual Inventory Management Report (IMR), which reports on the organisation's emissions, along with progress against EMRP actions.

7 The DCC's Zero Carbon Policy EMRP and annual IMR are submitted to the Local Government Financing Agency's (LGFA) Climate Action Loans programme (CAL) to enable borrowing at a discounted rate.

8 In June 2024, the Executive Leadership Team (ELT) adopted DCC's operational EMRP for 2023/24 - 2030/31. This EMRP sets out how DCC intends to reduce emissions in the period to 2030/31.

9 Council noted the DCC's EMRP at its 31 July 2024 meeting **(CNL/2024/133)**.

10 The EMRP includes DCC organisational emissions reduction targets as follows:

a) a 2026/27 interim emissions target of a 30% reduction in annual tCO_2e emissions compared with 2018/19; and

b) a 2030/31 target of a 42% reduction in emissions compared with 2018/19.

11 Emissions modelling completed in early 2024 estimated that completion of all EMRP projects would deliver a 38% reduction in emissions to 2030/31. EMRPs are a requirement for the LGFA in maintaining the DCC's status under the CAL programme. There is a requirement for the organisation to reference historic performance on emissions reduction in future EMRPs.

Zero Carbon Plan action - cruise emissions baseline

12 The city Zero Carbon Plan was adopted by Council in September 2023, setting out the key shifts needed to become a Zero Carbon city, and what the DCC can do to achieve this.

13 When the Zero Carbon Plan was developed, cruise ship emissions were not included in the emissions footprint or modelling, due to a lack of robust data and methodology.

14 To address these challenges, one of the actions in the Zero Carbon Plan Implementation Plan 2023/24 was to establish a baseline for emissions from cruise vessels (Zero Carbon Implementation Plan Reference #T2.4.2).

15 Development of a cruise emissions baseline was also included as an action in the Ōtepoti Dunedin Cruise Action Plan 2023-2025.

Zero Carbon Plan action - business support pilot

16 As part of the Zero Carbon 2023/24 and 2024/25 Implementation Plans, to contribute towards the key shift: 'support businesses and sectors to reduce emissions from their operations', the DCC is piloting a Zero Carbon business support initiative (Zero Carbon Implementation Plan References #C.4.7.1, #C4.7.2, #C4.7.3a).

17 The intention of the pilot is to test an approach to support small-to-medium enterprises (SMEs) based in Dunedin to reduce their operational emissions.

18 In Ōtepoti Dunedin, most business units are SMEs. The Zero Carbon Plan prioritises support for these smaller firms to enhance business resilience to climate-related consumer demands and regulatory changes. Research suggests that, relative to larger firms, they are less resilient to shocks and less able to dedicate staff to understanding and navigating the transition to a low carbon economy.

Zero Carbon Plan action - Zero Carbon Alliance (ZCA)

19 The ZCA is a formal collaboration between the Dunedin City Council, Otago Regional Council, Te Pukenga Dunedin Campus, Te Whatu Ora – Southern, and the University of Otago. Supporting and collaborating with the Zero Carbon Alliance, expanding the focus of work, and growing the Alliance as appropriate is a priority action in the Zero Carbon Implementation Plan 2023/24 and 2024/25 (Zero Carbon Plan Reference #C2.4.1).

20 The Memorandum of Understanding for the Zero Carbon Alliance was approved by Council in July 2022 **(CNL/2022/074)**.

21 Council, at its meeting of 27 August 2024 requested that the Zero Carbon Alliance invite Business South to become a member of the Alliance:

Moved (Cr Sophie Barker/Cr Cherry Lucas):

That the Council:

*c) **Requests** that the Zero Carbon Alliance invites Business South to become a member of the Zero Carbon Advisory Panel.*

***Motion carried (CNL/2024/159)** with Cr Laufiso recording her vote against*

DISCUSSION

DCC emissions Inventory Management Report 2023/24 (Attachment A)

22 The Inventory Management Report (Attachment A) gives a full breakdown of the DCC's organisational emissions results for 2023/24, as well as how emissions reduction projects were tracking against the 2023/24-2030/31 EMRP as at 30 June 2024.

23 The scope of the emissions in this report are determined by 'operational control' methodology. This includes activities undertaken by DCC staff (such as driving fleet cars, electricity usage) and emissions from DCC assets or services (such as LPG burnt at DCC pools, landfill gas from Green Island Landfill).

Difference between DCC emissions and Dunedin city-wide emissions

24 Emissions are also measured triennially for Dunedin city, using an internationally recognised methodology, which primarily measures emissions produced within the Dunedin boundary. As most of the DCC's activities occur within the Dunedin boundary, there is some overlap with city emissions. However, the key emissions sources, profile, and quantity of emissions differ significantly between the DCC and city scales.

Summary of emissions trends

25 The Inventory Management Report shows good progress against the DCC's emissions targets. Data for the 2023/24 financial year shows DCC has achieved a 29.75% reduction in overall emissions compared to 2018/19.

26 This reduction represents significant progress towards the 2026/27 interim emissions target of a 30% reduction in annual tCO_2e emissions relative to 2018/19, with the DCC falling only 208 tCO_2e short of this target in 2023/24.

27 Key contributors to the emissions reductions achieved in 2023/24 compared with the 2018/19 baseline are:

a) a 49% reduction in Waste to Landfill emissions (15% down compared with 2022/23)

b) a 20% reduction in closed landfills emissions (due to the decay of old landfill material rather than any direct DCC intervention)

c) a 19% reduction in stationary diesel emissions (37% down compared with 2022/23)

d) a 51% reduction in fleet fuel – petrol (15% down compared with 2022/23)

e) a 43% reduction in electricity emissions (7% down compared with 2022/23).

28 Despite DCC tracking well to meet the 2026/27 overall emissions target, several emission sources increased in 2023/24. Emissions from wastewater treatment represent the largest reported increase relative to 2018/19. This is primarily due to a change in the way emissions were calculated in 2023/24 compared with prior years, using rather than an increase in actual emissions, so caution must be applied in any comparison. More information regarding this change in wastewater treatment plant emissions measurement can be found on page 19 of the 2023/24 Inventory Management Report (Attachment A).

29 Other increases include:

a) a 41% increase in stationary LPG emissions compared with 2018/19 (with this also 28% higher than 2022/23); and

b) an 8% increase in fleet fuel – diesel emissions compared with 2018/19 levels (however fleet diesel emissions were 5% lower than 2022/23).

EMRP implementation

30 Continued implementation of EMRP actions is required to meet DCC's emissions reduction targets.

Independent assurance report

31 The Inventory Management Report for 2023/24 has been independently audited.

Zero Carbon Plan action - cruise emissions baseline

32 The cruise industry is an important part of the region's economy. The economic impact to Otago / Southland from the 23/24 season is estimated to be $156 million.

33 A cruise ship greenhouse gas (GHG) emissions baseline footprint for Dunedin is appended as Attachment B.

34 The next full Dunedin city community footprint is scheduled to be completed in the 2025/26 financial year. This will include cruise ship emissions.

Overall results and breakdown by category

35 Cruise vessel emissions are split into three separate categories:

a) To/from Destination: GHG emissions produced while the cruise ship travels from Dunedin to the next destination or from the last destination to Dunedin.

b) In-Port: GHG emissions produced while the cruise ship is stationary in-port.

c) Stationary at Sea: GHG emissions are produced while the cruise ship is stationary at sea (e.g. while waiting to enter the port).

36 Total cruise vessel emissions between 2018/19 and 2023/24 ranged between 51,922 tonnes of carbon dioxide equivalent (tCO2e) and 63,652tCO2e. No cruise vessels visited Ōtepoti Dunedin in 2020/21 or 2021/22 due to COVID-19 related travel restrictions.

37 The overall results are illustrated below, split into the three sub-categories of cruise vessel emissions:

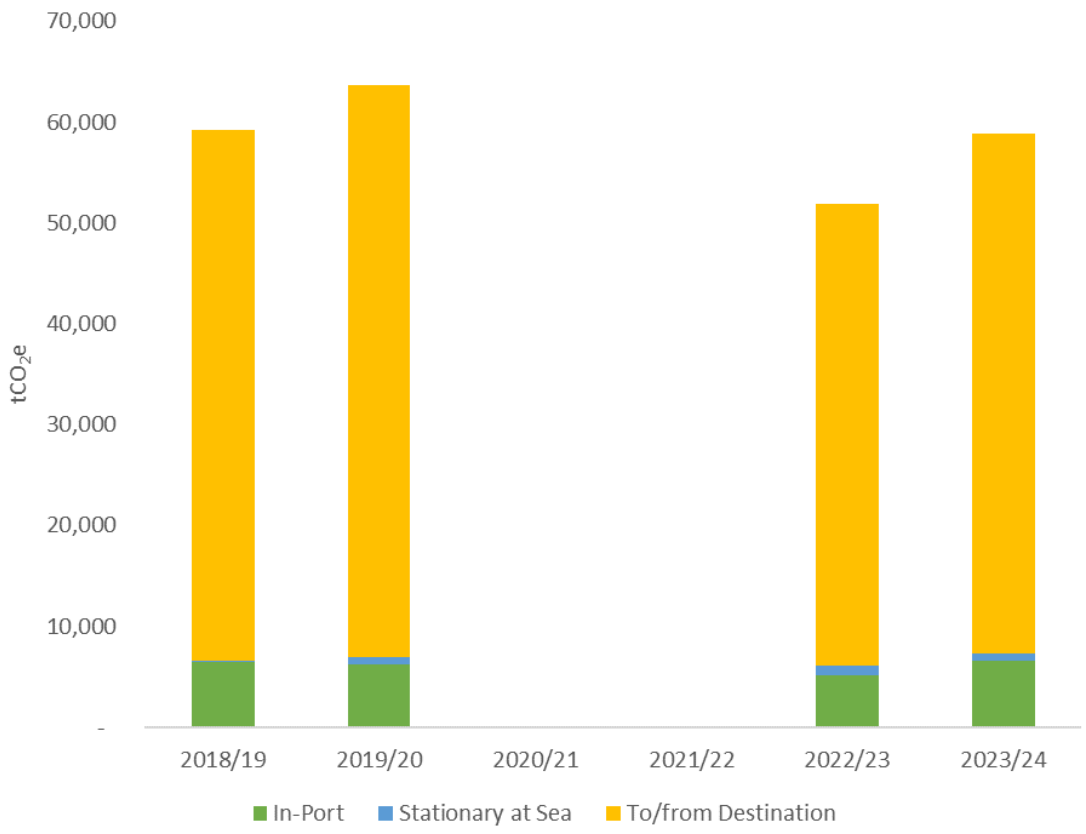

Figure 1 – Annual Estimated GHG Emissions from Cruise Ships visiting Dunedin (tCO2e)

Cruise vessel emissions as portion of total Dunedin city emissions

38 As noted above, cruise vessel emissions were not included within the most recent Dunedin City Community Carbon Footprint for 2021/22, or the Zero Carbon Plan emissions modelling.

39 The table below shows cruise vessel emissions when they are added to Dunedin's previously reported city-wide emissions up to 2021/22. When added to the overall inventory, cruise vessel emissions:

a) in 2018/19 comprised 8.8% of transport emissions, and 3.4% of total gross emissions;

b) in 2019/20 comprised 10.3% of transport emissions, and 3.8% of total gross emissions; and

c) in 2020/21 and 2021/22, no cruise vessels visited Dunedin, so there are no cruise emissions for those years.

Table 1 - Dunedin GHG Emissions Inventory (including cruise ships) tCO2e

Sector	2018/19	2019/20	2020/21	2021/22
Stationary Energy	205,764	202,553	229,437	181,671
Transport (including cruise ships)	672,089	618,840	576,454	517,379
Cruise ships portion of total transport emissions	*59,158*	*63,652*	-	-
Waste	112,473	96,128	95,318	97,567
IPPU	37,561	37,561	36,890	37,027
Agriculture	728,318	730,255	708,856	708,856
Forestry	-361,337	-524,194	-428,596	-493,170
Total (net) incl. forestry	**1,394,867**	**1,161,142**	**1,218,358**	**1,049,330**
Total (gross) excl. forestry	**1,756,205**	**1,685,337**	**1,646,955**	**1,542,500**

Development of GHG emissions methodology

40 The cruise ship emissions footprint was completed for the DCC by a provider that undertakes emissions inventories for many local authorities and completed the most recent Dunedin city community greenhouse gas emissions footprint.

41 As outlined in Attachment B, the provider applied research and best practice to develop a methodology in line with the Global Protocol for Community-Scale Greenhouse Gas Emissions Inventory v1.1 (GPC) BASIC+ methodology (the methodology that is used for the full Dunedin city community footprints).

42 As climate science and methodologies continue to evolve over time, or as more detailed information becomes available, the cruise emissions methodology will be updated. Should this occur, the emissions will be re-baselined.

Zero Carbon Plan action – business support pilot

43 The pilot aims to test an approach that supports businesses to identify actions to reduce emissions, rather than to provide a formal footprint for certification.

44 Pilot design considered learnings from previous DCC business-focused emissions reduction projects. Earlier projects were funded by MBIE (as part of Covid-related support for the tourism sector).

45 A supplier with in-depth knowledge of both business and emissions reduction was contracted by the DCC to co-develop and deliver the programme.

46 The programme emphasised bespoke support, with participants having one-on-one conversations with the supplier throughout.

47 Through involvement in the programme each participant business received:

- an emissions reduction footprint that identified their top 20 emissions sources
- a carbon footprint calculator spreadsheet (which they could update in future if desired)
- data collection improvement suggestions (if relevant)
- a bespoke emissions reduction plan that identified quick wins and longer-term actions to cut emissions.

48 There were four steps to the Phase 1 pilot programme:

Learn: Workshop and networking opportunities for participants to understand the programme and connect with other businesses.

Measure: Use of a carbon calculator and data collection to develop an organisational carbon footprint.

Act: Identify emission reduction opportunities, set targets, and start actions.

Follow-up: Two- and seven-months post-implementation to review actions taken.

49 The final seven months follow up has not yet been completed.

Participants

50 Fourteen businesses participated in the Phase 1 pilot programme. For the purpose of the pilot, a range of potential participants from various industries and business structures were long-listed to ensure that the programme was tested on various types of businesses. They were contacted individually to invite them to take part in the programme.

51 There was a 100% completion rate for participants who began the Phase 1 pilot.

52 Sectors included:

- Health and wellness
- Food and beverage
- Building and construction
- Marketing/professional
- Sustainable textile/retail

Emissions reduction themes and opportunities

53 Each business had differing footprints, reflecting their unique sector, operating environment and business model. In total, 3,000 tCO2e was in scope.

54 In an approach simplified from ISO 14064:2018 (the global standard for measuring and reporting organisational emissions), scope 1, 2, and 3 emissions[1] were considered. Businesses were supported to gather relevant emissions data, identifying major emissions sources.

55 For most participants, Scope 3 was significantly higher than their Scope 1 or 2 emissions. Scope 3 emissions are 'purchased goods and services' such as ingredients for food or goods purchased for resale. Businesses have varying degrees of influence over their supply chain, but actions to reduce emissions can include work with suppliers, using sustainability as a metric in procurement processes, and choosing alternative products.

56 Other areas of recommendation included refrigerant gases, heating systems, waste to landfill, electricity, freight, and travel behaviour (staff travel for business, and commuting to work).

57 Refrigerant gases were up to 70% of a participant's footprint. This is because one unit of some types of refrigerants can have thousands times more impact on warming than the same unit of carbon dioxide. Regular maintenance of cooling equipment, optimization of temperature control, and upgrading equipment can have significant emissions reduction benefits.

58 The supplier noted that, if implemented, many of the actions identified will result in longer-term financial savings for the participants.

Feedback from participants

59 Feedback identified two areas for improvement in Phase 2 of the pilot programme:

1. Simplifying outputs, or otherwise aiding ease of interpretation

Some participants reported finding outputs difficult to understand due to their technical nature (albeit being simplified from standard emissions reporting). This was offset by the one-on-one nature of the pilot programme, which enabled the supplier to help participants interpret the outputs.

2. Reducing the time intensity of data collection

Some participants noted the process of gathering the necessary data was time-consuming if there were no existing resources/record-keeping systems in place (such as a dedicated accounts staff member).

Cost

60 Contracted elements of Phase 1 of the pilot (which included programme co-development and delivery) cost $10,920 (excl. GST).

Pilot phase 2

61 The pilot has provided useful data and insights to inform further refinement of the programme through Phase 2 of the pilot.

[1] Scope 1 covers emissions from sources that an organisation owns or controls directly (e.g. fossil fuel burnt in fleet vehicles or boilers). Scope 2 are emissions that a company causes indirectly from its purchased energy (e.g. the national electricity grid). Scope 3 emissions are indirect emissions from up and down the value chain (e.g. ingredients purchased to make food products or products purchased to resell).

62 Refinements have been made following the two month review point with Phase 1 participants. Amendments of the programme for Phase 2 include:

a) Delivering less granular, 'hot spot' emissions footprint where appropriate, to respond to Phase 1 participant feedback and to maximise programme reach;

b) Prioritising prospective participants with high Scope 1 and 2 emissions, as this will maximise impact on the city's emissions footprint;

c) Broadening the scope of the programme to include not-for-profits, as it is acknowledged many in this sector face the same challenges as SMEs in terms of navigating emissions reduction; and

d) Prioritising prospective participants with an organisational commitment to emissions reduction action, to maximise the likelihood of emissions reductions being realised.

Zero Carbon Plan action – Zero Carbon Alliance

63 The Zero Carbon Alliance (ZCA) is a formal collaboration group with a current membership of the Dunedin City Council, Otago Regional Council, Te Pukenga Dunedin Campus, Te Whatu Ora – Southern, and the University of Otago. Its primary focus is on the reduction of organisational emissions and the achievement of the DCC's Zero Carbon city target.

64 Collaboration and liaison to give effect to the ZCA MoU is a Zero Carbon Plan action and is ongoing. The Collaboration Group meets twice a year, and Key Representatives meet monthly.

65 The ZCA update report to the end of October 2024 has been appended as Attachment C. The ZCA's work programme is focused on initiatives to reduce emissions from staff travel to work and waste at present (including several Zero Carbon Plan actions, with links to EMRP actions).

66 At the October 2024 ZCA Collaboration Group meeting, the ZCA Collaboration Group unanimously supported an in-principle invitation for Business South to join the ZCA.

67 An invitation to join the ZCA has been sent and is being considered by Business South.

OPTIONS

68 As this is a noting report, there are no options.

NEXT STEPS

DCC organisational emissions

69 Implementation of the EMRP will continue.

70 Full implementation of the EMRP in 2025 and beyond would require additional funding and will be considered through the 9YP process.

Zero Carbon Plan action - cruise emissions baseline

71 The Ōtepoti Dunedin's Greenhouse Gas Emissions Inventory: Cruise Ship Emissions report (Attachment B) will be made available on the DCC website.

72 Cruise emissions will be incorporated into the Zero Carbon Plan baseline 2018/19 emissions, and revised emissions modelling.

73 The Zero Carbon team will provide advice to council on updated emissions modelling, using up to date national, regional and district level context in May 2025 to help inform 9 year plan deliberations.

Zero Carbon Plan action – business support pilot

74 Phase 2 of the pilot will be completed in early to mid 2025.

Zero Carbon Plan action - Zero Carbon Alliance

75 The Zero Carbon Alliance will continue to liaise with Business South regarding potential membership.

Signatories

Author:	Rory McLean - Senior Policy Analyst Jinty MacTavish - Principal Policy Advisor Sustainability
Authoriser:	Scott MacLean - General Manager, Climate and City Growth

Attachments

	Title	Page
⇩A	DCC 2023/24 Greenhouse Gas Emissions Inventory and Management Report	54
⇩B	Ōtepoti Dunedin's Greenhouse Gas Emissions Inventory: Cruise Ship Emissions	116
⇩C	Zero Carbon Alliance Work Programme Update October 2024	130

SUMMARY OF CONSIDERATIONS

Fit with purpose of Local Government

This decision promotes the environmental well-being of communities in the present and for the future.

Fit with strategic framework

	Contributes	Detracts	Not applicable
Social Wellbeing Strategy	☐	☐	✓
Economic Development Strategy	☐	☐	✓
Environment Strategy	✓	☐	☐
Arts and Culture Strategy	☐	☐	✓
3 Waters Strategy	✓	☐	☐
Future Development Strategy	☐	☐	✓
Integrated Transport Strategy	☐	☐	✓
Parks and Recreation Strategy	☐	☐	✓
Other strategic projects/policies/plans	✓	☐	☐

This paper discusses several actions linked to the Zero Carbon Plan 2030. There is also a high degree of overlap between the EMRP and the city-wide Zero Carbon Plan.

Māori Impact Statement

This report contains reporting on progress to date; specific impacts on mataawaka or mana whenua communities have not been identified.

Sustainability

Without significant cuts to emissions, climate change impacts will further accelerate, with commensurate negative impacts on the social, environmental, cultural and economic wellbeing of New Zealand communities. Conversely, actions to reduce emissions generally have significant co-benefits in terms of community wellbeing.

Zero carbon

This report contains information about actions that have been progressed, or are progressing, to monitor and reduce city and DCC emissions.

LTP/Annual Plan / Financial Strategy /Infrastructure Strategy

Full implementation of the EMRP will require additional funding. This will be considered through the 9YP process. The EMRP will be reviewed following 9YP finalisation.

Financial considerations

Preparing the Inventory Management Report and submitting it to LGFA enables the DCC to have a reduced interest rate for its borrowing.
Full implementation of the EMRP will require additional funding. This will be considered through the 9YP process. The EMRP will be reviewed following 9YP finalisation.
Other actions are being progressed within existing budgets.

Significance

Not applicable – contains reporting only.

SUMMARY OF CONSIDERATIONS
Engagement – external For the cruise emissions baseline, Port Otago have been involved throughout the study, providing valuable input data to inform the emissions calculations. Port Otago have been provided a copy of the results. The ZCA involves collaboration across DCC, Otago Regional Council, Te Pukenga Dunedin Campus, Te Whatu Ora – Southern, and the University of Otago.
Engagement - internal Internal engagement undertaken as required with appropriate teams to understand key emissions sources and seek updates on emissions reduction projects.
Risks: Legal / Health and Safety etc. There may be reputational risks for the DCC associated with non-delivery on emissions reduction ambitions, given the target adopted by Council in 2019.
Conflict of Interest No conflict of interest identified.
Community Boards No known implications for community boards.

GREENHOUSE GAS EMISSIONS INVENTORY AND MANAGEMENT REPORT

Prepared in accordance with ISO 14064-1:2018

Dunedin City Council

Prepared by Carsten Dortans: Senior Policy Analyst, Zero Carbon - Dunedin City Council

Dated: November 2024

Verification status: McHugh & Shaw Limited completed independent verification. ISO Category 1-2 achieved Reasonable Assurance and ISO Category 3-6 achieved Limited Assurance.

Measurement period: 01 July 2023 to 30 June 2024
Base year period: 01 July 2018 to 30 June 2019

Approved for release by:

Manager - Zero Carbon

Availability

The report will be published on DCC's website at https://www.dunedin.govt.nz/dunedin-city/climate-change/zero-carbon and reported to the DCC Executive Leadership Team (ELT) and Council.

Report Structure

The Inventory Summary contains a high-level summary of this year's results and has a brief comparison to 2018/2019 and 2022/23 inventories.

Chapter 1, the Emissions Inventory Report, includes the inventory details. The inventory is a complete and accurate quantification of the amount of greenhouse gas (GHG) emissions[1] and removals that can be directly attributed to the organisation's operations within the declared boundary and scope for the specified reporting period. The inventory has been prepared in accordance with the requirements of *ISO 14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals*[2]. Where relevant, the inventory is aligned with industry or sector best practice for emissions measurement and reporting.

Chapter 2 covers the DCC's progress against Emissions Management and Reduction Plan (EMRP) targets.

Appendix 1 holds detailed emissions inventory results, including a breakdown of emissions by source and sink, and emissions by greenhouse gas type. Appendix 1 also contains detailed context on the inventory boundaries, inclusions and exclusions, calculation methodology, liabilities, and supplementary results.

[1] Throughout this document "emissions" means "GHG emissions".

[2] Throughout this document 'GHG Protocol' means the *GHG Protocol Corporate Accounting and Reporting Standard* and 'ISO 14064-1:2018' means the international standard *Specification with Guidance at the Organizational Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals*.

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List of Figures

Executive Summary

This is the annual Greenhouse Gas Emissions Inventory and Management Report (IMR) for DCC covering the measurement period 01 July 2023 to 30 June 2024.

The IMR is divided into two chapters. The first chapter provides a summary of emissions inventory results and clarifies the scope of this report.

The second chapter covers emissions inventory results in more detail by drawing on the DCC's Emissions Management and Reduction Plan 2023/24 – 2030/31 (EMRP) and emission reduction targets.

Throughout this report comparisons are made between the baseline year of 2018/19, and the 2022/23 and 2023/24 emissions inventories. More information on how the baseline inventory for 2018/19 was calculated can be found in section 1.3.4 of this report, and in Appendix 5.

Table 1 provides an inventory summary covering the 2023/24 measurement period, compared against 2018/19 and 2022/23.

Table 1: Inventory summary

Category (ISO 14064-1:2018)	**Scopes (ISO 14064-1:2006)**	**2018/19**	**2022/23**	**2023/24**
Category 1: Direct emissions	Scope 1	72,097.16	50,157.70	48,552.63
Category 2: Indirect emissions from imported energy (location-based method*)	Scope 2	3,682.24	2,274.56	2,108.55
Category 3: Indirect emissions from transportation	Scope 3	862.43	611.11	631.51
Category 4: Indirect emissions from products used by organisation		7,573.84	7,811.79	7,867.35
Category 5: Indirect emissions associated with the use of products from the organisation		0.00	0.00	0.00
Category 6: Indirect emissions from other sources		0.00	0.00	0.00
Total direct emissions		**72,097.16**	**50,157.70**	**48,552.63**
Total indirect emissions*		**12,118.51**	**10,697.45**	**10,607.40**
Total gross emissions*		**84,215.67**	**60,855.16**	**59,160.04**
Category 1 direct removals		0.00	0.00	0.00
Purchased emission reductions		0.00	0.00	0.00
Total net emissions		**84,215.66**	**60,855.16**	**59,160.04**

*Emissions are reported using a location-based methodology.

Chapter 1: Emissions Inventory Report

1.1 Introduction

The purpose of this IMR is to quantify emissions that can be attributed to DCC's operations within the declared boundary and scope for the July 2023 to June 2024 period. This inventory is aligned with best practice for emissions measurement and reporting and is part of an ongoing commitment to measure and reduce emissions on a regular basis.

The inventory report and any assertions are expected to be verified by a third-party verifier. The level of assurance is reported in a separate Assurance Statement, and is summarised on the title page of this IMR.

1.2 Emissions Inventory Results

The following tables and figures provide an overview of the DCC's emissions for 2023/24.

- Table 2 shows emissions by category for 2023/24, as well as emissions intensity based on residents, rateable properties and operating revenue.
- Figure 1 shows emissions by category.
- Table 3 breaks down emissions further to the emissions source and compares the 2023/24 figures to the baseline year 2018/19 and 2022/23.
- Figure 2 shows emissions by business unit within DCC, with Figure 3 showing emissions by source for 2023/24.

Table 2: Emissions inventory summary for this measurement period

Measurement period: 01 July 2023 to 30 June 2024

Category	Total emissions (tCO_2e)
Category 1: Direct emissions	48,552.63
Category 2: Indirect emissions from imported energy (location-based method*)	2,108.55
Category 3: Indirect emissions from transportation	631.51
Category 4: Indirect emissions from products used by organisation	7,867.35
Category 5: Indirect emissions associated with the use of products from the organisation	0.00
Category 6: Indirect emissions from other sources	0.00
Total direct emissions	**48,552.63**
Total indirect emissions*	**10,607.40**
Total gross emissions*	**59,160.04**
Category 1 direct removals	0.00

Purchased emission reductions	0.00
Total net emissions	**59,160.04**

Emissions intensity	**Total emissions (tCO2e)**
Rateable properties (gross tCO_2e / unit)	1.03
Residents (gross tCO_2e / unit)	0.44
Operating revenue (gross tCO_2e / $Millions)	166.28

*Emissions are reported using a location-based methodology.

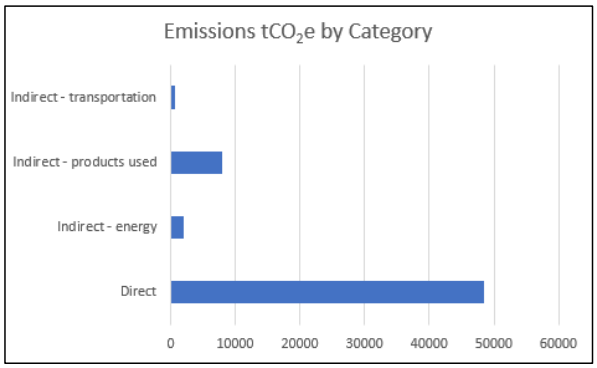


Figure 1: Emissions (tCO_2e) by Category 2023/24

Table 3: GHG emissions inventory by emissions source (tCO_2e)

Category (ISO 14064-1:2018)	Scopes (ISO 14064-1:2006)	Emission Source	2018/2019	2022/2023	2023/2024
Category 1: Direct emissions	Scope 1	Waste to landfill	51,210.49	30,595.59	25,881.21
		Closed landfills	9,684.28	8,146.97	7,720.35
		Wastewater treatment emissions	7,650.72	7,737.66	10,943.19
		Stationary LPG	1,908.56	2,113.13	2,700.05
		Diesel stationary energy	752.97	975.15	605.66
		Refrigerant leakage	368.90	111.06	253.78
		Fleet fuel - diesel	327.96	375.01	355.05
		Fleet fuel - petrol	160.36	91.37	77.67
		Fertiliser	32.90	11.77	15.67
		Fleet fuel - LPG	0.00	0.00	0.00
Category 2: Indirect emissions from imported energy	Scope 2	Electricity	3,682.24	2,274.56	2,108.55
	Scope 3	Staff travel to work	518.05	491.71	487.28

Category 3: Indirect emissions from transportation	Air travel (combined)	312.07	94.91	115.37
	Private cars	21.29	16.02	23.71
	Staff working from home	7.19	4.05	1.63
	Taxis	2.46	0.88	0.88
	Hotel stays	1.37	2.95	2.42
	Rental cars	0.00	0.58	0.24
Category 4: Indirect emissions from products used by organisation	Major suppliers	5,177.47	5,448.75	5,098.58
	Water treatment plant chemicals	2,075.36	2,127.54	2,195.53
	Electricity T&D losses	321.01	172.08	154.24
	Wastewater treatment – sludge disposed at private landfill	0	0	419.00

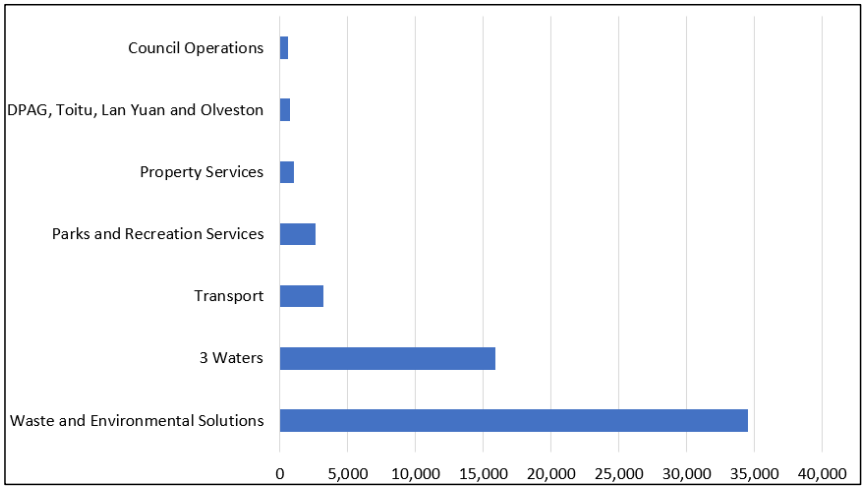


Figure 2: Emissions (tonnes CO_2e) by business unit

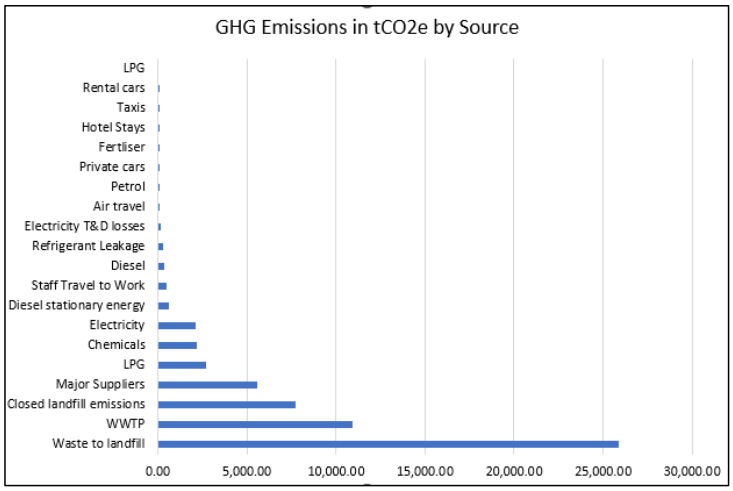


Figure 3: Emissions (tonnes CO_2e) by source

1.3 Organisational Context

1.3.1 Organisation Description

DCC is the local authority of the residents and ratepayers of Dunedin. The activities undertaken by the DCC include water supply; wastewater collection and treatment; storm water management; solid waste management; provision of transportation infrastructure and street lighting; arts and cultural facilities including libraries, museums, and a public art gallery; parks, recreation, and aquatic facilities; and the provision of regulatory, community and economic development services.

Further information about the DCC's activities, including Annual and Long-Term Plans, is located at www.dunedin.govt.nz.

Commitment to reducing emissions

The DCC began measuring and reporting its emissions in 2013 and have continued to do so on an annual basis. Since then, various emissions reduction actions have been implemented to reduce the DCC's emissions.

In 2019, Council declared a climate emergency and set emissions reduction goals for Dunedin city:

- net zero emissions of all greenhouse gases other than biogenic methane by 2030
- 24% to 47% reduction below 2017 biogenic methane emissions by 2050, including a 10% reduction below 2017 biogenic methane emissions by 2030.

In June 2022, Council adopted a Zero Carbon Policy, with the stated purpose of ensuring that the DCC's activities "minimise emissions and contribute to achieving both city-wide and

DCC emissions reduction targets", including by "implementing city-wide emissions reduction plans and DCC emission reduction plans".

The Zero Carbon Policy specifies that the DCC will seek to achieve or exceed adopted city-wide emissions reduction targets and the DCC's organisational targets and directs the organisation to prioritise gross emissions reduction.

In line with Zero Carbon Policy 2.2 the DCC will monitor, measure, report, manage, verify and publicly report DCC emissions on a regular basis, in accordance with the requirements set out in ISO14064:2018.

In September 2023, Council adopted the Zero Carbon Plan setting out the actions required for Dunedin city to meet the net zero emissions (excluding biogenic methane) target for 2030.

In June 2024, the Executive Leadership Team (ELT) adopted the Emissions Management and Reduction Plan 2023/24 to 2030/31 (EMRP). This plan sets out DCC's intention on how to reduce emissions over the period 2023/24 to 2030/31.

The DCC's own emissions are significant at the city scale. As of 2021/22, emissions from open and closed landfills and wastewater treatment, which were responsible for more than three quarters of the DCC's emissions in 2021/22, also constitute approximately six percent of Dunedin city's emissions[3].

Addressing the DCC's emissions is therefore an important contribution to city-wide emissions reduction efforts. DCC leadership in achieving emissions reductions is also important to facilitate city-wide emissions reductions with credibility.

Emissions Reporting

This report is an important annual measure that DCC undertakes to assess progress towards our DCC emissions reduction targets. It also constitutes part of DCC's contribution towards the target of net zero emissions (excluding biogenic methane) by 2030 for Dunedin city.

1.3.2 Statement of Intent

This inventory forms part of the organisation's commitment to measure and manage down emissions.

Intended use and users

The essential intended use of the inventory is to ensure compliance with the requirements of the ISO-14064:2018 emissions reporting standard, and to accurately measure changes in DCC's emissions, including progress towards its emissions reduction targets.

The DCC is committed to publicly report its emissions inventory following verification on the DCC website. This report is intended for all Dunedin city residents, city councillors, DCC

[3] Dunedin city-wide waste and wastewater emissions taken from 2021/22 Community carbon footprint - https://www.dunedin.govt.nz/__data/assets/pdf_file/0005/920723/Dunedin-City-Community-Carbon-Footprint-2022.pdf 6% waste emissions figure includes some emissions not within DCC's organisational inventory, such as residential wastewater septic systems, waste deposited at private landfills, and non-DCC closed landfills

suppliers, DCC staff, the Local Government Funding Agency, and other parties across Aotearoa New Zealand interested in DCC's emissions inventory and efforts to manage down emissions.

1.3.3 Person Responsible

The Manager - Zero Carbon, DCC is responsible for monitoring overall emission inventory measurement and reduction performance, and reporting results to executive management/Council. The Manager – Zero Carbon is also responsible for wider Zero Carbon work programme oversight, management, and coordination.

Executive management involvement

The Chief Executive Officer is the sponsor of the Zero Carbon work programme and is ultimately accountable for ensuring the programme achieves its objectives, including EMRP delivery and achievement of EMRP targets.

As of 30 June 2024, the Zero Carbon Programme Steering Group comprised the Chief Executive, the General Manager Climate & City Growth, and the General Manager Corporate Services. The group was established to lead, direct and enable the programme, including the implementation of the EMRP.

Executive management and governance commitment

As evidenced by adoption of the EMRP, and executive involvement in work programme oversight, the DCC's ELT is committed to implementing the emissions reduction actions listed in Chapter 2.

As set out above, the elected Council has set city targets for emissions reduction. Council commitments to emissions reduction, both city-wide and from DCC operations, are embedded in the DCC's strategic and policy framework, and have been reaffirmed by a number of Council resolutions in recent years.

Most notable amongst these commitments were the following:

- In 2014, joining Toitū's carbonreduce programme
- In 2015, joining the Global Covenant of Mayors
- In 2017, adoption of a Carbon Management Policy for the DCC.
- In 2019, declaration of a climate emergency and adoption of the Council's current city-wide emissions reduction target ('Zero Carbon 2030'), which is in two parts (a 'split gases' approach), as follows:
    - Net zero emissions of all greenhouse gases other than biogenic methane by 2030; and
    - 24% to 47% reduction below 2017 biogenic methane emissions by 2050, including 10% reduction below 2017 biogenic methane emissions by 2030.

- In 2019, establishment of a dedicated, specifically funded work programme to meet climate change mitigation planning needs (the 'Zero Carbon work programme').
- In 2022, replacing the Carbon Management Policy with a Zero Carbon Policy, to ensure that the DCC's activities minimise emissions and contribute to achieving both city-wide and DCC emissions reduction targets.
- In September 2023, adopting the Zero Carbon Plan 2030, which sets out the actions required for Dunedin city to meet the net zero emissions (excluding biogenic methane) target for 2030.

1.3.4 Reporting Period

Base year measurement period: 01 July 2018 to 30 June 2019

The DCC's base year is July 2018 to June 2019. The EMRP uses the same base year.

The DCC used 2013/14 as its baseline year until 2022/23, when it was updated to 2018/19. The change was made to reflect both the significant increases in the scope of DCC's organisational inventory, and the changes in the methodologies used to calculate emissions in recent years.

The emissions baseline has been updated predominantly using 2018/19 data, however, for some emissions sources the reporting methodology has changed, or data from 2018/19 is unavailable due to the emissions source being recently added to the inventory. Where data is unavailable for 2018/19, the earliest data available has been used.

A detailed breakdown of the DCC's baseline is attached as Appendix 5, which notes emissions sources where data other than 2018/19 is used. The DCC's base year recalculation policy is also included in Appendix 5.

Measurement period of this report: 01 July 2023 to 30 June 2024

DCC inventory reporting is conducted annually and aligned with the financial year of July to June. This allows DCC to readily compare emissions reporting with financial measures.

1.3.5 Operational control consolidation approach

An operational control consolidation approach was used to account for emissions.

Organisational boundaries were set with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standards.

Justification of consolidation approach

The operational control consolidation approach is the best fit for the DCC. We account for the emissions from operations we control, including indirect emissions from major suppliers of services such as rubbish/recycling collection or roading maintenance in this 2023/24 inventory. We do not account for emissions from operations in which we have a financial interest but have no control.

Organisational structure

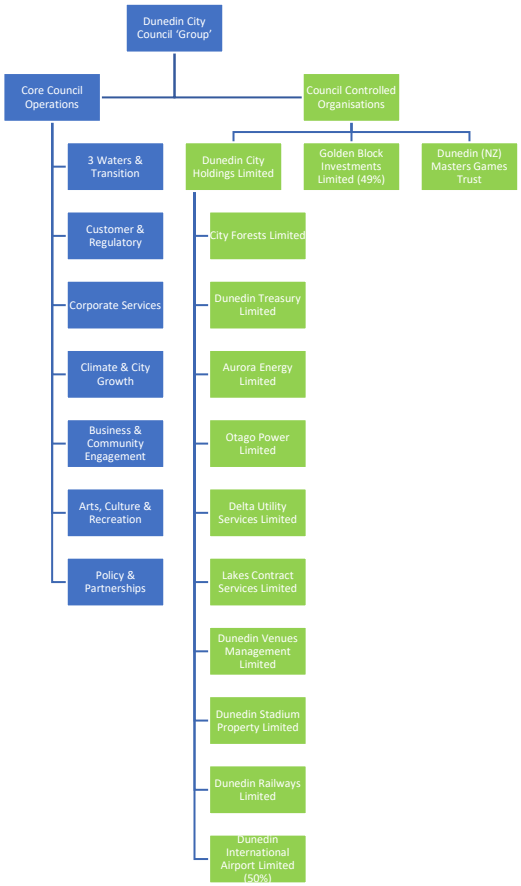
Figure 4 shows what has been included within the organisational boundary, in the context of the overall structure.

The organisational chart outlines the core DCC business units as well as the council-controlled operations. The blue boxes indicate units that have been included in the emissions inventory, while the green boxes indicate units that are excluded. For clarity, while they are shown as outside of DCC's footprint in Figure 4, the portion of Delta Utility Services Limited's emissions related to Parks and Recreation Services activity (undertaken on DCC's behalf) has been included as indirect Category 4 emissions in this inventory.

For the purposes of the 2023/24 emissions inventory, the DCC's emissions are reported at an organisational level, rather than by business unit.

The DCC is based at the Civic Centre, 50 The Octagon, Dunedin. However, many sites throughout the city are associated with the DCC.

Table 4 gives an overview of each department within DCC, and their functions. Please note that a department umbrellas a subset of business units (such as the ones reported in Figure 2).



Key: Blue business units are included in inventory, green business units excluded

Figure 4: Organisational structure

Table 4: Brief description of business units, sites and locations in this emissions inventory

Business Unit	Council departments	Key services/facilities provided
3 Waters & Transition	3 Waters, City Development	Water production and supply, wastewater treatment and stormwater management, city planning, resource management.
Customer and Regulatory Services	Building Services, Resource Consents, Compliance Solutions, Customer Services, i-Site Visitors Centre	Customer and regulatory services including customer services agency, building control, environmental health, and compliance.
Corporate Services	People and Capability, Business Information Services, Quality Improvement, Risk and Internal Audit, Procurement and Contracts, Portfolio and Project Support Office, Health and Safety, Property Services, Legal Counsel.	HR and IT, contract management, project management, health and safety, and property services including parking operations.
Climate and City Growth	Transport, Waste and Environmental Solutions, Zero Carbon, South Dunedin Future	Provision of rubbish and recycling services, waste minimisation education, implementation of Waste Minimisation and Management Plan, roading network, climate change mitigation and adaptation.
Business and Community Engagement	Enterprise Dunedin, Communications and City Marketing, Events, Governance, Corporate Planner	City wide economic development strategy and support, city events and oversight.
Arts, Culture and Recreation	Dunedin Public Library, Mosgiel Library, Other Community Libraries, Dunedin Public Art Gallery, Toitū Otago Settlers Museum, Lan Yuan Chinese Gardens, Olveston, Parks and Recreation Services, City of Literature, Creative Partnerships	Dunedin Public Libraries, Olveston Historic Home, Dunedin Public Art Gallery, Toitū Otago Settlers Museum, and Lan Yuan Chinese Gardens, Botanic Gardens, Parks and Reserves, Cemeteries, and Swimming Pools.
Policy and Partnerships	Māori Partnerships, Māori Cultural Capability, Community Partnerships, Corporate Policy, Policy Advisor Housing, Taskforce Green, Community Development	Council wide strategy, embedding working in partnership with mana whenua across the organisation.
Finance Group	Finance Team	Financial services.
Council Operations	All emissions that cannot easily be reported at a level other than organisation-wide, such as staff commuting, councillors and executive leadership travel.	Councillor support, executive functions.

1.3.6 Excluded business units and activities

Dunedin City Holdings Limited and its subsidiaries and DCC investment properties were excluded from this inventory as they are not directly managed by the DCC and do not deliver core DCC functions.

In line with the Zero Carbon Policy 2022, the DCC is committed to ensuring procurement and management of contracts aligns with the DCC's organisational and city-wide emissions reduction targets. Emissions from suppliers undertaking work on DCC's behalf have been reported since 2021/22. Initially, DCC reported emissions from nine key suppliers considered to be the most emissions intensive. (analysis to identify the top nine excluded suppliers already included in the inventory e.g. Category 1/Scope 1 stationary diesel suppliers). Since 2021/22, as existing contracts expire and new services are procured, new contracts include emissions reporting clauses. The inclusion of emissions reporting clauses in new contracts have led to a further three suppliers reporting their emissions to DCC, in addition to the initial nine suppliers. The twelve suppliers include roading maintenance and construction, 3 Waters pipeline renewals and maintenance, rubbish/recycling collection, landfill management, parks and recreation maintenance, and security services.

Cloud-based IT services, some smaller civil and building construction contractors, and other smaller suppliers such as providers of office supplies have not been included in this inventory.

In line with the requirements of ISO 14064: 2018, the DCC is working to include emissions associated with more suppliers over time. This progressive approach has been taken to allow DCC and suppliers to work through potential complications for suppliers providing data. Work underway includes ensuring new contracts have emissions reporting clauses, and that DCC engage suppliers early in the contract term to provide reporting.

Chapter 2: Emissions Management and Reduction Report

2.1 Emissions Reduction Results

Table 5 compares the 2023/24 inventory with the 2018/19 base year inventory, and the 2022/23 inventory.

Table 5: Comparison of historical emissions inventories

Category	2018/2019	2022/2023	2023/2024
Category 1: Direct emissions	72,097.14	50,157.70	48,552.63
Category 2: Indirect emissions from imported energy (location-based method*)	3,682.24	2,274.56	2,108.55
Category 3: Indirect emissions from transportation	862.43	611.11	631.51
Category 4: Indirect emissions from products used by organisation	7,573.84	7,748.36	7,867.35
Category 5: Indirect emissions associated with the use of products from the organisation	0.00	0.00	0.00
Category 6: Indirect emissions from other sources	0.00	0.00	0.00
Total direct emissions	**72,097.14**	**50,157.70**	**48,552.63**
Total indirect emissions*	**12,118.51**	**10,634.03**	**10,607.40**
Total gross emissions*	**84,215.66**	**60,791.73**	**59,160.04**
Category 1 direct removals	0.00	0.00	0.00
Purchased emission reductions	0.00	0.00	0.00
Total net emissions	**84,215.66**	**60,791.73**	**59,160.04**

2.2 Significant Sources

Waste to landfill

Waste to landfill continues to be the DCC's largest source of emissions, however there have been significant reductions year on year from this emissions source. This is primarily due to improvements in the landfill gas capture and destruction at the landfill, rather than due to decreases in the quantity of waste being landfilled.

Landfill gas was captured and destroyed at an average rate of 8,499m3/day in 2023/24, compared with 7,110m3/day in 2022/23. This continues an ongoing trend of year-on-year improvements in landfill gas captured and destroyed since the baseline year of 2018/19, contributing to a decrease in waste to landfill emissions from 51,211 tCO2e in our baseline year, to 25,881 tCO2e in 2023/24.

Wastewater Treatment Plant Emissions

Wastewater treatment plant (WWTP) emissions are the second largest source of DCC emissions in 2023/24, behind waste to landfill emissions. The emissions for 2023/24 are calculated using both time series data taken from SCADA ID tags monitoring things such as wastewater flows within WWTPs, as well as proxy data from 2021/22 for the three largest WWTPs (Green Island, Mosgiel, Tahuna) where time series data was not available. 2023/24 is the first year that WWTP emissions have been reported using time series data throughout the financial year.

Due to several factors, such as a more accurate collection of biogas volume, and some differences in the default parameters used in the 2023/24 calculations compared with previous years, emissions from WWTPs have increased significantly from 2022/23. Caution should be applied when comparing 2023/24 results against previous years due to the change to the methodology used in 2023/24. During 2024/25, consideration will be given to re-calculating baseline 2018/19 WWTP emissions using the updated methodology. Emissions from the four smaller WWTPs (Middlemarch, Warrington, Seacliff, Waikouaiti) are calculated using population estimates, with these estimates unchanged between 2022/23 and 2023/24.

Stationary LPG

Stationary LPG continues to be a significant emissions source for the DCC. The emissions from this source are 43% higher in 2023/24 compared to the baseline year.

Electricity

Emissions from stationary electricity have reduced 43% in 2023/24 compared with the baseline year (down 7.2% compared with 2022/23). This is primarily due to a reduction in overall electricity consumption compared to 2022/23. To a lesser extent, a higher share of renewable electricity generation in the national grid reduced the emissions per kWh imported.

Fleet fuel

Fleet fuel emissions are down compared to the baseline year (currently down 11%), with some way to go to the 2030/31 EMRP target of a 76% reduction in private vehicle, taxi and fleet emissions compared to 2018/19. Fleet emissions reductions in petrol use are due to continued electrification of the light fleet at DCC, along with changed work habits regarding remote attendance of meetings.

Fleet diesel use had been trending up at DCC until 2022/23, with the 3 Waters fleet the largest emitter. However, 2023/24 fleet diesel consumption was down 4% compared with 2022/23.

Air travel

While emissions from air travel in 2023/24 are significantly down compared the baseline year (63% reduction), they have increased by 22% compared to 2022/23. The pandemic interrupted business-as-usual travel for the organisation, and in the post-pandemic years management has used budget levers to set different expectations of departments with regards to travel.

Stationary diesel

Emissions from stationary diesel decreased by 38% in 2023/24 compared with 2022/23, and are 19% lower than in the 2018/19 baseline year.

Sludge incineration at Tahuna WWTP causes the majority of the DCC's stationary diesel consumption. In the second quarter of the 2023/24 financial year maintenance on the incinerator was carried out and several issues fixed, as well as an ash classifier being installed to reduce the amount of ash accumulation in the incinerator. This optimization led to more sludge and less diesel being burned, which saw a significant reduction in the total amount of diesel used at Tahuna WWTP.

Major Suppliers

The DCC have been reporting major supplier emissions since 2021/22, with the emissions from this source relatively similar over the 2021/22 to 2023/24 period (5,177 tCO2e in 2021/22, compared with 5,098 tCO2e in 2023/24).

The most significant supplier emissions stem from services where heavy machinery/vehicles are required, including roading construction/maintenance, landfill management, and refuse/recycling collection. As discussed in Chapter 1, the DCC continues to expand the number of contractors reported in the emissions inventory.

Staff Travel to/from Work

In terms of emissions associated with staff travel to work, the 2023/2024 financial year inventory report utilises the latest staff travel to work activity data collected in the 2021/22 financial year. This is due to no staff travel survey being completed in the 2022/23 or 2023/24 financial years. New travel survey data will be incorporated into the 2024/25 IMR.

Water Treatment Chemicals

Water treatment chemicals emissions are significant, however given the regulatory and public health requirements to treat drinking water to safe standards, there are anticipated limits on the extent to which emissions from this source can be mitigated or reduced.

Influence over activities

The DCC has considerable influence over stationary energy (electricity, diesel, LPG) given the organisation owns the facilities and assets involved. There are several existing actions underway or being investigated to address emissions from these sources, covered in more detail under section 2.3 of this report. Similarly, waste-to-landfill and wastewater emissions are significant sources within DCC's direct influence as the owner and manager of receiving facilities. Projects outlined in section 2.3 aim to reduce these emissions over time.

For emissions associated with contractors, the DCC is working to set clear expectations with suppliers when procuring services, include emissions reduction targets in contracts where appropriate, as well as ensuring contractors provide regular emissions reporting to confirm how they are progressing against targets in contracts, or agreed emissions reduction initiatives.

The DCC launched its Procurement Emissions Standards in 2023. These were created in consultation with suppliers, to set expectations and levels of ambition for suppliers to meet over time when tendering for contracts. This is a progressive process as existing contracts expire, and as new low-emissions technology becomes available and economic for contractors to implement.

Significant sources that cannot be influenced

Many of the closed landfill sites managed by DCC have not received waste for a considerable period. As such, mitigating the methane emissions from these sites through initiatives such as installing landfill gas capture and flaring infrastructure would not be viable. The emissions from these closed landfills sites will continue to decrease over time, as the organic material deposited decays.

2.3 Emissions Reduction Targets and Tracking

The EMRP includes emissions reduction targets through to 2030/31 (timed to align with targets in the city-wide Zero Carbon Plan). There is a high degree of integration and overlap between the EMRP and the Zero Carbon Plan, with 72 of the 81 emissions reduction projects in this EMRP also included within the Zero Carbon Plan.

Table 6 provides details of the emission reduction targets to be implemented. These are 'SMART' targets (specific, measurable, achievable, relevant, and time-constrained).

Under the Zero Carbon Policy, the DCC's emissions reduction approach is to align targets with endeavours to limit global warming to 1.5°C above pre-industrial levels. The Science Based Targets Initiative provides guidance on how to set targets in line with what climate science

deems necessary to avoid catastrophic climate change and reach net-zero by 2050 at latest. In setting the 2030/31 target, the DCC considered the Science Based Targets Initiative guidance on the level of emissions reduction consistent with efforts to keep global warming below 1.5ºC above pre-industrial levels. However, the DCC has not sought accreditation from the Science Based Target Initiative for its organisational emissions reduction targets.

Table 6: DCC organisation emissions targets

Scope of target	Target (Relative to baseline)	2018/19 Baseline (tCO_2e)	2023/24 (tCO_2e)	Tracking 2023/24 relative to baseline (% change)	Responsibility	Rationale
All DCC emissions	30% reduction in annual tCO2e emissions by 2026/27	84,216	59,160	-29.75%	Executive Leadership Team	Interim target to ensure DCC is tracking well to meet longer term 2030/31 target
All DCC emissions	42% reduction in annual tCO2e emissions by 2030/31	84,216	59,160	-29.75%	Executive Leadership Team	Target set having regard to Science Based Targets initiative guidance, seeking to align with efforts to keep global warming below 1.5°C above pre-industrial levels

Figure 5 below shows:

- the emissions track modelled for the EMRP (estimate based on completion of all EMRP projects, delivering a 38% reduction from baseline over the period to 2030/31),
- the emissions track required to achieve the DCC's 2030/31 target (a 42% reduction from baseline); and
- actual DCC emissions for 2022/23 and 2023/24.

Overall, in 2023/24 DCC's organisational emissions were slightly above (+0.63%/373.66tCO_2e) the modelled EMRP 2023/24-2030/31 pathway.

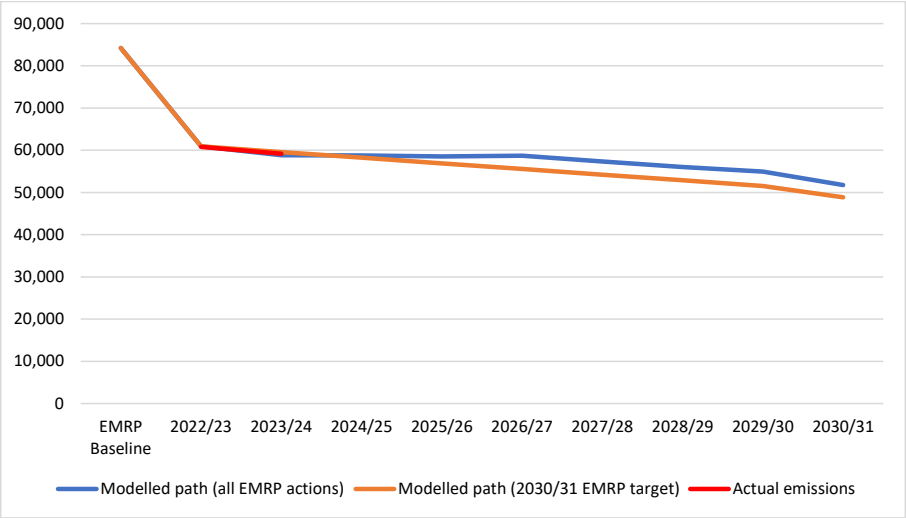


Figure 5. DCC Organisational Emissions Modelling to 2030/31 compared to actuals

2.4 Detailed Tracking of Emissions Sources and Reduction Projects

The sections below provide detailed tracking of emissions sources across DCC, as well as emissions reduction projects included within the EMRP to address these emissions. Emissions sources have been listed in order, from the largest to the smallest, rather than by emissions category.

Each section (emissions source) provides an overview of emissions across reporting years, the associated EMRP target, a 2023/24 tracking of emissions against the EMRP 2030/31 target, as well as a comment on emissions category affiliated project progress.

2.4.1 Waste

Background

Waste makes up most of the DCC's emissions inventory, accounting for **57% of emissions in the 2023/24 financial year**. More specifically, waste to Green Island landfill is by far the largest single emissions source within the DCC's inventory. This includes waste deposited by community and businesses, and from kerbside collections. It is included in the DCC's inventory because the DCC is the owner and operator of the landfill. Methane emissions are generated from landfilled waste as organic materials decay trapped underneath inorganic materials such as building rubble or plastics.

Tracking against EMRP targets

Table 7 below provides a detailed overview of EMRP targets for the waste emissions category, an overview of emissions for the last two financial years, as well as the 2023/24 emissions tracking against the 2030/31 EMRP target.

Waste to landfill and composting emissions were below the 2030/31 target. Emissions from closed landfills were above the 2030/31 target, however the closed landfills target will only be met in 2030/31 based on the gradual decomposition of historically deposited waste at the closed DCC landfill sites. **Overall, waste emissions in 2023/24 were 2,484tCO_2e below the 2030/31 EMRP target.**

Table 7: Waste Emissions

Emissions Source	EMRP Baseline 2018/19 (tCO2e)	*EMRP target 2030/31 (tCO2e)*	2022/23 (tCO2e)	2023/24 (tCO2e)	2023/24 tracking against 2030/31 target (tCO2e)
Green Island Landfill	51,210.49	*26,285.64*	30,595.59	25,881.21	**4,712.13 under target (target exceeded)**
Composting	0.00	*4,307.70*	0.00	0.00	
Closed landfills	9,684.28	*5,493.12*	8,146.97	7,720.35	**2,227.23 above target (target not yet achieved)**
Total	**60,894.77**	***36,085.76***	**38,742.56**	**33,601.56**	**2,484.20 under target (target exceeded)**

The emissions reductions achieved at Green Island landfill are primarily driven by improvements in the landfill gas capture and destruction at the landfill, also aided by slight reductions in the quantity of waste being landfilled.

Landfill gas was captured and destroyed at the landfill at an estimated average rate of 8,499m3/day in 2023/24, compared with 7,110m3/day in 2022/23. This continues an ongoing trend of improvements in landfill gas captured and destroyed since the baseline year of 2018/19, contributing to a decrease in waste to landfill emissions from 51,211 tCO2e in our baseline year (2018/19), to 25,881 tCO2e in 2023/24.

While the 2030/31 EMRP target includes some modelled composting emissions, as at 2023/24 no composting emissions are included in the DCC inventory. There are planned actions to divert organic materials from landfill to a DCC owned and operated composting facility in the years to 2030/31, which will lead to composting emissions. As at 30 June 2024, kerbside food and garden waste collections had not commenced, and a DCC owned and operated composting facility is yet to be constructed. Progress on projects to divert organic and other waste streams from landfill are outlined in Table 8 below.

Waste to landfill and composting emissions are intertwined:

- While the DCC anticipates some composting emissions in 2030/31 as some waste sources are diverted from landfill (such as beginning food and garden kerbside waste collection in 2024/25), emissions from composting are significantly lower than those from landfill. As composting emissions increase, emissions from waste to landfill are anticipated to reduce.
- Furthermore, with the kerbside refuse bin service commencing from 1 July 2024 many households may switch from using a private refuse collection service to the DCC provided bins. The closure of the private Wickliffe St transfer station means that waste that was historically received there and transferred out of district for disposal will be received at Green Island Landfill. This change to DCC waste collection services was anticipated when the EMRP targets for waste to landfill were set.

There are some actions which will not be easily measured within the DCC's inventory if the waste source is inert (does not directly cause emissions in landfill), such as diversion of greater quantities of construction and demolition waste for beneficial re-use. Such actions are anticipated to have emissions reduction benefits at the city-scale, for example through reductions in freight and broader emissions reduction benefits beyond Dunedin city boundaries through greater re-use of materials rather than newly manufactured materials.

Progress on EMRP actions

The Zero Carbon Plan includes many actions to address emissions from waste which have been incorporated into the EMRP. Actions to achieve these goals in the Zero Carbon Implementation Plan are included in the EMRP projects table below. These include focusing on three key areas:

• Use resources in a more circular way
• Divert more waste from landfill
• Improve landfill and wastewater gas management.

In 2023/24, **26 of the 40 EMRP actions to address waste to landfill emissions were progressed.** The remaining 14 EMRP actions are not due to commence until subsequent financial years, as shown in Table 8 below.

As at 30 June 2024:

- 16 were on track to be completed as scheduled (green), and
- 10 were subject to delays or changes in scope, but with emissions reductions still anticipated be partially or wholly realised (amber).
- 14 are yet to commence (N/A).

An overview of waste emission reduction projects is presented below:

Table 8: Waste emissions reduction projects

Project	Zero Carbon Plan action #	EMRP Project #	Timeframe	Lead Team	Tracking 2023/24
Purchase and install new gas engine and flare at Green Island Landfill	R3.8.2	1	2023/24	Waste and Environmental Solutions	
Continue work to optimise gas capture and destruction at Green Island Landfill	R3.8.3	2	2023-2031		
Construct new Green Island composting facility	R1.3.1	3	2023-2027		
Deliver kerbside food/garden organics collection service	R1.3.2	4	2024-2031		

Explore options to prevent organics entering DCC owned landfills once alternative disposal solutions are available	R1.3.3	5	2024-2027		N/A
Construct Green Island facility for storing timber diverted from landfill	R1.4.1	6	2023-2027		
Continue collaborating with other councils to identify or create solution for timber and other regional waste processing infrastructure	R1.4.2	7	2023-2027		
Explore ways to support the establishment and operation of building deconstruction services	R1.4.7	8	2023-2025		
Support the establishment and operation of building deconstruction services	R1.4.8	9	2025-2028		N/A
Explore options for a long-term biosolids solution	R3.7.1	10	2023-2027	3 Waters	
Deliver a long-term biosolids solution	R3.7.2	11	2025-2034		N/A
Provide recycling collection/services/days for rural areas	R1.1.3	12	2023/24		N/A
Explore options for incentives to encourage low carbon, circular, low waste design for construction projects	R1.4.5	13	2023-2027		
Implement incentives for low carbon, circular, low waste design for construction projects	R1.4.6	14	2025-2034		N/A
Explore with community partners the potential for construction waste re-use hub(s)	R1.4.3	15	2023-2027		
Support the establishment and operation of construction waste re-use hub(s)	R1.4.4	16	2025-2034		N/A
Continue to expand provision of waste minimisation information and education, including developing an online information hub, a mobile waste education unit and delivering a business education programme	R1.5.1	17	2023-2034		
Construct new resource recovery park at Green Island to provide infrastructure for waste diversion	R1.5.2	18	2023-2027	Waste and Environmental Solutions	
Roll out kerbside recycling collection to some rural areas	R1.5.3	19	2023-2027		
Explore how to best support businesses to undertake waste audits and develop waste minimisation plans	R1.5.4	20	2023-2027		
Deliver a pilot programme for construction waste skip separation	R1.4.9	21	2023-2027		
Undertake and publish case studies on separating construction waste and reducing waste in design	R1.4.10	22	2023-2024		
Publish information about best practice for reducing construction material use and waste through design and construction	R1.4.11	23	2023-2027		
Continue to develop and support existing resource recovery parks: Green Island, Waikouaiti, Middlemarch	R1.1.1	24	2023-2031		
Develop a central city location for collection of recyclable materials and sale of diverted items (a 'second Rummage store')	R1.1.2	25	2023-2031		

Work with community partners to support three or more communities to establish new community-led resource/recycling centres in local neighbourhoods	R1.1.4	26	2023-2031		
Complete business case for a wider network of community-led resource/recycling centres in local neighbourhoods	R1.1.5	27	2023-2027		
Support communities to operate and develop community-led resource/recycling centres into self-sustaining operating models	R1.1.6	28	2024-2031		N/A
Work with community partners to progressively expand the network of community-led resource/recycling centres	R1.1.7	29	2024-2031		N/A
Continue to support/run and grow a calendar of community events and education to divert household items from landfill, including repair cafes and Para Kore	R1.1.8	30	2023-2031		
Expand supports for waste minimisation education, projects, facilities, and services to include initiatives that support resource circularity, and to ensure that key services can access multi-year funding.	R1.2.1	31	2023-2031		
Convene a circular economy collaboration group or groups to support local resource reuse initiatives and infrastructure, and to promote resource circularity especially in the business community.	R1.2.2	32	2023-2031		
Require DCC contracts with the potential for large waste volumes to minimise waste through standardised Zero Carbon approach – refer to Communities and Economies (Key shift 4)	R1.2.3	33	2023-2031		
Encourage and support waste-related improvements to the Land and Water Regional Plan including improving provisions for composting	R1.3.4	34	2023-2027		
Support business to undertake waste audits and develop waste minimisation plans	R1.5.5	36	2024-2030		N/A
Undertake study to determine source of paper sent to landfill	R1.6.3	37	2024-2030		N/A
Use findings from R1.6.3 (EMRP project 37) to plan and implement actions to reduce, re-use, or recycle paper	R1.6.4	38	2024-2030		N/A

Undertake study to determine source and composition of textiles sent to landfill	R1.6.5	39	2024-2030		N/A
Use findings to plan and implement actions to reduce, re-use, or recycle textiles	R1.6.6	40	2024-2030		N/A

Closed landfills

Background

The DCC have recently begun reporting on emissions from closed landfills managed and owned by the council. Emissions from waste continue long after it has been deposited in landfill, due to organic materials being trapped underneath inorganic materials, leading to the slow decay (or break down) of organic material over many years and decades.

Closed DCC landfills measured in the inventory include at North Taieri, Middlemarch, Forrester Park, Sawyers Bay and Waikouaiti.

Tracking against EMRP targets

Figure 6 below shows the projected closed landfill emissions through to 2030 if no intervention is taken. As such, DCC can expect to see emissions decline from DCC owned closed landfills over the coming years.

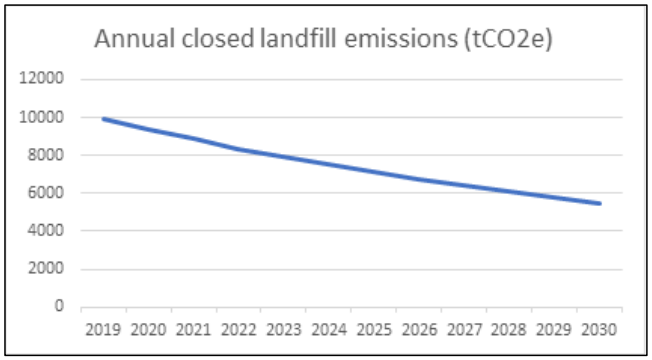


Figure 6. Projected closed DCC landfill emissions 2019-2030

Progress on EMRP actions

There are no actions included within the EMRP to address closed landfills emissions. The scale and form of each landfill renders it unviable to capture and destroy landfill gas generated at these sites. The DCC is working to maximise landfill gas capture at Green Island landfill, to ensure the long term impacts of that landfill are mitigated as much as possible once it is closed.

Waste generated from DCC Operations

Background

Emissions associated with waste generated by DCC's own operations are not included as a separate inventory item under Category 5/Scope 3 at present. However, emissions from DCC generated waste are accounted for in DCC's overall emissions inventory given waste from DCC buildings and facilities is deposited at Green Island landfill (which is included as Category 1/Scope 1 emissions).

The DCC has previously completed waste audits for the Civic Centre building, with waste minimisation initiatives such as recycling, and paper towel replacement implemented.

As emissions reporting from suppliers improves, DCC will look to report on waste generated from DCC operations in buildings and facilities based on the quantities of waste collected and disposed of by the waste and recycling collections contractor.

DCC are also working to incorporate waste generated by DCC suppliers, such as that generated in construction, into the emissions inventory over time, as part of major suppliers emissions reporting (see section 2.4.3). However, as indicated above, it will be important to ensure these emissions are not double counted given all emissions from Green Island are captured in the DCC's reporting.

2.4.2 Wastewater Treatment Emissions

Background

Emissions associated with wastewater treatment and disposal are the second largest emissions source within DCC's inventory, accounting for **19% of emissions in the 2023/24 financial year**. Emissions from operation of wastewater treatment plants (WWTPs) and disposal of sludge are also significant within the waste to landfill emissions (sludge deposited at Green Island landfill) and stationary diesel emissions (Tahuna, Mosgiel and Green Island WWTP stationary diesel usage). There are also emissions associated with liming of sludge from Tahuna WWTP which are not currently measured within DCC's inventory. However, the liming plant at Tahuna WWTP was not operational during 2023/24, which led to some untreated sludge being deposited at AB Lime landfill in Winton.

2023/24 was the first year in which monitored WWTP process data was collected for Tahuna, Mosgiel and Green Island WWTPs. This monitored data helps to account for WWTP emissions more accurately for the three largest WWTPs. Caution should be applied when comparing 2023/24 results against previous years due to the change to the methodology used in 2023/24. During 2024/25, consideration will be given to re-calculating baseline 2018/19 WWTP emissions using the updated methodology.

Tracking against EMRP targets

Table 9 below provides a detailed overview of EMRP targets for the wastewater treatment emissions category, a summary of emissions for the last two financial years, as well as the

2023/24 emissions tracking against the 2030/31 EMRP target. Due to the change in methodology (using monitored data instead of assumptions-based modelling) a direct comparison to previous financial years is not recommended.

None of the three larger WWTP achieved their EMRP aligned emission targets in 2023/24, and population-based emissions estimates for emissions from smaller WWTPs (Middlemarch, Warrington, Waikouaiti and Seacliff) remained the same. **Overall, WWTP emissions in 2023/24 were 4,925tCO_2e above the 2030/31 EMRP target.** As noted above, the methodology used to report WWTP emissions in 2023/24 differs from the methodology used in previous years.

Table 9: Wastewater Treatment Plant Emissions (biological processes)

Emissions Source	EMRP Baseline 2018/19 (tCO2e)	*EMRP target 2030/31 (tCO2e)*	2022/23 (tCO2e)	2023/24 (tCO2e)	2023/24 tracking against 2030/31 target (tCO2e)
Tahuna WWTP	3,669	*3,591*	3,591.05	5,637.79	**2,046.79 above target (target not yet achieved)**
Mosgiel WWTP	2,077	*787*	2,087.38	1,802.47	**1,015.47 above target (target not yet achieved)**
Green Island WWTP	1,649	*1,781*[1]	1,781.14	3,643.84	**1,862.84 above target (target not yet achieved)**
Small WW facilities (Middlemarch, Warrington, Waikouaiti, Seacliff)	255	*278*	278	278	**No change (target achieved)**
Total	**7,650**	***6,437***	**7,737.66**	**11,362.19**[4]	**4,925.19 above target (target not achieved)**

Progress on EMRP actions

The modelled emissions for 2030/31 are based on known actions to reduce emissions from wastewater treatment, namely the installation of a flare at Mosgiel WWTP to destroy the methane it generates. Additional emissions reduction opportunities were identified during 2023/24 through 3 Waters Integrated System Planning, but funding and scheduling of these is subject to 9 Year Plan decisions.

In 2023/24, **4 of the 7 EMRP actions to address wastewater treatment emissions were progressed**. The remaining 3 EMRP actions are not due to commence until subsequent financial years, as shown in Table 10 below.

As at 30 June 2024:

- 3 were on track to be completed as scheduled (green);
- 1 was subject to delays or changes in scope, but with emissions reductions still anticipated to be partially or wholly realised (amber); and

[4] This total WWTP emissions figure is primarily Category 1/Scope 1 Direct emissions (10,943.19 tCO2e), however there are some Category 4/Scope 3 emissions (419tCO2e) associated with emissions from untreated sludge from Tahuna WWTP being deposited at a private landfill included in this total figure.

- 3 had not started (N/A).

An overview of wastewater treatment emission reduction projects is presented below:

Table 10: Wastewater Treatment Emissions Reduction Projects

Project	Zero Carbon Plan action #	EMRP Project #	Timeframe	Lead Team	Tracking 2023/24
Deliver a gas flare at Mosgiel WWTP	R3.8.4	41	2023/24	3 Waters	
Undertake monitoring and explore other improvements to the capture and destruction of greenhouse gases produced in wastewater treatment processes	R3.8.5	42	2023-2027		
Implement other improvements to the capture and destruction of greenhouse gases produced in wastewater treatment processes	R3.8.6	43	2025-2034		N/A
Build Zero Carbon considerations into 3 Waters Integrated System Planning	R3.7.3	44	2023/24		
Implement outcomes of 3 Waters Integrated System Planning	R3.7.4	45	2024-2034		N/A
Explore options for a long-term biosolids solution	R3.7.1	10	2023-2027		
Deliver a long-term biosolids solution	R3.7.2	11	2025-2034		N/A

2.4.3 Major Supplier Emissions

Background

Major suppliers generated **8.6% of DCC's emissions in 2023/24**.

As part of the ISO 14064-1:2018 methodology update, DCC has expanded its emissions inventory to include emissions associated with suppliers undertaking work on DCC's behalf. As discussed in Chapter 1, the DCC continues to expand the number of contractors reported in the emissions inventory. As a result of these improvements in suppliers reporting, reported emissions from this source are expected to increase.

Tracking against EMRP targets

Table 11 below provides a detailed overview of EMRP targets for the major supplier emissions category, a summary of emissions for the last two financial years, as well as the 2023/24 emissions tracking against the 2030/31 EMRP target.

Overall, emissions from major suppliers in 2023/24 were 1,329tCO_2e above the 2030/31 EMRP target.

Table 11: Major Supplier Emissions

Major Supplier Emissions by source	*EMRP target 2030/31 (tCO2e)*	2022/23 (tCO2e)	2023/24 (tCO2e)	2023/24 tracking against 2030/31 target (tCO2e)
Total	*3,769.41*	5,490.96	5,098.58	1,329.17 above target (target not yet achieved)

The emissions modelling is based on contractors' fleet meeting certain minimum requirements in the coming years through to 2030. These minimum requirements are outlined in the Procurement Emissions Standards (covered in Chapter 1), and set progressive emissions reduction targets for suppliers to aim for in the years to 2030. It is likely there will be further opportunities to reduce emissions through emerging technology in other areas, as well as through smarter design.

The reduction in contractor emissions in 2023/24 was driven by a reduction in diesel fleet fuel and fleet heavy oil consumption compared to 2022/23.

Progress on EMRP actions

In 2023/24, **all four EMRP actions to address major supplier emissions were progressed**. As at 30 June 2024, all were on track to be completed as scheduled (green).

An overview of major supplier emission reduction projects is presented below:

Table 12: Major Suppliers Emissions Reduction Projects

Project	Zero Carbon Plan action #	EMRP Project #	Timeframe	Lead Team	Tracking 2023/24
Provide further guidance for teams on how to achieve emissions reductions through procurement, including standard clauses and specifications that can be included in contracts.		79	2023-2027	Zero Carbon (with help from Procurement)	
Introduce requirements for emissions reporting into contracted work and services, starting with major contracts. Use LTES panel, i.e. design, to reduce carbon emissions.		80	Ongoing		
Implement standardised approach to give effect to the Zero Carbon Policy through procurement, including guidance and support for DCC staff and suppliers	C4.8.1	81	2023-2027		
Require DCC contracts with the potential for large waste volumes to minimise waste through standardised Zero Carbon approach – refer to Communities and Economies (Key shift 4)	R1.2.3	31	2023-2031		

2.4.4 Stationary Energy

Background

When combined, stationary energy emissions from electricity, diesel, and LPG use in DCC buildings and facilities generated **9% of DCC emissions in 2023/24**. Across all stationary energy sources, there is a need to both reduce whole-of-life operating costs and to decarbonise energy supply.

While there are connections between the end-uses of electricity, LPG and stationary diesel used at DCC (a variety of fuels might be use in one facility), emissions from each source are reported separately.

Tracking against EMRP targets

Table 13 below provides a detailed overview of EMRP targets for the stationary energy emissions category, a summary of emissions for the last two financial years, as well as the 2023/24 emissions tracking against the 2030/31 EMRP target.

While electricity emissions outperformed the 2030/31 EMRP target, stationary LPG and diesel did not achieve the EMRP target. **Overall, emissions from stationary energy in 2023/24 were 2,629tCO_2e above the 2030/31 EMRP target.** Key drivers for the changes within each energy sources are discussed below.

Table 13: Stationary Energy Emissions Overview

Emissions Source	EMRP Baseline 2018/19 (tCO2e)	EMRP target 2030/31 (tCO2e)	2022/23 (tCO2e)	2023/24 (tCO2e)	2023/24 tracking against 2030/31 target (tCO2e)
Stationary LPG	1,908.56	309.62	2,113.13	2,700.05	2,390.43 above target (target not yet achieved)
Electricity (incl. T&D losses)	4,003.26	2,509.41	2,446.64	2,262.79	246.62 under target (target exceeded)
Stationary Diesel	752.97	120.42	975.15	605.66	485.24 above target (target not yet achieved)
Total	**6,664.79**	**2,939.45**	**5,534.92**	**5,568.50**	2,629.05 above target (target not yet achieved)

Stationary LPG

Background

Stationary LPG **generated 4.6% of DCC's emissions in 2023/24**.

The majority of DCC stationary LPG is used to heat Moana Pool, which in 2023/24 accounted for 55% of total stationary LPG use. Space heating of DCC buildings in the CBD accounted for a further 30% of total stationary LPG use. In many instances, LPG is used to heat hot water in settings where alternative energy sources are impractical or inefficient at present, due to demand only at limited times (such as hot water for sports field changing rooms which may have little to no use during weekdays but peak requirements on weekends after sports matches).

Tracking against EMRP targets

Table 15 below provides a detailed overview of EMRP targets for the stationary LPG emissions category by consumption site, a summary of emissions for the last two financial years, as well as the 2023/24 emissions tracking against the 2030/31 EMRP target.

Overall, emissions from stationary LPG use in 2023/24 were 2,518tCO_2e above the 2030/31 EMRP target. An increase in 500tCO_2e from Moana Pool was driven predominantly by increased LPG consumption during a heat pump upgrade.

Table 14: Stationary LPG use by site

Location	*EMRP target 2030/31 (tCO2e)*	2022/23 (tCO2e)	2023/24 (tCO2e)	2023/24 tracking against 2030/31 target (tCO2e)
Moana Pool	*0.00*	1,100.44	1,621.12	1,621.12 above target (target not yet achieved)
Civic Centre/Library	*0.00*	371.82	415.03	415.03 above target (target not yet achieved)
Dunedin Public Art Gallery	*0.00*	236.40	274.47	274.47 above target (target not yet achieved)
Andersons Bay Crematorium	*142.43*	189.91	143.48	1.05 above target (target not yet achieved)
Toitū Early Settlers Museum	*0.00*	74.08	109.69	109.69 above target (target not yet achieved)
Caledonian Gym	*0.00*	66.75	43.23	43.23 above target (target not yet achieved)
St Clair saltwater pool cafe	*11.43*	11.43	13.10	1.67 above target (target not yet achieved)
Other DCC sites	*89.99*	169.4	79.93	10.06 below target (target achieved)

Total	***181.08***	**2,113.13**	**2,700.05**	**2,518.97 above target (target not yet achieved)**

Progress on EMRP actions

Projects in the EMRP address the main LPG emissions sources by 2030/31. DCC anticipates Andersons Bay Crematorium will be the most technically difficult source to displace. This is due to the ageing building structure as well as the high heat required from alternative fuel sources to be used at the Crematorium. However, the EMRP includes a project to investigate the feasibility of alternative sustainable fuel sources.

Smaller sources ('other DCC sites') are not a focus of DCC within the EMRP, however may be reviewed in future following larger LPG sources being replaced with low emissions alternatives, and potential technology improvements for short term, high demand water heating.

In 2023/24, **4 of the 7 EMRP actions to address stationary LPG emissions were progressed.** The remaining 3 EMRP actions are not due to start until subsequent financial years.

As at 30 June 2024:

- 1 was on track to be completed as scheduled (green);
- 3 were subject to delays or changes in scope, but with emissions reductions still anticipated be partially or wholly realised (amber): and
- 3 are not due to start yet (N/A).

An overview of stationary LPG emission reduction projects is presented below:

Table 15: Stationary LPG Emissions Reduction Projects

Project	Zero Carbon Plan action #	EMRP Project #	Timeframe	Lead Team	Tracking 2023/24
Develop detailed cases to improve energy efficiency and displace LPG use at - Civic Centre - Dunedin City Library - Dunedin Public Art Gallery - Toitū Otago Settlers Museum	E1.2.3	49	2023-2027	Property	
Implement preferred options to improve energy efficiency and displace LPG use at - Civic Centre - Dunedin City Library - Dunedin Public Art Gallery - Toitū Otago Settlers Museum	E1.2.4	50	2024-2030		N/A
Deliver heat recovery system at Moana Pool	E1.2.1	51	2023-2027	Aquatics/ Property	
Implement changes to displace LPG used for hot water heating at Moana Pool	E1.2.2	52	2024-2030		N/A
Explore options to improve the overall energy efficiency and displace stationary LPG use at Andersons Bay Crematorium	E1.2.10	53	2023-2027	Parks/Property	
Implement preferred option to improve the overall energy efficiency and displace LPG use at Andersons Bay Crematorium	E1.2.11	54	2025-2031		N/A
Explore and implement other upgrades to improve energy efficiency and displace	E1.2.12	55	2023-2031	Parks	

stationary diesel and LPG use at other PARS facilities					

Electricity (including transmission and distribution losses)

Background

Electricity generated **3.8% of DCC's emissions in 2023/24.**

Tracking against EMRP targets

Reductions in emissions from electricity during 2023/24 were primarily due to a reduction in overall electricity consumption compared to 2022/2023. To a lesser extent, a higher share of renewable electricity generation in the national grid reduced the emissions per kWh imported. The Ministry for the Environment published new emissions factors for electricity and electricity and distribution losses in April 2024. These emission factors were also backdated to previous calendar years. A recalculation of electricity-related emissions of previous financial years has been conducted in this year's IMR.

Progress on EMRP actions

Several EMRP actions aim to either improve electricity efficiency or generate electricity to reduce the need for electricity from the national grid and to reduce DCC's electricity consumption. However, DCC's overall electricity consumption may increase, as large DCC buildings and facilities are decarbonised and switch from LPG. The switch in fuel type from LPG to electricity is expected to result in significant reductions in overall emissions across DCC.

Modelling of electricity emissions anticipates the increase in emissions from electricity consumption will be offset by improvements in energy efficiency and greater renewable energy generation in the national electricity grid. The modelling assumptions will be reviewed over time as more detailed information becomes available for each project and changes are made (or not made) to the national grid.

In 2023/24, **3 of the 6 EMRP actions to address electricity emissions were progressed.** As at 30 June 2024, all were on track to be completed as scheduled. The remaining 3 EMRP actions are not due to start until subsequent financial years.

An overview of electricity emission reduction projects is presented below:

Table 16: Electricity Emissions Reduction Projects

Project	Zero Carbon Plan action #	EMRP Project #	Timeframe	Lead Team	Tracking 2023/24
Upgrading Civic Centre lighting as the first phase of lighting upgrade programme	E1.2.4	59	2023/24	Property	

Upgrading lighting across three other CBD sites: Dunedin Town Hall/Municipal Chambers, Toitū Early Settlers Museum, and City Library	E1.2.4	60	2025		N/A
Complete upgrade of building management systems (BMS) within existing DCC facilities and align strategies, plant and equipment to ensure facilities are designed to reduce energy use	E1.2.4	61	2025		N/A
Consider opportunities for renewable generation associated with 3 Waters infrastructure as part of 3 Waters Integrated System Planning	E3.4.1	62	2023/24	3 Waters	
Explore options for renewable energy generation associated with other DCC assets, as part of other energy efficiency and decarbonization work programmes	E3.4.4	63	2023-2034	Property	
Implement preferred options for renewable generation associated with other DCC assets	E3.4.5	64	2025-2034		N/A

Stationary Diesel

Background

Stationary diesel **generated 1% of DCC's emissions in 2023/24.** The majority of stationary diesel is used at the Tahuna Wastewater Treatment Plant to operate the sludge incinerator. Stationary diesel is used at Green Island and Mosgiel WWTPs to heat the digesters when the biogas system is not working, and to supplement electric pumps during periods of high rainfall. Stationary diesel is also used for remote or short-term power generation at other sites within the 3 Waters network, such as to power small pump stations.

Tracking against EMRP targets

Table 17 below provides a detailed overview of EMRP targets for the stationary diesel emissions category by consumption site, a summary of emissions for the last two financial years, as well as the 2023/24 emissions tracking against the 2030/31 EMRP target.

In 2023/24, the emissions related to stationary diesel consumption for Tahuna and Mosgiel WWTPs were above the 2030/31 EMRP emissions target. All other diesel consuming sites achieved the 2030/31 EMRP target. **Overall, emissions from stationary diesel use in 2023/24 were 485tCO_2e above the 2030/31 EMRP target.**

Table 17: Stationary Diesel use by site

Location	*EMRP target 2030/31 (tCO2e)*	2022/23 (tCO2e)	2023/24 (tCO2e)	2023/24 tracking against 2030/31 target (tCO2e)
Tahuna WWTP	*0.00*	650.36	543.73	**534.73 above target (target not yet achieved)**
Mosgiel WWTP	*27.22*	130.66	50.96	**23.74 above target**

				(target not yet achieved)
Southern Water Treatment Plant pump	*75.25*	100.30	0.63	74.62 below target (target exceeded)
Green Island WWTP	*6.92*	43.76	4.55	2.37 below target (target exceeded)
Musselburgh WW PS/screening plant	*11.05*	40.12	5.79	5.26 below target (target exceeded)
Botanic Garden	*0.00*	2.67	0.00	0.00 (target achieved)
Total	***120.42***	**967.87**	**605.66**	485.24 above target (target not yet achieved)

Reductions in stationary diesel from 2022/23 to 2023/24 were for a variety of reasons. Stationary diesel consumption at Tahuna WWTP was down due to an upgrade to the sludge incinerator to reduce the build-up of ash as sludge is combusted. This upgrade was made part way through the 2023/24 financial year. As such, the DCC expect to fully understand the impact of the Tahuna sludge incinerator upgrade through the 2024/25 financial year, and the reductions seen at Tahuna in 2023/24 are likely to be enduring.

Reductions in stationary diesel consumption at Mosgiel WWTP and Green Island WWTP are in part due to operational improvements made to the biogas boilers (in each WWTP), as well as a lack of significant heavy rainfall events during 2023/24 (Mosgiel WWTP only). Heavy rainfall events lead to increased stationary diesel consumption due to the use of diesel generators to supplement electric pumps.

At the Southern WTP, reductions in stationary diesel consumption during 2023/24 were due to capacity improvements at the Mount Grand catchment. These improvements reduced the need for freshwater to be accessed from the Southern WTP.

A lack of heavy rainfall in 2023/24 also led to reduced diesel used at Musselburgh WW PS/screening plant.

As such, some of the stationary diesel reductions seen during 2023/24 may be enduring, and some may be due to favourable weather conditions in 2023/24.

Progress on EMRP actions

In the long term, there is a project underway to find an alternative solution to the combustion of sludge at Tahuna WWTP. There are also further options available in the short term to optimise use of the incinerator, such as installing an ash clarifier to remove ash from the incinerator. This will reduce the amount of diesel required to incinerate sludge, as the higher the percentage of ash is mixed with the sludge, the more heat is required to burn the remaining organic material.

Continued work to optimise the biogas boilers at both Green Island and Mosgiel WWTPs will ensure baseline stationary diesel consumption from these sites is minimised.

Completely displacing the use of diesel for power generation in severe weather events or remote locations in the 3 Waters network may be difficult, however DCC will investigate what options are available to reduce reliance on stationary diesel for such purposes.

In 2023/24, **4 of the 9 EMRP actions to address stationary diesel emissions were progressed.** The remaining 5 EMRP actions are not due to start until subsequent financial years. As at 30 June 2024,

- 3 were on track to be completed as scheduled (green);
- 1 was subject to delays or changes in scope, but with emissions reductions still anticipated be partially or wholly realised (amber); and
- 5 are not due to start until subsequent financial years

An overview of stationary LPG emission reduction projects is presented below:

Table 18: Stationary Diesel Emissions Reduction Projects

Project	Zero Carbon Plan action#	EMRP Project #	Timeframe	Lead Team	Tracking 2023/24
Explore options to displace stationary diesel use at wastewater treatment plants	E1.2.7	46	2023-2027	3 Waters	
Implement preferred options to displace stationary diesel use at wastewater treatment plants	E1.2.8	47	2024-2030		N/A
Explore and implement other upgrades to improve energy efficiency and displace stationary diesel use at other 3W facilities	E1.2.9	48	2024-2030		N/A
Build Zero Carbon considerations into 3 Waters Integrated System Planning	R3.7.3	43	2023/24		
Implement outcomes of 3 Waters Integrated System Planning	R3.7.4	44	2024-2034		N/A
Explore options for a long-term biosolids solution	R3.7.1	10	2023-2027	3 Waters	
Deliver a long-term biosolids solution	R3.7.2	11	2027-2034		N/A
Consider opportunities for renewable generation associated with 3 Waters infrastructure as part of 3 Waters Integrated System Planning	E3.4.1	62	2023/24		
Implement preferred options for renewable generation associated with other DCC assets	E3.4.5	64	2025-2034	Property	N/A

2.4.5 Chemical Use

Background

Chemical use **generated 3.7% of DCC's emissions in 2023/24.** The 3 Waters carbon baseline report completed in 2021/22 identified that chemical use was a significant emissions source. For this reason, it has been included in emissions reporting since 2021/22.

To date, DCC is only reporting on chemical use in Water Treatment Plants (WTPs). There are further emissions associated with the liming of sludge from Tahuna wastewater treatment

plant to allow for its disposal at Green Island landfill, which may be significant and are not currently measured.

Tracking against EMRP targets

Table 19 below provides a detailed overview of EMRP targets for the chemical use emissions category, a summary of emissions for the last two financial years, as well as the 2023/24 emissions tracking against the 2030/31 EMRP target. In 2023/24, the emissions related to chemical use were above the 2030/31 EMRP emissions target. **Overall, emissions from chemical use in 2023/24 were 67tCO_2e above the 2030/31 EMRP target.**

Table 19: 3 Waters Chemicals Emissions

Location	EMRP Baseline 2018/19 (tCO2e)	*EMRP target 2030/31 (tCO2e)*	2022/23 (tCO2e)	2023/24 (tCO2e)	2023/24 tracking against 2030/31 target (tCO2e)
3 Waters Chemicals Emissions	2,075.36	*2,127.54*	2,127.54	2,195.53	**67.99 above target (target not yet achieved)**

Progress against EMRP actions

Opportunities to reduce chemical use emissions are limited by regulatory and operational requirements. Actions for exploration include optimising water treatment processes, considering alternatives to liming Tahuna WWTP plant sludge, and identifying whether there are suppliers closer to Dunedin to reduce freight emissions are underway.

The 3 Waters team is constantly looking at ways to optimise chemical consumption (reduce the use wherever possible by optimising plants and processes). Initial reviews have been focused on Mt Grand and Southern WTPs.

In 2023/24, **3 of the 4 EMRP actions to address 3 Waters chemical emissions were progressed.** The remaining EMRP action is not due to begin until 2024/25. As at 30 June 2024:

- 2 were on track to be completed as scheduled (green);
- 1 was subject to delays or changes in scope, but with emissions reductions still anticipated be partially or wholly realised (amber); and
- 1 is not due to start until 2024/25.

An overview of chemical use emission reduction projects is presented below:

Table 20: Chemicals Emissions Reduction Projects

Project	Zero Carbon Plan action #	EMRP Project #	Timeframe	Lead Team	Tracking 2023/24
Ensure all major chemicals used within DCC are included within emissions data, including but not limited to aquatics chlorine use, and liming of sludge at Tahuna WWTP	N/A	77	2023/24	3 Waters	
Identify opportunities to reduce emissions from chemicals use, and implement changes	Included in E3.4.1	78	2024/25-2026/27	3 Waters/Zero Carbon	
Build Zero Carbon considerations into 3 Waters Integrated System Planning	R3.7.3	43	2023/24	3 Waters	

Implement outcomes of 3 Waters Integrated System Planning	R3.7.4	44	2024-2034		N/A

2.4.6 Staff Travel to and From Work

Background

Staff travel to and from work **generated less than 1% of DCC's emissions in 2023/24.**

Emissions associated with staff travel to and from work have only recently been incorporated into DCC's greenhouse gas inventory, following the ISO:14064 emissions reporting standard update and data becoming available.

Almost 90% of the staff travel to/from work emissions are caused using private fossil fuel powered vehicles. Staff travel survey data indicates many would like to travel by more sustainable modes of transport, however face difficulties in doing so. Some staff may be unlikely to be able to switch from use of a private vehicle to more sustainable transport modes in the short to medium term due to their personal circumstances.

Tracking against EMRP targets

Table 20 below provides a detailed overview of EMRP targets for the staff travel to and from work emissions category, a summary of emissions for the last two financial years, as well as the 2023/24 emissions tracking against the 2030/31 EMRP target. **Overall, emissions from staff travel to and from work in 2023/24 were 257tCO_2e above the 2030/31 EMRP target.**

Table 21: Staff Travel To and From Work Emissions

Emissions Source	EMRP Baseline 2018/19 (tCO2e)	*EMRP target 2030/31 (tCO2e)*	2022/23 (tCO2e)	2023/24 (tCO2e)	2023/24 tracking against 2030/31 target (tCO2e)
Staff travel to work (alone) – Internal Combustion Engine (ICE) + Hybrid	328.14	*147.54*	312.71	327.32	179.78 above target (target not yet achieved)
Staff travel to work - carpooling - ICE + Hybrid	103.98	*43.44*	103.98	100.25	56.81 above target (target not yet achieved)
Staff travel to work - Bus	48.69	*24.15*	48.69	48.69	24.54 above target (target not yet achieved)
Staff travel to work - Motorcycle/Motor scooter	8.63	*8.63*	8.63	8.66	0.03 above target (target not yet achieved)
Staff travel to work - EV (alone and carpooling)	2.73	*6.09*	2.33	2.12	3.97 below target (target exceeded)
Staff travel to work - taxi	0.14	*0.14*	0.10	0.10	0.04 below target (target exceeded)
Staff travel to work - E-scooter	0.03	*0.03*	0.03	0.45	0.15 above target (target not yet achieved)
Staff travel to work - bike	0.00	*0.00*	0.00	0.00	0.00 (target achieved)
Staff travel to work - walk	0.00	*0.00*	0.00	0.00	0.00 (target achieved)
Total	**503.50**	***230.03***	**476.47**	**487.59**	257.56 above target (target not yet achieved)

Changing the way staff travel to and from work across Dunedin is also a focus for Zero Carbon Plan actions targeting city-scale emissions. The projected emissions by 2030/31 for

staff travel to/from work are based on DCC staff travel choices reflecting the targets included in the Zero Carbon Plan for metrics such as how many trips within the city are via cycling, walking, and public transport compared with private car trips.

For the 2023/24 staff travel to work emissions calculation activity data from 2022/23 is used. No travel survey was conducted in 2023/24. The difference between 2022/23 and 2023/24 is due to different emissions factors per kilometre of staff travel being applied to 2022/23 and 2023/24 staff travel, due to an update in the Ministry for the Environment emissions factors.

Progress on EMRP actions

The emissions reduction projects included for staff travel to/from work seek to remove or lower the barriers for staff to switch from use of private vehicles to more sustainable travel modes such as catching the bus, cycling, e-biking/e-scootering, or walking. A recent focus for the Zero Carbon Alliance has been staff travel planning, to seek to amplify efforts, scale up solutions and share lessons learnt within each organisation.

In 2023/24, **5 of the 11 EMRP actions to address emissions from staff travel to and from work were progressed.** The remaining 6 actions are not due to start until subsequent financial years. As at 30 June 2024:

- 3 were on track to be completed as scheduled (green);
- 2 were subject to delays or changes in scope, but with emissions reductions still anticipated be partially or wholly realised (amber);
- 1 is not on track, with no mitigation currently in place (red).

An overview of staff travel to and from work emission reduction projects is presented below:

Table 22: Staff travel to and from work Emissions Reduction Projects

Project	Zero Carbon Plan action #	EMRP Project #	Timeframe	Lead Team	Tracking 2023/24
Implement flexible working policy across DCC to enable working from home where appropriate	Related to T3.7.1	66	2023/24 onwards	Across DCC - oversight from ELT	
Investigate options to encourage and enable greater uptake of e-bikes by ZCA staff.	Related to T5.16.1	67	2024	Zero Carbon (with support from Transport)	
Implement preferred e-bike option across ZCA organisations (including DCC)	Related to T5.16.2	68	2025		N/A
Work with Otago Regional Council public transport team on the potential for improved public transport options for ZCA staff, like monthly passes.	Related to T5.15.1 and T4.10.2	69	2024		N/A
Implement preferred public transport initiative across ZCA organisations (including DCC)	Related to T5.15.1 and 4.10.2	70	2024/25		N/A

Investigate options for a sustainable travel budget initiative across ZCA organisations, with the focus to remove barriers for those with dependants to use sustainable travel options. Options could include, but are not limited to, initiatives such as a guaranteed ride home scheme	Related to T5.15.1	71	2024		N/A
Implement preferred sustainable travel budget initiative across ZCA organisations (including DCC)	Related to T5.15.1	72	2024/25		N/A
Review and upgrade end of trip facilities, such as bike sheds	N/A	73	2024	Property (with support from Transport and Zero Carbon)	
Promote end of trip facilities	N/A	74	Ongoing	Transport	
Internal DCC communications and engagement on sustainable travel options and initiatives	N/A	75	Ongoing		
Continue to undertake annual staff travel surveys	N/A	76	Ongoing		

2.4.7 Fleet Fuel

Background

Fleet fuel **generated less than 1% of DCC baseline emissions**. Emissions from DCC petrol vehicles have decreased in recent years due to investments in plug-in hybrid (PHEV) and electric vehicles (EV). However, DCC's diesel use from fleet had been increasing in recent years, largely due to 3 Waters activity. There was a slight reduction in 2023/24 fleet diesel use compared with 2022/23.

Achievement of the emissions reduction targets for DCC fleet is important to align with the expectations DCC has of its suppliers and the Zero Carbon Plan. As such, it is important DCC can illustrate the changes it has made in its own fleet over the coming years to show leadership in this area.

Tracking against EMRP targets

Table 22 below provides a detailed overview of EMRP targets for the fleet fuel emissions category, a summary of emissions for the last two financial years, as well as the 2023/24 emissions tracking against the 2030/31 EMRP target. **Overall, emissions from fleet fuel in 2023/24 were 316tCO_2e above the 2030/31 EMRP target.**

Table 23: Fleet Fuel Emissions

Emissions Source	EMRP Baseline 2018/19 (tCO2e)	*EMRP target 2030/31 (tCO2e)*	2022/23 (tCO2e)	2023/24 (tCO2e)	2023/24 tracking against 2030/31 target (tCO2e)
Fleet Fuel	488.32	*116.60*	466.38	432.72	316.12 above target (target not yet achieved)

Fleet emissions reductions in petrol use are due to continued electrification of the light fleet at DCC, along with changed work habits regarding remote attendance of meetings.

Progress on EMRP actions

DCC and Customfleet worked together through 2023 to undertake a fleet optimisation study. The aim of this study is to identify ways to better utilise our fleet, including opportunities to reduce the number of vehicles in the fleet, better utilise existing PHEV vehicles in the fleet, and identify a pathway to have zero tailpipe emissions from DCC fleet vehicles. The final report was provided in late 2023, with implementation of the recommendations to occur in 2024 and beyond. The report has indicated a number of vehicles could be removed from DCC's fleet in the short term, and over the next 5-7 years all vehicles could be replaced with no tailpipe emissions alternatives and alternatives to DCC fleet options such as carshare, e-bikes or use of public transport (pending a greater market supply of EV utility vehicles, and sufficient charging infrastructure).

Actions to address emissions from fleet fuel will be progressed in 2024/25 and beyond. An overview of fleet fuel emission reduction projects is presented below:

Table 24: Fleet Emissions Reduction Projects

Project	Zero Carbon Plan action #	EMRP Project #	Timeframe	Lead Team	Tracking 2023/24
Invest in infrastructure to support continued DCC fleet electrification	T7.21.3	56	2024-2027	Fleet Services	N/A
Implement the recommendations of the Fleet Optimisation Study	N/A	57	2024-2025	Fleet Services	N/A

2.4.8 Business Travel

Background

Business travel **generated less than 1% of DCC's emissions in 2023/24**.

Tracking against EMRP targets

Table 24 below provides a detailed overview of EMRP targets for the business travel emissions category, a summary of emissions for the last two financial years, as well as the 2023/24 emissions tracking against the 2030/31 EMRP target. Apart from emissions from Taxi use, all other business travel modes did not achieve the 2030/31 EMRP emissions target in 2023/24. **Overall, emissions from business travel in 2023/24 were 142tCO_2e above the 2030/31 EMRP target.**

Table 25: Business Travel Emissions

Emissions Source	EMRP Baseline 2018/19 (tCO2e)	*EMRP target 2030/31 (tCO2e)*	2022/23 (tCO2e)	2023/24 (tCO2e)	2023/24 tracking against 2030/31 target (tCO2e)
Air Travel	312.07	*37.96*	94.91	115.37	**77.41 above target (target not yet achieved)**
Private cars	21.29	*16.02*	16.02	23.71	**7.69 above target (target not yet achieved)**

Taxis	2.46	*0.88*	0.88	0.88	**0.00 (target achieved)**
Hotel Stays	1.37	*1.18*	2.95	2.42	**1.24 above target (target not yet achieved)**
Rental cars	0.00	*0.15*	0.58	0.24	**0.09 above target (target not yet achieved)**
Total	**337.19**	***56.19***	**115.34**	**142.62**	**86.43 above target (target not yet achieved)**

The pandemic interrupted business-as-usual travel for the organisation, and in the post-pandemic years DCC management has used budget levers to set different expectations of departments with regards to travel.

Progress against EMRP actions

There are no specific actions to reduce hotel stays, rental cars, and taxi emissions. These sources are largely proportional to the amount of air travel that occurs and are a minor part of DCC's inventory.

There are no specific actions to address private car emissions (private car use by staff which is reimbursed by DCC). Private car use is in part related to staff travelling to and from the airport in their own vehicle. As such, achieving the air travel target should result in some reduction in private car emissions.

There is one EMRP action to address emissions from business travel. In 2023/24, the action was on track to be completed as scheduled.

An overview of business travel emission reduction projects is presented below:

Table *26:* Business Travel Emissions Reduction Projects

Project	Zero Carbon Plan action #	EMRP Project #	Timeframe	Lead Team	Tracking 2023/24
Implement initiatives to achieve target of a 25% reduction in air travel by 2026/27 compared to 2022/23 levels, include using alternatives to travel where practicable (such as videoconferencing), using alternative travel modes where possible (such as carpooling to/from Christchurch in a DCC EV/PHEV where multiple staff are attending the same event/meeting), or reducing team travel budgets.	N/A	65	2023/24-2026/27	Across DCC	

2.4.9 Fertiliser and Refrigerants

Background

Fertiliser and refrigerants combined **generated less than 1% of DCC's emissions in 2023/24.**

Emissions from fertiliser come from nitrogen applied to DCC operated recreational facilities across Dunedin city.

Refrigerant leakage across DCC facilities has the potential to become an increasing risk over the coming years as existing LPG boilers are likely to be replaced with electric heat pump technology which utilises refrigerants. Although some refrigerants have very high global warming potential (GWP) if released into the atmosphere, emerging technologies using refrigerants with far lower GWP are becoming available.

Tracking against EMRP targets

Table 26 below provides a detailed overview of EMRP targets for fertiliser and refrigerant emissions category, a summary of emissions for the last two financial years, as well as the 2023/24 emissions tracking against the 2030/31 EMRP target. Neither two emissions sources achieved the 2030/31 EMRP emissions target in 2023/24. Furthermore, refrigerant leakage caused a significant increase in emissions from this source in 2023/24 compared to the previous financial year. **Overall, emissions from fertiliser and refrigerant emissions in 2023/24 were 269tCO_2e above the 2030/31 EMRP target.**

Table 27: Fertiliser and Refrigerant Emissions

Emissions Source	EMRP Baseline 2018/19 (tCO2e)	*EMRP target 2030/31 (tCO2e)*	2022/23 (tCO2e)	2023/24 (tCO2e)	2023/24 tracking against 2030/31 target (tCO2e)
Refrigerant Leakage	368.90	*96.41*	111.06	253.78	**157.37 above target (target not yet achieved)**
Fertiliser	32.90	*11.77*	11.77	15.67	**3.9 above target (target not yet achieved)**
Total	**401.80**	***108.18***	**122.83**	**269.45**	**161.27 above target (target not yet achieved)**

Progress against EMRP actions

No alternative to the use synthetic fertilisers has been identified to ensure there is enough grass cover across sports fields, in particular for winter sports. Fertiliser is a relatively minor emissions source for the DCC, and given the lack of known alternatives at this point in time, there are no actions within this EMRP to address this emissions source.

Effective management of existing refrigerant systems, as well as careful selection of refrigerant systems to install, is important to ensure emissions from refrigerants are minimised in the coming years.

There are two EMRP projects relating to refrigerants. In 2023/24, both actions to address emissions from refrigerants were on track to be completed as scheduled.

An overview of refrigerant emission reduction projects is presented below:

Table 28: Refrigerant Emissions Reduction Projects

Project	Zero Carbon Plan action #	EMRP Project #	Timeframe	Lead Team	Tracking 2023/24

Explore options to reduce the GWP of refrigerants on DCC property, as part of other energy efficiency and decarbonization work programmes	E4.6.1	58	Ongoing	Property	
Implement standardised approach to give effect to the Zero Carbon Policy through procurement, including guidance and support for DCC staff and suppliers	C4.8.1	81	2023-2027	Zero Carbon/Procurement	

2.5 Staff Engagement

Relevant DCC teams provided input into the development of the EMRP, and are regularly engaged as part of reporting. Information regarding the EMRP and DCC emissions reduction goals is also published on the intranet. Other avenues for staff engagement include conversations with teams, and ELT leadership.

The Zero Carbon Policy covers city-wide and organisational emissions. Zero Carbon Policy guidance documents have been developed and published internally, and further opportunities for Zero Carbon Policy integration within the organisation are being sought. The guidance documents outline how city-wide and organisational emissions can be reduced through strategy, policy and plan development, infrastructure, events and small projects. A wide range of further integration opportunities are being considered with a view to implementing those which are considered likely to be most effective.

Much of DCC's work takes place through procurement and in the delivery of projects. Procurement emissions standards have been developed and Zero Carbon considerations are being piloted as part of the DCC's evolving project management framework.

Additional support is provided to teams and staff by the Zero Carbon team on an as required basis.

2.6 Monitoring and Reporting

As the Programme Director, the Manager - Zero Carbon is responsible for work programme oversight, management and coordination. This includes establishing processes for regular reporting to ELT and/or Council.

BraveGen software has been implemented to aid regular reporting and oversight. This, along with regular reporting on implementation of the EMRP projects to ELT will help ensure progress against agreed emissions reduction actions.

Appendix 1: Detailed Greenhouse Gas Inventory

Additional inventory details are disclosed in the tables below.

Table A1.1: GHG emissions and removals, quantified for each applicable gas 2023/2024

Scope	Inventory Category	tCO2e	Carbon Dioxide	Nitrous Oxide	Methane	Sulphur Hexafluoride	HFC's	Other
1	Direct	48,552.6	3,722	25.4	7,730.3	0.00	253.8	10,999.5
2	Indirect - energy	2,108.5	2,031.2	2.2	75.2	0.00	0.00	0.00
3	Indirect - products used	7,953.9	5,616.6	71.8	30.1	0.00	0.00	2,240.7
	Indirect transportation	631.5	611.4	12.9	4.8	0.00	0.00	3.2
Total		59,246.6	11,981.6	112.5	7,480.3	0.00	253.8	13,243.4

A1.1 Reporting Boundaries

A1.1.1 Emission Source Identification Method and Significance Criteria

The GHG emissions sources included in this inventory are those identified with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standard.

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

All direct emissions sources that contribute more than 1% of total Category 1 and 2 emissions

All indirect emissions sources that are required by the ISO 14064-1:2018 standard, and additional indirect emissions sources which meet DCC's significance criteria. Further details on the significance criteria used to determine which indirect emissions sources to include can be found in Appendix 2.

A1.1.2 Included Sources and Activity Data Management

As adapted from ISO 14064-1, the emissions sources deemed significant for inclusion in this inventory were classified into the following categories:

- **Direct GHG emissions (Category 1):** GHG emissions from sources that are owned or controlled by the company.
- **Indirect GHG emissions (Category 2):** GHG emissions from the generation of purchased electricity, heat and steam consumed by the company.

- **Indirect GHG emissions (Categories 3-6):** GHG emissions that occur because of the activities of the company but occur from sources not owned or controlled by the company.

Table A1.2 provides detail on the categories of emissions included in the GHG emissions inventory, an overview of how activity data were collected for each emissions source, and an explanation of any uncertainties or assumptions made based on the source of activity data. Detail on estimated numerical uncertainties are reported in Table A1.2.

Table A1.2: GHG emissions activity data collection methods and inherent uncertainties and assumptions

Business unit	GHG emissions source	GHG emissions level Category	Data Source	Data collection unit	Uncertainties
3 Waters and Transition (3 Waters)	Wastewater treatment process emissions	Category 1	Operational wastewater data inputs in line with requirements of Water NZ Carbon Accounting Guidelines Operational time-series wastewater data	Various	Assumed that data is complete and accurate, however aware some data is incomplete. Moderate to high degree of uncertainty regarding how accurately Water NZ model for calculating WWTP emissions based on input data reflects actual emissions. Collection and processing of time series activity data at Tahuna, Mosgiel and Green Island WWTPs has been outsourced since the 2023/2024 financial year. Assume that calculations are meeting Water NZ standards while the establishment of a formal in-house review of data is underway. For the 2023/2024 financial year, missing activity data was replaced with the median over remaining data. Assume that this average is reflecting actual processes.
3 Waters and Transition (3 Waters)	Diesel - Stationary	Category 1	Annual departmental spend on fuel diesel and litres provided in the	l	Potential that other stationary diesel combustion may not be recorded (such as for mobile plant such as diesel generators where fuel cards may be used to purchase fuel), however, these

			supplier invoices.		are likely to be de minimis in the context of the overall inventory. Ministry for the Environment (MfE) emissions factor uncertainties +-0.5% in 2024 emissions factor guide.
Across teams with dedicated fleet, as well as shared fleet	Diesel transport [Volume]	Category 1	Fuel Usage Report provided by Council's FleetCard provider (FleetSmart).	l	Assumed that all fuel purchases are paid for via Fleet Card as per organisation policy. MfE emissions factor uncertainties stated in 2024 emissions factor guide as +-0.7%.
Consumption attributed to teams based on location	Electricity - default	Category 2	Environmental (actual used) electricity report received from Smartpower. Invoice data can be checked in Esmart, Smartpower's online portal for clients to use.	kWh	Assumed that data is complete and accurate. MfE emissions factor uncertainties not stated in 2024 emissions factor guide.
Consumption attributed to teams based on location	LPG - commercial [Energy]	Category 1	Environmental (actual used) LPG report received from Smartpower. Invoice data can be checked in Esmart, Smartpower's online portal for clients to use.	kWh	Assumed that data is complete and accurate. MfE emissions factor uncertainties +-2.4% in 2024 emissions factor guide.
Arts, Culture, and Recreation (Parks and Recreation Services)	Nitrogen	Category 1	Fertiliser Application Workbook, provided by DCC Parks Department	kg Nitrogen	Assumed that data provided is complete accurate. MfE emissions factor uncertainties not stated in 2024 emissions factor guide.
Across teams with dedicated fleet, as well as shared fleet	Petrol - transport, premium	Category 1	Fuel Usage Report provided by Council's FleetCard provider (FleetSmart).	l	Assumed that all fuel purchases are paid for via Fleet Card as per organisation policy. MfE emissions factor uncertainties +-1.6%in 2024 emissions factor guide.
Across teams with dedicated fleet, as well as shared fleet	Petrol - transport, regular	Category 1	Fuel Usage Report provided by Council's FleetCard	l	Assumed that all fuel purchases are paid for via Fleet Card as per organisation policy. MfE emissions factor

			provider (FleetSmart).		uncertainties +-1.6%in 2024 emissions factor guide.
Council Operations	Private Car - average (all fuel times)	Category 1	Report on all reimbursements for private car use provided by DCC Finance Department.	$ (NZD)	Assumed that the majority of personal car use for DCC purposes will be claimed for by staff. MfE emissions factor uncertainties not stated in 2024 emissions factor guide.
Reported to teams based on purchase orders used when booking	Public transport - air travel domestic (average)	Category 3	Environmental Impact Report provided by Council's Travel Agent (Orbit Corporate Travel) and passengers kilometres report provided by Air New Zealand	pkm	Assumed that the majority of travel is through Orbit or Air New Zealand and charged to corporate codes. MfE emissions factor uncertainties not stated in 2024 emissions factor guide.
Reported to teams based on purchase orders used when booking	Public transport - air travel long haul (average)	Category 3	Environmental Impact Report provided by Council's Travel Agent (Orbit Corporate Travel) and passengers kilometres report provided by Air New Zealand	pkm	Assumed that the majority of travel is through Orbit or Air New Zealand and charged to corporate codes. MfE emissions factor uncertainties not stated in 2024 emissions factor guide.
Reported to teams based on purchase orders used when booking	Public transport - air travel long haul (econ)	Category 3	Environmental Impact Report provided by Council's Travel Agent (Orbit Corporate Travel) and passengers kilometres report provided by Air New Zealand	pkm	Assumed that the majority of travel is through Orbit or Air New Zealand and charged to corporate codes. MfE emissions factor uncertainties not stated in 2024 emissions factor guide.
Council Operations	Public Transport - Taxi (NZ$)	Category 3	Report on all expenditure charged to 'Taxi' charge codes in 21/22 FY, provided by DCC Finance Department.	$ (NZD)	Assumed that all taxi use is charged to 'Taxi' code. MfE emissions factor uncertainties not stated in 2024 emissions factor guide.
Reported to teams based	Rental cars	Category 3	Environmental Impact Report	pkm	Assume that all rental cars are booked through Orbit. Where

on purchase orders used when booking			provided by Council's Travel Agent (Orbit Corporate Travel) including rental car bookings, with km travelled		km is not provided by Orbit, have assumed 20km travelled per day. MfE emissions factor uncertainties not stated in 2024 emissions factor guide.
Reported to teams based on purchase orders used when booking	Hotels	Category 3	Environmental Impact Report provided by Council's Travel Agent (Orbit Corporate Travel) including hotel stays	Visitor nights	Assume that all hotel stays are booked through Orbit and reported through environmental impact report. MfE emissions factor uncertainties not stated in 2024 emissions factor guide.
Climate and City Growth (Waste and Environmental Solutions)	Waste landfilled	Category 1	Waste to landfill data collected by DCC Solid Waste Department as required for Online Waste Management Levy (OWL) System and Emissions Trading Scheme (ETS) reporting. Solid Waste Analysis Protocol 2018 report.	t	Assumed that data is recorded and reported accurately for OWLS and ETS purposes. Landfill Unique Emissions Factor uncertainties not stated in the Climate Change (Unique Emissions Factors) Regulations 2009, however previous MfE Detailed Emissions Guidance for 2022 stated +-40% for waste emissions factors. As such, assume high degree of uncertainty for waste to landfill emissions.
Climate and City Growth (Waste and Environmental Solutions)	Closed landfills	Category 1	Historic data on waste deposited at closed DCC landfills has been input into the IPCC Waste Model for estimating emissions of methane from landfills	tCO2e	Emissions associated with closed landfills are generated based on available data and theoretical IPCC waste calculator for the rate emissions will decay and emit methane in landfill. High degree of uncertainty regarding how accurate this calculation is for the DCC closed landfills. Based on other MfE guidance on waste emissions, likely to be +-40% uncertainty.
3 Waters and Transition (3 Waters)	Water Treatment Chemicals	Category 4	Operational data on quantities of chemicals used plus their source location have been compared with published emissions factors for each chemical, and distances freight had to travel calculated based	Emissions factor per t, tkm	Emissions factors per tonne of chemical used come from a variety of sources, and as such there are likely to be varying degrees of data reliability. Tkm freight emissions are calculated using MfE default shipping factors, with certain assumptions made around the shipping path travelled. Quantities of chemicals reported at times based on operational staff knowledge of amounts

			on source location		used, rather than a verifiable source such as invoice data.
3 Waters and Transition (3 Waters, Waste and Environmental Solutions, Transport), Arts, Culture and Recreation (Parks and Recreation Services), Corporate Services (Property)	Major supplier emissions	Category 4	Emissions data supplied by 9 major suppliers	Various	Method used to apportion emissions to DCC related work varies depending upon data availability of suppliers. For example, some suppliers have been able to report on emissions on the basis of the plant and vehicles dedicated to DCC work, whereas other suppliers have had to use aggregate emissions figures for Dunedin/Southern region and then apportion DCC emissions on a percentage of revenue basis. Where percentage of revenue used, assume activities undertaken by the supplier for DCC reflect the emissions profile of their overall business.

A1.1.3 Excluded Emissions Sources and Sinks

Emissions sources in Table A1.3 have been identified and excluded from this inventory.

Table A1.3: GHG emissions sources excluded from the inventory

Business Unit	GHG emissions source	GHG emissions level scope	Reason for exclusion
General operations	Waste landfilled	Category 5	Given the small impact on the total, we have chosen to exclude this based on the programme's de minimis rule. Emissions associated with DCC employee waste is also included within the DCC footprint through the reported Green Island landfill emissions.
General operations	Paper purchase	Category 4	Given the small impact on the total, we have chosen to exclude this based on the de minimis rule.
General operations	Freight	Category 3	Data could only be collected in $ spent, data in tkm was not available. Given the small impact on the total, we have chosen to exclude this based on the de minimis rule. Where tkm data is available (water treatment plant chemicals), freight emissions have been included.
General operations	Couriers	Category 3	Data could only be collected in $ spent, data in tkm was not available. Given the small impact on the total, we have chosen to exclude this based on the de minimis rule.
General operations	Postage	Category 3	Data could only be collected in $ spent. Given the small impact on the total, we have chosen to exclude this based on the de minimis rule.
General operations	Air travel booked via other means	Category 3	Data is collected via DCC's travel booking agents Orbit and Air New Zealand. Staff are always recommended to book via the appropriate agents, but travel can sometimes be booked via corporate credit cards. Given the small impact this has on the total, we have chosen to exclude this based on the programme's de minimis rule.
General operations	Cloud based computing services	Category 4	While the DCC is aware emissions associated with cloud-based software services may be significant, our organisation has not to date made a decision on whether to include these emissions in our

			inventory, and if so whether to just include direct energy emissions associated with cloud-based services or whole of life emissions associated with energy usage, construction and maintenance of facilities, and disposal of electronic waste.
General operations	Wastewater treatment chemicals	Category 4	While the DCC is measuring emissions associated with potable water treatment, to date wastewater treatment chemicals are not being measured. This has been due to a lack of resourcing, with DCC targeting inclusion of this emissions source in the 2024/25 inventory. The emissions may be significant, especially when lime starts being used to treat sludge at Tahuna WWTP prior to being landfilled.
General operations	Tenant electricity and LPG emissions	Category 5	The DCC currently exclude emissions associated with buildings owned by the DCC but tenanted by a third party. The DCC may consider including these emissions in the 2024/25 inventory, however, may find it difficult to get a complete dataset given many of the tenants are invoiced for electricity and LPG directly.
General operations	Capital Goods	Category 4	Embodied emissions from capital goods purchased by the DCC are currently not included in the inventory, due to a lack of reliable data. Data could only be collected in $ spent. As data availability, quality and supplier reporting changes over time, the DCC may include this emissions source in subsequent inventories.
General operations	Reticulated LPG T&D losses	Category 4	The DCC use reticulated LPG, rather than natural gas, for space and water heating in several CBD facilities. The Ministry for the Environment Detailed Emissions Guide 2024 states that while there are transmission and distribution losses for reticulated natural gas, the guide assumes there are no transmission and distribution losses from reticulated LPG due to the composition of the gas (see page 29). As such, no reticulated LPG T&D losses are included in DCC's inventory, in line with MfE guidance.

A1.2 Quantified Inventory of Emissions and Removals

A1.2.1 Calculation Methodology

A calculation methodology has been used for quantifying the emissions inventory based on the following calculation approach, unless otherwise stated below:

Emissions = activity data x emissions factor

All emissions were calculated using externally verified emissions factor sources such as Ministry for the Environment's detailed emissions guide. Global Warming Potentials (GWP) from the IPCC fifth assessment report (AR5) are the preferred GWP conversion[5]. It is worth noting that the 2023/24 financial year wastewater treatment data uses AR5 GWP 100 while previous measurement periods use AR5 GWP 100 e/CCF.

Where applicable, unit conversions applied when processing the activity data has been disclosed.

[5] If emission factors have been derived from recognised publications approved by the programme, which still use earlier GWPs, the emission factors have not been altered from as published.

There are systems and procedures in place that will ensure applied quantification methodologies will continue in future GHG emissions inventories.

A1.2.3 GHG Storage and Liabilities: Land Use Liabilities

Organisations that own land subject to land-use change may achieve sequestration of carbon dioxide through a change in the carbon stock on that land. Where sequestration is claimed, then this also represents a liability in future years should fire, flood, management activities or other intentional or unintentional events release the stored carbon.

Table A1.4: Land use liabilities (total)

Site name	Total sequestration during reporting period (tCO_2e)	Contingent liability (tCO_2e)	Total potential liability (tCO_2e)
DCC	32,305	172,754	2,867,555

A1.2.3 GHG Storage and Liabilities: GHG Stocks Held On Site

Table A1.5: GHG Stocks held on 30 June 2024

GHG gas stock held	Quantity	Unit	Potential liability (tCO2e)
Diesel	34,475.71	Litres	92.34
LPG	10,275	Kg	30.53
Refrigerants - R22	6	Kg	10.56
Refrigerants - R134a	166	Kg	215.8
Refrigerants - R404a	22	Kg	86.74
Refrigerants - R407c	316	Kg	513.25
Refrigerants - R410a	684	Kg	1,315.67

A1.2.4 Supplementary Results

Holdings and transactions in GHG-related financial or contractual instruments such as permits, allowances, verified offsets or other purchased emissions reductions from eligible schemes are reported separately here.

Carbon credit and offsets

No carbon credits or offsets were purchased for the 2023/24 financial year.

Double counting and double offsetting

There are various definitions of double counting or double offsetting. For this report, it refers to:

- Parts of the organisation have been prior offset.

- The same emissions sources have been reported (and offset) in both an organisational inventory and product footprint.
- Emissions have been included and potentially offset in the GHG emissions inventories of two different organisations, e.g., a company and one of its suppliers/contractors. This is particularly relevant to indirect (Categories 2 and 3) emissions sources.
- The organisation generates renewable electricity, uses, or exports the electricity and claims the carbon benefits.
- Emissions reductions are counted as removals in an organisation's GHG emissions inventory and are counted or used as offsets/carbon credits by another organisation.

Double counting / double offsetting has not been included in this inventory.

Appendix 2: Significance Criteria Used

The following quantitative and qualitative criteria are considered to determine which indirect emissions sources to include in the DCC's organisational emissions inventory:

- Data availability and quality
- Staff resourcing
- The magnitude of emissions source
- Level of influence DCC have on the emissions source
- The risk from the emissions source, or opportunity to reduce emissions from this source
- Sector specific guidance
- Whether the emissions source is counted in city-wide emissions reduction targets
- Whether the emissions source needs to be measured in order to meet requirements of our intended inventory use and users

Indirect emissions sources currently excluded from DCC's inventory are periodically assessed against these criteria, to take into account changes over time (for instance, the data availability may improve over time).

There is no prescriptive rule to determine whether an indirect emissions source meets the threshold for inclusion in DCC's inventory. Rather, the assessment is largely qualitative.

Appendix 3: References

International Organization for Standardization, 2018. ISO 14064-1:2018. Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals. ISO: Geneva, Switzerland.

Intergovernmental Panel on Climate Change, 2001. IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories. Chapter 5: Waste. IPCC: Geneva, Switzerland. https://www.ipcc-nggip.iges.or.jp/public/gp/english/

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Ministry for the Environment, 2024. Measuring emissions: A guide for organisations: 2024 summary of emissions factors. Ministry for the Environment: Wellington, New Zealand. Measuring-emissions_Detailed-guide_2024_ME1829.pdf (environment.govt.nz)

Water New Zealand, 2021. Carbon accounting guidelines for wastewater treatment: CH4 and N2O. Water New Zealand, New Zealand.

World Resources Institute and World Business Council for Sustainable Development, 2004 (revised). The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. WBCSD: Geneva, Switzerland.

World Resources Institute and World Business Council for Sustainable Development, 2015 (revised). The Greenhouse Gas Protocol: Scope 2 Guidance. An amendment to the GHG Protocol Corporate Standard. WBCSD: Geneva, Switzerland.

Appendix 4: Reporting Index

This report template aligns with ISO 14064-1:2018. The following table cross references the requirements against the relevant section(s) of this report.

Section of this report	ISO 14064-1:2018 clause
Cover page	9.3.1 b, c, r 9.3.2 d,
Availability	9.2 g
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1.2. Emissions inventory results	9.3.1 f, h, j 9.3.3
1.3. Organisational context	9.3.1 a
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2.5. Staff engagement	
2.6. Key performance indicators	
2.7. Monitoring and reporting	9.3.2 h
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Appendix 5: Baseline Emissions Summary and Recalculation Policy

Category (ISO 14064-1:2018)	Scopes (ISO 14064-1:2006)	Emission Source	Baseline (tCO2e)	Emissions data used	Rationale (if not 2018/19)
Category 1: Direct emissions	Scope 1	Waste to landfill	51,210.49	2019/20	Earliest data available using new reporting methodology
		Closed landfills	9,684.28	2019/20	Earliest data available
		Wastewater Treatment	7,650.72	2019/20	Earliest data available using new reporting methodology
		Stationary LPG	1,908.56	2018/19	
		Stationary Diesel	752.97	2018/19	
		Refrigerant Leakage	368.90	2018/19	
		Fleet Fuel - Diesel	327.96	2018/19	
		Fleet Fuel - Petrol	160.36	2018/19	
		Fertiliser	32.90	2018/19	
		Fleet Fuel - LPG	0.00	2018/19	
Category 2: Indirect emissions from imported energy	Scope 2	Electricity	3,682.24	2018/19	
Category 3: Indirect emissions from transportation	Scope 3	Staff Travel to Work	518.05	2020/21	Earliest data available
		Air travel	312.07	2018/19	
		Private cars	21.29	2018/19	
		Staff Working from Home	7.19	2020/21	Earliest data available
		Taxis	2.46	2018/19	
		Hotel Stays	1.37	2020/21	Earliest data available
		Rental cars	0.00	2020/21	Earliest data available
Category 4: Indirect emissions from products used by organisation		Major Suppliers	5,177.47	2021/22	Earliest data available
		3 Waters Chemicals	2,075.36	2021/22	Earliest data available
		Electricity T&D losses	321.01	2018/19	
Total			**84,215.66**		

Baseline Emissions Recalculation Policy

The following instances shall require a recalculation of DCC's base year emissions to ensure comparisons against the base year remain relevant:

- Structural changes that have a significant impact on the DCC's base year emissions. For example, as more suppliers report their emissions to the DCC when existing contracts expire and new contracts with emissions reporting requirements are put in

place, the base year "major suppliers" emissions will need to be recalculated in order to remain relevant.

- Changes in calculation methodology, improved accuracy of emissions factors, or improved activity data that result in a significant impact on the base year emissions data
- Discovery of significant errors, or cumulative errors, that are collectively significant.

Historic Year Recalculations

The Ministry for the Environment provided an update on emission factors in May 2024. As a result, emissions from electricity as well as electricity transmission and distribution losses for the calendar years 2020, 2021 and 2022 were recalculated. This has been reflected in the summary emission overviews in this IMR.


Prepared for
Dunedin City Council
ABN: N/A
AECOM
Ōtepoti Dunedin's Greenhouse Gas Emissions Inventory: Cruise Ship Emissions
2018/19 to 2023/24
10-Oct-2024
aecom.com
Delivering a better world

Ōtepoti Dunedin's Greenhouse Gas Emissions Inventory: Cruise Ship Emissions

2018/19 to 2023/24

Client: Dunedin City Council

ABN: N/A

Prepared by

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10-Oct-2024

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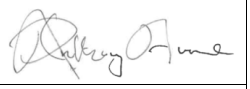
https://aecomaus.sharepoint.com/sites/CCF/Shared Documents/Dunedin Cruise GHG FY24/4. Deliverables/DCC_CruiseGHG_FY19-24_241010_v3.docx
Revision 3 – 10-Oct-2024
Prepared for – Dunedin City Council – ABN: N/A

Quality Information

Document	Ōtepoti Dunedin's Greenhouse Gas Emissions Inventory: Cruise Ship Emissions
Ref	1
Date	10-Oct-2024
Originator	Adam Swithinbank and Renee McKay
Checker/s	Luke Elsen / Suzanne Lowe
Verifier/s	Anthony Hume

Revision History

Rev	Revision Date	Details	Approved	
			Name/Position	Signature
3	10-Oct-2024	Final	Anthony Hume Practice Lead - Sustainability and Resilience	

https://aecomaus.sharepoint.com/sites/CCF/Shared Documents/Dunedin Cruise GHG FY24/4. Deliverables/DCC_CruiseGHG_FY19-24_241010_v3.docx
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1.0 Introduction

In June 2019, the Dunedin City Council (DCC) declared a climate emergency and adopted a two-part emissions reduction target ('Zero Carbon 2030' target) as follows:

- net zero emissions of all greenhouse gases other than biogenic methane by 2030; and
- 24% to 47% below 2017 biogenic methane emissions by 2050, including a 10% reduction below 2017 biogenic methane emissions by 2030.

In September 2023, DCC adopted a Zero Carbon Plan for Dunedin, setting city-wide shifts and actions required to deliver city-wide Greenhouse Gas (GHG) emissions reductions in line with the Council's 'Zero Carbon 2030 target'. The DCC used previous city-wide GHG emissions inventories covering 2018/19 to 2021/22 to model the level of emissions reduction required to meet the 'Zero Carbon 2030 target'.

When the Zero Carbon Plan was adopted, cruise ship GHG emissions were not included in Dunedin's city-wide GHG emissions inventory due to the absence of an agreed methodology or reliable data. To address this, the Zero Carbon Implementation Plan for the 2023/24 financial year included an action to "establish a baseline for GHG emissions from cruise ships"[1]

Due to the differing fuel demands of cruise ships and marine freight vessels, a different method is required to calculate GHG emissions from cruise ships compared to that used for marine freight vessels in Dunedin's most recent GHG Emissions Inventory.

Scope of works

DCC has commissioned AECOM New Zealand Limited (AECOM) to develop and apply a methodology to calculate the annual contribution of cruise ships to Dunedin's city-wide GHG emissions inventory between 2018/19 and 2023/24 based on the available data, a literature review on the topic, and alignment with reporting requirements.

The results of this study include estimates of GHG emissions from the propulsion and operation of cruise ship vessels, including those generated while travelling to Dunedin from the previous destination, and from Dunedin to the next destination, and while stationary (both in port and at sea).

This report does not consider the health and air quality impacts of non-GHG cruise ship emissions (e.g. NOx, SOx, and PM2.5), or other environmental impacts of these vessels to Dunedin's environment (e.g. waste and wastewater).

2.0 Approach

A recent literature review was completed by AECOM as a precursor to method development for other stakeholders to ensure calculations aligned with best and most recent GHG emission estimation practices.

2.1 Literature Review

Our initial literature review found no widely accepted approach (method) for estimating GHG emissions produced by cruise ships for regional or national-level GHG emissions reporting. Some high-level approaches have been used but have yet to be widely used. While more granular approaches based on specific vessels have been proposed, they are yet to be applied and require development to align with the Global Protocol for Community-Scale Greenhouse Gas Inventories (GPC) calculation and reporting requirements.

[1] Ōtepoti Dunedin Zero Carbon Plan: https://www.dunedin.govt.nz/__data/assets/pdf_file/0011/992873/zero-carbon-plan-2030.pdf

There was also a significant variance in estimates of cruise ship GHG emissions. For example, there was a wide range of quoted GHG emissions per passenger km values in available research (e.g. from 250 to 2,200 gCO_2e/passenger km[2]).

Research was also undertaken to examine whether emission factors or fuel consumption information was available for specific cruise ships. Except for average emissions factors for the complete fleet of two cruise ship operating companies, very little information was in the public domain specific to individual cruise ships. A reference list covering the reviewed literature is provided in Appendix A.

2.2 Method

The method adopted for estimating GHG emissions produced by cruise ships for Dunedin has been developed by AECOM based on research and applied to one other territorial authority area in New Zealand.

The method used for estimating GHG emissions produced by cruise ships is provided with confidence for the purposes of the scope of this assessment and can be applied consistently for city and region-level emissions in New Zealand. The method is consistent with BASIC+ reporting for the Global Protocol for Community-Scale Greenhouse Gas Emissions Inventory v1.1 (GPC) published by the World Resources Institute (WRI) 2021.

The study boundary incorporates the jurisdiction of the Dunedin City Council (the Dunedin District) and covers the financial years from 2018/19 to 2023/24.

To calculate the annual contribution of cruise ships to Dunedin's city-wide GHG emissions inventory, the method accounts for the size of the ship engine, reported cruising speed, and time spent stationary.

The method was selected as it accounts for each vessel's expected fuel consumption rate, the distance travelled to Dunedin from the previous destination, and from Dunedin to the next destination (e.g. from Lyttleton Port to Dunedin and then from Dunedin to Fiordland), and the vessel speed.

For the emissions produced while in transit between destinations, the emissions are split equally between the two destination areas. For emissions produced while stationary in port, 100% of these emissions are allocated to the area where the port is located.

In this study, 'destination' refers to the location of a visit by a cruise ship whereby passengers usually disembark. These are usually the locations mentioned in cruise itineraries and include destinations such as Milford Sound, Lyttleton, Hobart, and Wellington.

2.2.1 Data Sources

Cruise ship schedule data was sourced from publicly available information published by the New Zealand Cruise Association: He Waka Eke Noa. The data from the New Zealand Cruise Association: He Waka Eke had to be collated and sorted into a usable format for this assessment.

As this data is based on the cruise ship's schedules rather than the actual trips, many of the trips that didn't occur were marked as cancelled by the New Zealand Cruise Association: He Waka Eke Noa but were still included in the data set. The cancelled trips were dealt with as follows:

- Where a trip in Dunedin was marked as cancelled, this was excluded from this assessment.
- Where an arrival or departure location was cancelled, the next available to/from trip outside the cancelled trip was included. For example, if a cruise ship was travelling from Wellington to Christchurch and then to Dunedin, and the Christchurch visit was cancelled, Wellington would be taken as the departure location.
- Where there were no alternative to/from trips in the data, the cancelled trip was included and highlighted.
- In some instances, there were data gaps where the previous or next destination of the cruise ship wasn't recorded. In these cases, a location has been estimated based on the cruise ships other trips in the same financial year. If this information wasn't available, the location was

[2] Howitt, et al. (2010). Carbon emissions from international cruise ship passengers' travel to and from New Zealand. https://www.sciencedirect.com/science/article/abs/pii/S0301421510000066

determined by researching the cruise ships specific itinerary for the current financial year (2024/25).

The methodology in this study is likely to continually develop over time due to the recent focus on cruise ship GHG emissions. As data availability improves and best-practice methodologies are further developed, these calculations should be revisited and adjusted.

Gas-power

Over the assessment period, two cruise ships visiting Dunedin were identified to use gas (Liquid Natural Gas, LNG) rather than heavy fuel oil to power their engines. Five other cruise ships were powered by a combination of heavy marine fuel and gas. The remaining 57 cruise ships used heavy marine fuel or similar for all power.

The cruise ship industry states that LNG cruise ships are expected to produce lower GHG emissions than those using heavy fuel oil due to releasing less carbon dioxide. However, some of the literature reviewed has indicated current uncertainties around the emissions from LNG-powered cruise ships. For example, some of the literature highlighted the issue of methane slip whereby unburned methane is released during the storage and transfer of LNG. Due to this uncertainty and the relatively low number of LNG vessels involved, LNG-powered vessels have been calculated as if they are using heavy fuel oil as set out in the Key Assumptions below. This approach may need to be adjusted in future assessments as the number of cruise ships using LNG is expected to rise and as understanding of these emissions increases.

Data Quality

Despite using a method provided with confidence, it is important to recognise that the numbers presented represent an estimate of GHG emissions from cruise ships. There is still a lack of reliable data in this area. For example, in this assessment, we found reliable data such as installed power and cruising speed difficult to obtain. In this situation, unverified publicly available information has been used as a starting point to meet the project's aims.

2.2.2 Key Assumptions

Key assumptions:

- Cruise ship-specific data regarding engine size (installed power) and max speed were obtained from various sources. These data sets vary in quality, but the data has been assumed to be accurate for the purposes of this study.
- Fuel consumption rates were estimated based on the total installed power of each cruise ship, regardless of the engine's specific efficiency or fuel type.
- Cruise ship engines are assumed to use heavy marine fuel. A few cruise ships use gas-powered engines or a combination of liquid fuel and gas engines, but this has not been accounted for. This exclusion and the use of gas fuel are discussed below.
- Where the cruising speed is unknown, the average speed of the cruise ship while in transit is based on 75% of the reported max speed of the cruise ship. This aligns with the relationship between the reported max speed and cruising speed of the dataset where known.
- Where information on the installed power of cruise ships was unavailable, the installed power has been estimated based on the cruise ship weight (in gross weight tonnage) and the relationship between cruise ship weight and installed power for cruise ships in the dataset. The number of cruise ships where installed power was estimated to represent 6% of cruise ships that travelled to Dunedin.
- The engines are assumed to run at 75% load while cruising, 50% load while piloted, and 15% load while stationary. These have been sense-checked against available information but identified as sensitive inputs to the calculations.

2.2.3 Calculations

The following steps were taken to calculate emissions:

1. The first step calculates the fuel consumption of the journeys to and from the next and last destination based on the distance travelled, the cruise ship's cruising speed, the time traveling and the estimated fuel consumption rate of the cruise ship engine. The GHG emissions are then calculated using an emission factor for heavy marine fuel and divided equally between the destination areas. This includes both domestic and international journeys.
2. The cruise ship's fuel consumption while stationary in port is calculated based on the time the cruise ship is berthed in port. A per-hour fuel consumption rate while stationary for each cruise ship based on the installed power is then used to calculate fuel consumption. The GHG emissions are then calculated using an emission factor for heavy marine fuel.
3. The fuel consumption of a cruise ship while the ship is stationary at sea is based on difference between theoretical "distance hours in transit" and scheduled "time hours in transit" calculation. If the scheduled "time hours in transit" is much greater than the "distance hours in transit", this suggests that the cruise ship was stationary at sea and using a lower consumption of fuel. To account for the variability in actual speed and weather conditions, only when the difference in methods was greater than 4 hours was the cruise ship assumed to be stationary at sea. The condition of 4 hours was selected as this was the absolute mean error of the theoretical "distance hours in transit" and scheduled "time hours in transit" from the entire dataset. The fuel consumption and emissions are then calculated in the same way as for stationary in-port emissions. This is applied to the arrival and departure legs, with the related GHG emissions split equally between the destination areas.
4. The GHG emission results are then totalled to provide the total GHG emissions related to the cruise ship arrival and departure from a destination.

The resultant annual GHG emissions from cruise ships utilising the adopted method provided the following GHG emission outputs:

- **To/from Destination:** GHG emissions produced while the cruise ship travels from Dunedin to the next destination or from the last destination to Dunedin.
- **In-Port:** GHG emissions produced while the cruise ship is stationary in-port.
- **Stationary at Sea:** GHG emissions are produced while the cruise ship is stationary at sea (e.g. while waiting to enter the port).

To enable further analysis; the **To/from Destination** GHG emissions have been broken down into the following categories:

- **While Being Piloted:** GHG emissions produced during the time the cruise ship is in transit piloted by tugboats within Otago Harbour. The time being piloted is considered within the jurisdiction of the Dunedin City Council and hence the emissions boundary, therefore the while being piloted GHG emissions are fully attributed to DCC.
- **To/from Domestic Destinations:** GHG emissions produced between Dunedin and other domestic destinations (excludes emissions while stationary and while being piloted).
- **To/from International Locations:** GHG emissions produced between Dunedin and international destinations (excludes emissions while stationary and while being piloted).

The GHG emissions to/from domestic destinations and international destinations were able to be easily discerned from the total To/from Destination data as the destinations were identified as either 'Local' or 'International' in the data collation process.

The distance and engine-based method is applied to each cruise ship for the time being piloted to calculate the GHG emissions while being piloted in the harbour. The pilot time was determined using the distance to Pilot Boarding Ground ALPHA which was located using coordinates provided by the Port of Otago[3]. Pilot Boarding Ground ALPHA is noted as the preferred Pilot boarding ground for larger cruise ships. The pilot time was then estimated using the Pilotage Guide- Lower Harbour[3] which outlined the different speeds vessels travel as they enter the harbour. On average, this speed was determined to be 10 kn. This 10 kn pilot speed also aligns with previously completed cruise ship

[3] Otago Harbour Pilotage Guide. 2022: https://www.portotago.co.nz/assets/Uploads/Otago-Harbour-Pilotage-Guide-rev-7.0.pdf

studies. This calculated pilot time (54 mins) was then subtracted from the berth time reported by the New Zealand Cruise Association: He Waka Eke Noa to give the time of day the vessels began being piloted from.

2.3 Technical Review

The GHG emission estimate calculation and results used here have been through AECOM's internal technical quality review process, which includes a review process specific to GHG emissions reporting. This GHG review process is led by a suitably qualified individual ensure consistency with international GHG emission reporting principles and standards.

3.0 GHG Emissions Results Summary

The inventory is based on data and reporting guidance available at the time of calculation, using reasonable assumptions in line with the GPC reporting guidance. All estimates are provided as annual values for the financial year (July to June) in tonnes of Carbon Dioxide Equivalent (tCO_2e).

3.1 Contribution to Dunedin's City-wide GHG Emissions Inventory

Table 1 presents the results of annual GHG emissions from cruise ships visiting Dunedin between 2018/19 and 2023/24. Due to the COVID-19 pandemic travel restrictions in Aotearoa New Zealand, no cruise ships visited Dunedin in the 2020/21 or 2021/22 financial years.

Cruise ships only visit Dunedin during the summer season (between October and March), however, the results are reported as annual values for the financial year (July to June).

Table 1 Annual Estimated GHG Emissions from Cruise Ships visiting Dunedin (tCO_2e).

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
In-Port	6,403	6,259	-	-	5,194	6,527
While Being Piloted	3,924	3,884	-	-	3,174	3,884
Stationary at Sea	236	723	-	-	939	753
To/from Domestic Destinations	46,913	49,745	-	-	38,940	46,711
To/from International Destinations	1,682	3,041	-	-	3,676	1,005
Total Cruise Ship Emissions	**59,158**	**63,652**	**-**	**-**	**51,922**	**58,881**

In 2023/24, cruise ships produced 58,881 tCO_2e related to their visits to and from Dunedin. This is similar to those produced pre-COVID in 2018/19 (59,158 tCO_2e).

https://aecomaus.sharepoint.com/sites/CCF/Shared Documents/Dunedin Cruise GHG FY24/4. Deliverables/DCC_CruiseGHG_FY19-24_241010_v3.docx
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Prepared for – Dunedin City Council – ABN: N/A

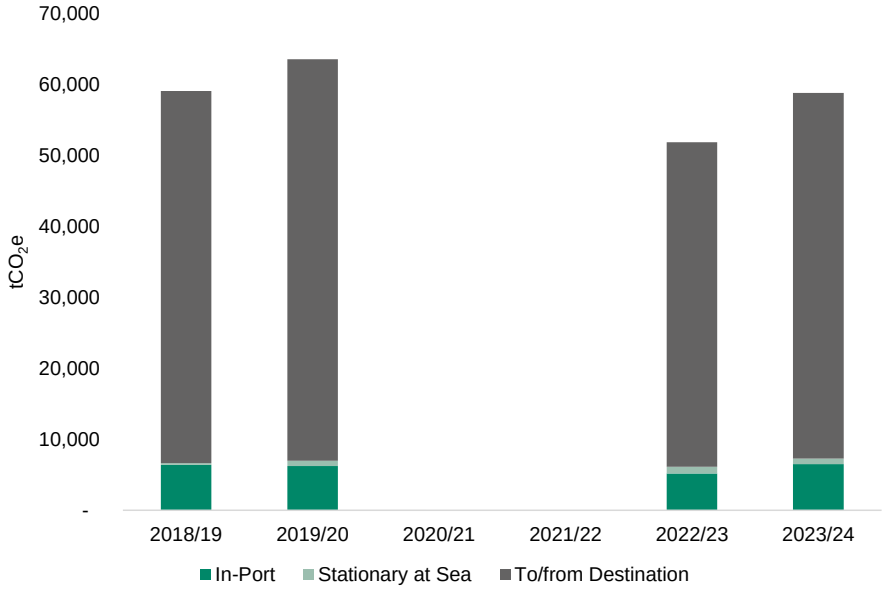

Figure 1 Annual Estimated GHG Emissions from Cruise Ships visiting Dunedin (tCO_2e).

Table 2 and Table 3 show Dunedin's city-wide GHG emissions if cruise ship emissions were included in Dunedin's GHG emissions inventory. The rounded cruise ship results have been used here.

Dunedin's GHG emissions inventory for 2022/23 and 2023/24 has not yet been reported. If included in the 2018/19 and 2019/20 inventory year, cruise ships would have been equivalent to 3% and 4% of Dunedin's total gross emissions and 9% and 10% of transport emissions, respectively.

Table 2 Dunedin's Total Gross Emissions Inclusive of Cruise Ship Emissions (tCO_2e).

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Total Gross Emissions	1,756,205	1,685,337	1,646,955	1,542,500	N/A	N/A
Cruise Ships (percentage of total gross emissions)	3.4%	3.8%	0.0%	0.0%	N/A	N/A

Table 3 Dunedin's Total Transport Emissions Inclusive of Cruise Ship Emissions (tCO_2e).

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Total Transport Emissions	672,089	618,840	576,454	517,379	N/A	N/A
Cruise Ships (percentage of total transport emissions)	8.8%	10.3%	0.0%	0.0%	N/A	N/A

https://aecomaus.sharepoint.com/sites/CCF/Shared Documents/Dunedin Cruise GHG FY24/4. Deliverables/DCC_CruiseGHG_FY19-24_241010_v3.docx
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3.2 In-Port GHG Emissions while Stationary in Dunedin

Table 4 presents the annual GHG cruise ship emissions while in-port in Dunedin. The in-port GHG emissions are a subset of the total cruise ship emissions which are shown in Table 1. No cruise ship visits to Dunedin were made in the 2020/21 and 2021/22 financial years due to the COVID-19 pandemic travel restrictions in Aotearoa New Zealand during that time.

Table 4 Annual GHG Emissions from Cruise Ships visiting Dunedin while Stationary In-Port (tCO_2e).

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
In-Port	6,403	6,259	-	-	5,194	6,527

In 2023/24, it is estimated that cruise ships while stationary in-port in Dunedin produced 6,527 tCO_2e. If included in Dunedin's 2018/19 and 2019/20 inventory years, cruise ships while stationary in port would represent 1% of the city's total transport emissions and 0.4% of the city's total gross emissions. Based on the method used, in-port emissions are relatively small when considered in the context of the city-wide emission footprint.

3.3 Recommendation for Baseline

The data from this study supports using a baseline year of 2018/19 for DCC's cruise ship emission inventories. This option gives a baseline pre-covid and aligns with previous inventory works. The previous 2018/19 DCC emissions inventory could therefore be updated to include cruise ships.

https://aecomaus.sharepoint.com/sites/CCF/Shared Documents/Dunedin Cruise GHG FY24/4. Deliverables/DCC_CruiseGHG_FY19-24_241010_v3.docx
Revision 3 – 10-Oct-2024
Prepared for – Dunedin City Council – ABN: N/A

Appendix A

Literature Review Resources

Attachment B

Appendix A Literature Review Resources

Resources cited here are the key research papers and sites used for either the development of the chosen GHG calculation methods or used to cross-check the chosen methods' results against an alternative method.

1. *"Carbon Footprint of Cruise Ships Emissions Calculator: By Destination, Miles." (n.d.). 8 Billion Trees: Carbon Offset Projects & Ecological Footprint Calculators. https://8billiontrees.com/carbon-offsets-credits/carbon-footprint-of-cruise-ships/#:~:text=and%20everything%20amounts%20to%20approximately*
2. *"Cruise ship air pollution." (2017, January 10). Real World Visuals. https://www.realworldvisuals.com/blog-1/cruise-ship-air-pollution*
3. *"How much fuel does a cruise ship use?" (2016, July 25). Paul M. Rady Mechanical Engineering. https://www.colorado.edu/mechanical/2016/07/25/how-much-fuel-does-cruise-ship-use*
4. *"How much fuel does a cruise ship use?" (n.d.). LoveToKnow. https://www.lovetoknow.com/life/lifestyle/how-much-fuel-does-cruise-ship-use*
5. *"A cruise ship's emissions are the same as 1 million cars: report" (2017, September 08). CBC Radio. https://www.cbc.ca/radio/asithappens/as-it-happens-wednesday-edition-1.4277147/a-cruise-ship-s-emissions-are-the-same-as-1-million-cars-report-1.4277180*
6. *"Can the Large Cruise Ships Drive Systemic Change in Maritime Sustainability?" (2024, April 04). Ukpanah I. GreenMatch. https://www.greenmatch.co.uk/blog/maritime-sustainability*
7. *"Cruise ships are coming back to NZ waters – should we really be welcoming them?" (2024, August). The Conversation. https://theconversation.com/cruise-ships-are-coming-back-to-nz-waters-should-we-really-be-welcoming-them-188974*
8. *Becken, S., Higham, J., & Auckland Unlimited. (2021). Carbon footprint of Auckland tourism (Report No. 2115). Auckland Unlimited. Retrieved June 25, 2024, from https://www.knowledgeauckland.org.nz/media/2115/carbon-footprint-of-auckland-tourism-auckland-unlimited-becken-s-higham-j-may-2021.pdf*
9. *Carnival Corporation & plc. (2018). 2018 Carnival Corporation sustainability report. Retrieved June 25, 2024, from https://carnival-sustainability-2023.nyc3.digitaloceanspaces.com/assets/content/pdf/2018_Carnival_Sustainability_Report.pdf*
10. *Eijgelaar, E.; Thaper, C.; Peeters, P. M. (2010). Antarctic cruise tourism: the paradoxes of ambassadorship, "last chance tourism" and GHG emissions. Journal of Sustainable Tourism, 18(3), PP. 337-354*
11. *European Federation for Transport and Environment. (2019). Study on the EU shipping's climate record (Rep.). Transport & Environment. Retrieved June 25, 2024, from https://te-cdn.ams3.digitaloceanspaces.com/files/Study-EU_shippings_climate_record_20191209_final.pdf*
12. *Fox, A. (2023, April 17). Analyzing carbon emissions on a cruise. Friends of the Earth. https://foe.org/news/cruise-passengers-carbon/#:~:text=According%20to%20the%20analysis%2C%20one,industry%20greenwashing%20about%20better%20practices.*
13. *Howitt, O. J., Revol, V. G., Smith, I. J., & Rodger, C. J. (2010). Carbon emissions from international cruise ship passengers' travel to and from New Zealand. Energy Policy, 38(5), 2552-2560.*
14. *Issa, M., Ibrahim, H., Ilinca, A., & Hayyani, M. Y. (2019). A review and economic analysis of different emission reduction techniques for marine diesel engines. Open Journal of Marine Science, 9(03), 148.*
15. *M. Simonsen (2014). Cruise Ship Tourism – A LCA Analysis. Western Norway Research Institution.*
16. *Ma, H. (2023, July 20). Cruise ship fuel consumption – All the details. Cruise Hive. https://www.cruisehive.com/cruise-ship-fuel-consumption/105309*

https://aecomaus.sharepoint.com/sites/CCF/Shared Documents/Dunedin Cruise GHG FY24/4. Deliverables/DCC_CruiseGHG_FY19-24_241010_v3.docx
Revision 3 – 10-Oct-2024
Prepared for – Dunedin City Council – ABN: N/A

17. *Myclimate, S. (n.d.). CO2 emissions calculator: Calculate your carbon emissions.* https://www.myclimate.org/en/information/about-myclimate/downloads/cruise-calculator/
18. *Olmer, N. et al. (2017, October). Greenhouse Gas Emissions from Global Shipping. International Council on Clean Transportation.*
19. *POAL. (n.d.). Cruise vessel emission reduction technologies. Ports of Auckland. Retrieved June 25, 2024, from* https://www.poal.co.nz/sustain/Documents/Cruise%20Vessel%20Emission%20Reduction%20Technologies.pdf
20. *Simonsen, M., Walnum, H., & Gössling, S. (2018). Model for Estimation of Fuel Consumption of Cruise Ships. Energies, 11(5), 1059.*
21. *Sinha, S. (2024, April 24). How much fuel does a cruise ship use? Marine Insight.* https://www.marineinsight.com/know-more/how-much-fuel-does-a-cruise-ship-use/
22. *Vestlandsforsking. (2011). Cruise tourism in a peripheral destination (VF-notat No. 2/2011). Vestlandsforsking. Retrieved June 25, 2024, from* https://www.vestforsk.no/sites/default/files/migrate_files/vf-notat-2-2011-cruise.pdf
23. *Vidal, J. (2016, May 21). The world's largest cruise ship and its supersized pollution problem. The Guardian.* https://www.theguardian.com/environment/2016/may/21/the-worlds-largest-cruise-ship-and-its-supersized-pollution-problem
24. *Walnum, H. J. (2011). Energy use and CO2 emissions from cruise ships–A discussion of methodological issues. Sustainable Destination Norway 2025.*

https://aecomaus.sharepoint.com/sites/CCF/Shared Documents/Dunedin Cruise GHG FY24/4. Deliverables/DCC_CruiseGHG_FY19-24_241010_v3.docx
Revision 3 – 10-Oct-2024
Prepared for – Dunedin City Council – ABN: N/A

Appendix 1: Zero Carbon Alliance work programme update - October 2024

Introduction

The Zero Carbon Alliance

The Zero Carbon Alliance (ZCA) was formally established in November 2022. Parties to the Memorandum of Understanding (MoU) currently constitute three public sector organisations (Health New Zealand Te Whatu Ora – Southern, Te Pūkenga Dunedin Campus, the University of Otago) and two local authorities (the Dunedin City Council and Otago Regional Council). The MoU is attached as Appendix 2. The ZCA's Agreed Objectives seek to promote close collaboration in pursuit of both organisational emissions reduction targets, and Dunedin's Zero Carbon targets.

A ZCA Collaboration Group, made up of senior officials from each organisation, meet six-monthly to provide oversight of and facilitate actions towards the ZCA's Agreed Objectives. Key representatives from each organisation meet monthly to advance the ZCA work programme. The Dunedin City Council (DCC) provides administrative support for these groups. This update report is an outcome of the September 2023 Collaboration Group meeting, at which members directed the ZCA secretariat to provide a report on work programme progress to partner organisations, following twice-yearly Collaboration Group meetings.

ZCA members' emissions reduction targets

Reducing greenhouse gas emissions is an important priority for all ZCA partner organisations:

- Health New Zealand, Te Pūkenga and the University of Otago are part of the Carbon Neutral Government Programme, which means they must (Health New Zealand) or are encouraged to (tertiary institutions) meet emissions reporting, reduction and offsetting requirements. In addition, the University is aiming to reduce its gross emissions by 56% by 2029 (from a 2019 baseline) and achieve net zero emissions in 2030.
- The DCC has a target of reducing core organisational emissions by 42% by 2030 (from a 2018/19 baseline). The DCC has also adopted a 'Zero Carbon target' for Dunedin, aiming to achieve net zero emissions of all gases other than biogenic methane by 2030. In September 2023, the DCC adopted its Zero Carbon Plan 2030, which aims to reduce the city's gross emissions by 40% over the period.
- The Otago Regional Council has recently adopted the 2024-2034 Strategic Directions. One of the goals under the Climate Focus Area (as currently drafted) is "The carbon footprint of our organisation is reduced in line with our climate change strategy…". The ORC's Strategic Climate Action Plan (i.e. the climate change strategy) is in the process of being developed, with a final due to be presented to Council in December 2024 for adoption. One of the priority actions is to continue the development of ORC's GHG emissions inventory and Emissions Reduction Plan.

Alignment with Agreed Objectives

The table on the following page provides an update on activities that relate to the Agreed Objectives in the Zero Carbon Alliance Memorandum of Understanding undertaken in the period since the previous Collaboration Group meeting. The information provided is intended to provide a concise summary primarily for Collaboration Group members. It is not an exhaustive description of all work completed by the Zero Carbon Alliance.

Agreed Objective	Activity(s)
A) Greater visibility and support for existing collaborative emissions-reducing initiatives	• ZCA partners have continued their workplace travel planning partnership, with a number preparing to undertake travel surveys during spring. While we are still to determine exactly how the work will evolve from a shared role working across the partners to internal staff collaborating through a network, both the University and DCC are providing support to ORC to support them as they begin workplace travel planning. • Key representatives have continued to discuss relevant aspects of developing and implementing car share in Dunedin (in a fleet subscription context).
B) Shared understanding of Dunedin's emissions profile	• 2023 Collaboration Group meetings discussed Dunedin's emissions profile, and this information is within the Zero Carbon Plan. However, this will need to be updated and presented as it changes over time.
C) Sharing of good practice around reducing both organisational and city-wide emissions	• Key representatives meet monthly; sharing of good practice is regularly discussed at such meetings. Where useful, key representatives should be disseminating such information up to their Collaboration Group member or to relevant colleagues. • Key representatives have shared current practices relating to how their organisations manage their food and e-waste.
D) Identification of additional collaborative opportunities to reduce both operational and city-wide emissions generally, and to contribute to the city's Zero Carbon 2030 Target specifically	• Key representatives have begun to scope and develop a staff climate literacy programme that could be used across the partners (with some customisation to allow for individual organisational context). • Key representatives have also undertaken a self-assessment of how their work supports meeting the Agreed Objectives in the ZCA MoU. This has made key representatives aware of improvements in how they can collaborate better to meet the Agreed Objectives. • Both items could lead to additional work programme items if the Collaboration Group members support the addition of these.
E) Wider and more coordinated promotion of good practice and success in emissions reduction, and the importance of the Zero Carbon 2030 Target	• ZCA partners have a role to play in building support for the Zero Carbon Plan and Zero Carbon 2030 Target through the 2025-34 nine year plan process.
F) Opportunities to input into the development of a city-wide emissions reduction plan to give effect to the Zero Carbon 2030 Target	• DCC welcomes contributions and feedback on Zero Carbon Plan implementation packages during the 2025-34 9 Year Plan process.
G) Opportunities for research that may be transferable to the reduction of emissions in other contexts.	• The University's Sustainability Office will run its Pūhau ana te Rā research programme once again this coming summer. Unfortunately most other partners are not in a position to fund researchers this summer.

October 2024 work programme update

2023 focus area: staff travel to work

The 2023 staff travel to work focus led to agreement from ZCA Collaboration Group members to progress or further investigate five initiatives. Progress on these is briefly updated below:

Workplace travel planning

After several unsuccessful attempts were made to recruit a new Workplace Travel Planning (WTP) Coordinator, an alternative model has been proposed. This would see existing staff (or students) within each agency providing the WTP services within their respective agencies, and then collaborating through a WTP network across the agencies. How exactly these staff engage and collaborate has not yet been determined. However, the University and DCC have provided support to ORC's responsible staff member on developing a workplace travel plan and running a staff travel survey.

Other organisations are in the process of or planning to run staff travel surveys during spring. A worthwhile next step to complete in early 2025 would be for staff representatives to share and discuss their respective travel survey results as part of a process to potentially update or refine existing workplace travel plans or initiatives.

Shared parking management principles

The procurement process for this initiative has been paused pending DCC council decisions relating to the anticipated source of funds for this project, expected to be taken in late October.

Employer-provided public transport pass/discount

ORC councillors approved the development of a new Regional Public Transport Plan (RPTP) in August. This is the appropriate strategic planning document to guide the development of any variant of this. ORC has indicated that employer-provided public transport passes should be explored in the RPTP's Fares workstream, especially as the new government's Government Policy Statement on Land Transport 2024 expects that public transport authorities should increase third-party revenue from public transport provision.

Improving access to e-bikes and bikes

In the knowledge that the scheme is of interest to other ZCA partners, and as part of actions in both the DCC Emissions Management and Reduction Plan and Zero Carbon Plan 2030, DCC staff have scoped how Workride could be implemented at DCC. This has included understanding how Workride has been implemented at two other local authorities. Implementation is subject to decisions and approvals at relevant levels of the organisation.

No further action has been taken on other e-bike access ideas like setting up an e-bike library. DCC council decisions expected to be taken in late October will determine the priority of this project relative to other Zero Carbon Plan actions.

Sustainable travel budgets and incentives

No further action taken.

2024 focus area: Waste

Key representatives have further considered next steps for this focus area. Joint solutions for corporate food waste streams and e-waste streams have been identified as priorities for the ZCA going forward.

Corporate e-waste streams

Corporate e-waste is the area that key representatives believe is the most fertile ground for collaboration and joint solutions. While all partners engage with e-waste managers and recyclers like Cargill Enterprises or Remarkit, we all face similar challenges regarding quantifying, managing and reducing e-waste. Key representatives will shortly bring together responsible staff from across the ZCA partners to further identify potential improvements, existing challenges and interventions to overcome these.

Corporate food waste streams

The new kerbside collection process is significantly reducing emissions from food waste from residential areas, but this food waste is currently processed in Timaru. ZCA partners are keen to support progress in the development of a composting facility in Dunedin that can handle commercial food waste. Partners with significant food waste (the University, Polytechnic and Dunedin Hospital) have their own programmes to manage and/or reduce food waste.

Other areas of work

DCC's Waste and Environmental Services team has a staff member focused on reducing construction and demolition waste, and they have taken on responsibility for planning a deconstruction pilot. They will continue to liaise with the ZCA as appropriate for this project.

Research completed by a student researcher last summer indicated the difficulty in advancing measuring diversion from landfill at reuse stores. Key representatives have also identified this has limited knowledge sharing opportunities within the ZCA, as only two partners operate reuse stores.

Zero Carbon Plan 2030

After taking the Government-mandated option of an 'enhanced annual plan' for the 2024-25 year, the Zero Carbon Plan has to date only been advanced only through actions that could be achieved within existing budgets. Zero Carbon Plan implementation packages will be formally considered as part of the upcoming 9 Year Plan 2025-34 (9YP) process, with DCC Council having directed they would like High and Medium options developed for consideration. DCC welcomes contributions and feedback from all other ZCA partners on the High and Medium investment packages that will be consulted on as part of the 9YP process.

Climate Literacy staff education

Key representatives have scoped a potential staff climate literacy programme that could be delivered across the five ZCA partners, with appropriate organisational context to be added as required. Climate literacy involves both competency and knowledge of climate change science and issues, as well as a deeper understanding of how to take action on climate change. Key representatives have discussed the following design aspects in scoping the programme: participation, format, session length, delivery, content, resourcing, cost, certification, assessment and staging. These are detailed in (short paper or presentation to Collaboration Group) to be

discussed at the October 2024 Collaboration Group meeting, with members to decide if this is something to be added to the work programme or not.

Support for partner initiatives

Car share

In October 2023, DCC signed a Memorandum of Understanding with a New Zealand car share provider, and has worked with this provider to understand potential approach to delivery, and associated costs and challenges. Next steps for the project are subject to decisions of DCC Council.

The University and Te Whatu Ora key representatives have also continued to work with the provider to investigating car share options as part of their fleet optimisation work.

University charter rail

As noted in the May 2024 work programme report, there are substantial barriers to establishing even an event-specific train between Dunedin and Christchurch. In the meantime, staff are exploring how we can make inter-regional bus services more attractive to potential users, like tertiary students travelling to and from Dunedin from other destinations within the South Island. This focus is much more consistent with the positions of the current coalition Government as expressed in the Transport and Infrastructure Select Committee's report on the Inquiry into the Future of Inter-Regional Passenger Rail in New Zealand.

Student research

The University is running its Pūhau ana te Rā undergraduate research programme again this coming summer. In previous years ZCA partners have funded research to better understand issues that include specific problems facing their organisation or providing contextual or scene-setting research that is placed into a Dunedin context. Unfortunately, organisations are not in a position to support this programme financially at present.

Appendix 2: Zero Carbon Alliance key documents

Memorandum of Understanding

in relation to the establishment of a Zero Carbon Alliance for Dunedin

Dunedin City Council

Otago Regional Council

University of Otago

Otago Polytechnic Limited

Te Whatu Ora – Health New Zealand

MOU dated 2022

Parties

Dunedin City Council, a local authority under the Local Government Act 2002 (**DCC**)

Otago Regional Council, a local authority under the Local Government Act 2002 (**ORC**)

University of Otago, a body corporate established under the University of Otago Ordinance of the Provincial Council 1869, the University of Otago Amendment Act 1961 and a university within the meaning of the Education Act 1989 (**UO**)

Otago Polytechnic Limited, a company incorporated under cl 20 of Schedule 1 of the Education and Training Act 2020 and wholly owned by Te Pūkenga—New Zealand Institute of Skills and Technology (**OP**)

Health New Zealand, established by Section 11 of the Pae Ora (Healthy Futures) Act and a Crown agent within the meaning of section 10(1) of the Crown Entities Act 2004, known as Te Whatu Ora – Health New Zealand (**Te Whatu Ora**)

(each a **Party**, together the **Parties**)

Introduction

A The Parties have a shared interest in reducing both organisational and city-wide greenhouse gas emissions, and wish to collaborate on emissions monitoring and reduction initiatives.

B The Parties wish to set up a framework for their ongoing engagement and collaboration.

C The Parties record the terms of that framework in this MOU.

Agreement

1 Interpretation

1.1 In this MOU, unless the context requires otherwise:

Agreed Commitments has the meaning given in clause 5.3;

Agreed Objectives has the meaning given in clause 2.3;

Alliance means the alliance established by this MOU, to be known as the Zero Carbon Alliance for Dunedin;

Collaboration Group Representative has the meaning given in clause 8.2;

Commencement Date means the date that this MOU is signed by all Parties;

Emissions Profile has the meaning given in clause 5.3(a);

Expiry Date means 31 December 2030;

Key Representative has the meaning given in clause 7.2;

MOU means this Memorandum of Understanding;

New Intellectual Property means all intellectual property rights of any sort (including design rights, copyright and knowhow in all concepts, design, drawings, specifications, plans, studies, reports and documentation) prepared or created in relation to the Agreed Objectives by any one or more of the Parties (or any of their employees, representatives, contractors or consultants) but not including Pre-existing Intellectual Property;

Pre-existing Intellectual Property means all intellectual property rights owned by a Party or any third party which existed prior to the Commencement Date or created or prepared after the Commencement Date but not specifically created or prepared in relation to the Agreed Objectives;

Terms of Reference means the terms of reference for the Zero Carbon Alliance Collaboration Group to be adopted under clause 5.1(a);

Zero Carbon Alliance Collaboration Group means the group formed in accordance with clause 2.4; and

Zero Carbon 2030 Target means the city-wide emissions reduction target adopted by the DCC.

2 Establishment of the Alliance and its Agreed Objectives

2.1 The Parties acknowledge that OP is currently a 100% subsidiary of Te Pūkenga - New Zealand Institute Skills and Technology (**Te Pūkenga**), a Crown Entity and tertiary institution created on 1 April 2020 and continued under the Education and Training Act 2020 (**ETA**). The creation of Te Pūkenga is one of the key components of the Reform of Vocational Education (RoVE) which seeks to create a strong, unified, sustainable vocational education system that is fit for the future of work and delivers the skills that learners, employers and communities need to thrive. Under the legislation implementing RoVE, OP will be dissolved by no later than 31 December 2022 and its operations (including all assets and liabilities) will be assumed by Te Pūkenga. By operation of law (refer Schedule 14, clause 4, ETA), Te Pūkenga will become a party to this Agreement on dissolution of OP.

2.2 The Parties agree to form the Alliance, to be known as the Zero Carbon 2030 Alliance for Dunedin.

2.3 The purpose of the Alliance is to address and/or achieve the following Agreed Objectives:

(a) Greater visibility and support for existing collaborative emissions-reducing initiatives;

(b) Shared understanding of Dunedin's emissions profile;

(c) Sharing of good practice around reducing both organisational and city-wide emissions;

(d) Identification of additional collaborative opportunities to reduce both operational and city-wide emissions generally, and to contribute to the city's Zero Carbon 2030 Target specifically;

(e) Wider and more coordinated promotion of good practice and success in emissions reduction, and the importance of the Zero Carbon 2030 Target;

(f) Opportunities to input into the development of a city-wide emissions reduction plan to give effect to the Zero Carbon 2030 Target; and

(g) Opportunities for research that may be transferable to the reduction of emissions in other contexts.

2.4 A Zero Carbon Alliance Collaboration Group, comprised of each Party's Collaboration Group Representatives, shall be formed to provide oversight of, and to facilitate actions required to support, achievement of the Agreed Objectives.

2.5 The Key Representatives shall meet and will facilitate the Alliance's work programme between meetings of the Zero Carbon Alliance Collaboration Group.

2.6 The Parties agree that the Agreed Objectives will guide the activities of the Zero Carbon Alliance Collaboration Group and of each of their Key Representatives, unless agreed otherwise or they are found not to be practicable.

3 Guiding Principles

3.1 The Parties acknowledge that the following guiding principles will inform the pursuit of Agreed Objectives:

(a) The Treaty of Waitangi, with a particular emphasis on partnerships with mana whenua; and

(b) Sustainability, with particular emphasis on the concept of a just transition and addressing existing inequalities.

4 Relationship Principles

4.1 The Parties acknowledge that the following relationship principles will govern their interactions:

(a) The Parties will be committed to the establishment and successful execution of the Zero Carbon Alliance;

(b) The Parties will be collaborative, conduct their interactions with each other in a professional manner, and communicate in a way that is open and effective;

(c) The Parties will address any issues that arise in a timely manner, and engage in discussions to resolve any issues in good faith; and

(d) The Parties will, while seeking to collaborate on both organisational and city-wide emissions reduction, respect the independence and individual circumstances of each Party.

5 General collaboration

5.1 The Parties agree that DCC will be the lead Party responsible for coordinating the Zero Carbon Alliance, and the DCC will:

(a) finalise and adopt the Terms of Reference for the Zero Carbon Alliance 2030 Collaboration Group;

(b) provide administrative support for meetings of Key Representatives and the Zero Carbon Alliance Collaboration Group;

(c) service Key Representatives and the Zero Carbon Alliance Collaboration Group with information relating to Dunedin's emissions profile;

(d) lead the development of a city-wide emissions reduction plan to give effect to the Zero Carbon 2030 Target; and

(e) invite potential new parties to the Zero Carbon Alliance, in accordance with clause 13.

5.2 Notwithstanding clause 5.1, the Parties acknowledge that the purpose of this MOU is to establish a framework whereby each Party will provide advice and knowledge for the purpose of pursuing the Agreed Objectives. In order to achieve this, each Party will:

(a) monitor and report on operational emissions in line with the Agreed Commitments set out in clauses 5.3(a) - 5.3(c);

(b) use best endeavours to achieve the other Agreed Commitments set out in clauses 5.3(d)-(j);

(c) deploy and commit its Key Representatives in line with clause 7.2;

(d) deploy and commit representation on the Zero Carbon Alliance Collaboration Group;

(e) give serious consideration to co-funding or co-resourcing initiatives that are considered mutually beneficial and aligned with pursuit of the Agreed Objectives;

(f) keep mana whenua informed as to its involvement in the Alliance as anticipated by each Party's own pre-existing agreements with mana whenua; and

(g) otherwise assist and support the DCC in the pursuit of the Agreed Objectives.

Agreed Commitments

5.3 In pursuit of the Agreed Objectives, the Parties each agree to:

(a) Establish a baseline organisational emissions profile in line with ISO 14064, and an associated emissions reduction plan (**Emissions Profile**) within one year of signing this MOU;

(b) Update its Emissions Profile no later than 2023/24, and annually thereafter;

(c) Share its Emissions Profile with other Parties, to enable the identification of opportunities to collaborate on emissions reduction;

(d) Use best endeavours to support and amplify existing collaborative emissions reducing initiatives;

(e) Use best endeavours to identify and progress additional collaborative opportunities to reduce both operational and city-wide emissions generally, and to contribute to the city's Zero Carbon 2030 Target specifically;

(f) Use best endeavours to strive to achieve substantial cuts in organisational emissions by 2030, and to contribute to city-wide emissions reduction;

(g) Use best endeavours to share good practice around reducing organisational emissions;

(h) Use best endeavours to promote and publicise good practice and success in emissions reduction, and the importance of the Zero Carbon 2030 Target;

(i) Use best endeavours to support the development of a city-wide emissions reduction plan to give effect to the Zero Carbon 2030 Target; and

(j) Use best endeavours to support research on emissions reduction that may be transferable to the reduction of emissions in other contexts.

(together the **Agreed Commitments**)

5.4 The parties have each agreed to carry out the initiatives set out in clause 5.3(a) - 5.3(c). Nothing in this MOU obliges a Party to implement or contribute to any other specific initiatives supported by the Alliance, that that Party does not see merit in, or have the means to progress.

Proceedings of the Zero Carbon Alliance Collaboration Group

5.5 The Terms of Reference regulate the proceedings of the Zero Carbon Alliance Collaboration Group.

6 Term

6.1 The Parties agree that this MOU commences on the Commencement Date and, unless terminated pursuant to clause 6.2, will continue until the Expiry Date, at which time the Parties will consult in good faith in respect of any ongoing arrangements they may wish to enter into in respect of collaboration on emissions reduction.

6.2 Any Party may, in its discretion, terminate its participation in this MOU at any time on written notice to the other Parties.

7 Key Representatives

7.1 The role of the Key Representatives is as set out in clause 2.5.

7.2 Each Party nominates the staff member identified in the table below as its representative in respect of any discussions, actions to be carried out, or decisions to be made under this MOU (each a **Key Representative**):

Party	Key Representative	Current delegate	Email Contact Details
DCC			
ORC			
UO			
OP			
Te Whatu Ora			

7.3 A Party may change its Key Representative from time to time by notice in writing to the other Parties.

7.4 Any notice under this MOU must be delivered by email to a Party's Key Representative at the email address identified in the table at clause 7.3, or any Key Representatives changed in accordance with clause 7.3.

8 Collaboration Group Representatives

8.1 The role of the Zero Carbon Alliance Collaboration Group is set out in clause 2.4.

8.2 Each Party nominates the staff member identified in the table below as its representative in respect of attendance at Zero Carbon Alliance Collaboration Group meetings (each a **Collaboration Group Representative**):

Party	Collaboration Group Representative	Current office bearer	Email Contact Details
DCC			
ORC			
UO			
OP			
Te Whatu Ora			

8.3 In determining its Collaboration Group Representative, each Party will have regard to their ability to give effect to the purpose, and the deliverables set out in the Terms of Reference. Senior or executive-level management representation is preferred.

8.4 A Party may change its Collaboration Group Representative(s) from time to time by notice in writing to the other Parties.

9 Intellectual Property

9.1 Where the Parties wish to conduct a research project under this MOU, the relevant Parties will agree upon and sign project specifications and a contractual agreement in respect of that Project. Protocols relating to New Intellectual Property and publication resulting from contract-specific collaborations between the Parties will be outlined in such contractual agreements.

9.2 Subject to clause 9.4, all New Intellectual Property developed other than under a research project, will be jointly owned by the Parties, unless otherwise agreed in writing.

9.3 The Parties acknowledge that where a student or students of the University of Otago or Otago Polytechnic Limited contribute to a research project under this MOU, ownership of the New Intellectual Property may be addressed under a prior written agreement with the student(s), and any ownership agreed to under this MOU must be consistent with such agreements.

9.4 Where publications and New Intellectual Property result from non-contract specific collaborations, Parties must give recognition to other contributing parties and third parties and meet through designated representatives to seek an equitable and fair understanding as to ownership and other property interests that may arise.

9.5 All Pre-existing Intellectual Property will remain the property of the original owner. The Parties hereby grant to each other an unrestricted, royalty-free licence to use and copy Preexisting Intellectual Property to the extent reasonably required in carrying out the Agreed Objectives which will terminate upon the expiration or earlier termination of this MOU on any basis.

9.6 The Parties provide no warranty to each other as to the suitability of the New Intellectual Property for any purpose other than the Agreed Objectives.

9.7 Notwithstanding anything to the contrary in this Agreement, the Parties recognises the interest of kaitiaki in mātauranga Māori and taonga works (as defined in Ko Aotearoa Tēnei: Report on the Wai 262 Claim), and agrees that nothing in this Agreement transfers ownership, or any other rights, title or interests, in mātauranga Māori or taonga works.

10 Publicity

10.1 The Parties agree that any public statements and/or media releases by any Party in relation to the Zero Carbon Alliance will be in accordance with the relationship principles at clause 4 and confidentiality provisions in clause 11.

10.2 Subject to clause 11 , the Parties agree that, to the extent reasonably possible, they will liaise with the other Parties prior to making any public statement and/or media releases in accordance with clause 10.1.

11 Confidentiality

11.1 Each Party must keep confidential all information made available by or on behalf of another Party under or in relation to this MOU (**Confidential Information**), and must not use or disclose Confidential Information to any third party unless:

(i) the disclosure is required by law; or

(ii) the information is already publicly available (other than through a breach of this clause) or which a party can prove it was independently created or acquired; or

(iii) the Party who provided the information has given its written consent to the disclosure; or

(iv) clause 11.2 applies.

11.2 The Parties acknowledge that they are subject to official information and privacy legislation (the Local Government Official Information and Meetings Act 1987, the Official Information Act 1982, and the Privacy Act 2020, as applicable) and that pursuant to a request made under such legislation the Parties may disclose information relating to this MOU to the requester.

11.3 The Parties agree that the undertakings given in relation to the Confidential Information shall continue notwithstanding the termination of this MOU.

12 Disputes

12.1 While this MOU is based on a spirit of collaboration, if a dispute arises under the MOU, the Key Representatives of the Parties involved in the dispute will meet and seek to resolve the dispute through good faith discussions. Those discussions will be guided by the relationship principles set out at clause 4.

12.2 If those attempts do not resolve the dispute within a reasonable period of time, any Party may refer the dispute to mediation, with the choice of mediator to be agreed between the Parties. If the Parties are unable to agree on a mediator within 10 days of commencing discussions, one will be appointed by the Chairperson of the Resolution Institute.

12.3 Each Party to the mediation shall bear its own costs.

13 Admission of New Parties

13.1 The Alliance comprises of entities meeting one or more of the following criteria:

(a) Mana whenua;

(b) Public sector agencies or local authorities with a key strategic role in decarbonising Dunedin's public sector specifically, and Dunedin's economy generally;

(c) Major emitters in the Dunedin context, with a commitment to achieving reduction in emissions by 2030 in line with those prescribed by the Science Based Target initiative; or

(d) Membership-based organisations representing major Dunedin sectors.

13.2 A new party to the Zero Carbon Alliance meeting one of the criteria set out in clause 13.1 may be admitted, on the invitation of the DCC following the unanimous recommendation of the Zero Carbon Alliance Collaboration Group. The new party shall sign a Deed in the form set out in Schedule 1 (under which the new party agrees to be bound by this MOU). The Parties agree that, from the date the Deed is signed, the new party shall have the benefit of, and be bound by, all the terms of this MOU as if the new party was an original Party to this MOU.

14 General

14.1 Notwithstanding any other clause in this MOU, this MOU does not bind or restrict DCC or ORC as regulatory authorities, and any consent or agreement given by DCC and ORC under this MOU is not an agreement or consent in its regulatory capacity.

14.2 Nothing in this MOU shall be construed to constitute a partnership in a legal sense or an agency or joint venture between the Parties. No Party has any authority to bind another Party.

14.3 No amendments to this MOU will be effective unless agreed in writing by all of the current Parties.

14.4 No Party may transfer or assign its rights, interests or obligations under this MOU. This clause does not apply in the context of the dissolution of OP due to the operation of clause 4, Schedule 14, ETA.

14.5 This MOU is binding on the Parties and their respective successors.

14.6 Each Party shall bear its own costs in relation to this MOU.

14.7 This MOU may be executed (including by electronic signature) in any number of counterparts (which may be facsimile or sent via email in pdf) all of which when taken together shall constitute one and the same document.

14.8 This MOU shall be read and construed in accordance with New Zealand law and shall be subject to the exclusive jurisdiction of New Zealand Courts.

Signed for and on behalf of **Dunedin City Council**
by:

Authorised signatory's full name	Authorised signatory's signature

Signed for and on behalf of **Otago Regional Council** by:

_____	_____
Authorised signatory's full name	Authorised signatory's signature

Signed for and on behalf of **University of Otago** by:

_____	_____
Authorised signatory's full name	Authorised signatory's full name

Signed for and on behalf of **Otago Polytechnic Limited** by:

_____	_____
Authorised signatory's full name	Authorised signatory's full name

Signed for and on behalf of **Te Whatu Ora** by:

_____	_____
Authorised signatory's full name	Authorised signatory's full name

Schedule 1 – Form of the Deed to be signed by a new Party

DEED ADMITTING A NEW PARTY TO THE ZERO CARBON ALLIANCE FOR DUNEDIN

Date: 20__

PARTIES

[name and details of the new Party] (**New Party**)

BACKGROUND

A. Under a Memorandum of Understanding in relation to the establishment of a Zero Carbon Alliance for Dunedin' dated [date] 2022 (**MOU**) the parties to the MOU formed an alliance, known as the Zero Carbon Alliance for Dunedin.

B. Following a unanimous recommendation of the Zero Carbon Alliance Collaboration Group, the Dunedin City Council has invited the New Party to be admitted to the Zero Carbon Alliance for Dunedin and as a Party to the MOU.

C. The New Party wishes to be admitted to the Zero Carbon Alliance for Dunedin and as a Party to the MOU, and enters into this Deed in accordance with clause 13.2 of the MOU.

THIS DEED RECORDS

1. From the date of this Deed:

   (a) The New Party shall be bound by the MOU, and have all the benefits and obligations under the MOU, as if the New party was an original Party to the MOU.

   (b) The New Party agrees that its covenants under this Deed are given in favour of the Parties to the MOU from time to time, and agrees that such persons may enforce these covenants under the Contract and Commercial Law Act 2017.

2. For the purposes of clause 7.2 the New Party nominates the following staff member as its Key Representative:

Key Representative	Current delegate	Email Contact Details

3. For the purposes of clause 8.2 the New Party nominates the following staff member as its Collaboration Group Representative:

Collaboration Group Representative	Current office bearer	Email Contact Details

4. This Deed will be read with the MOU. This Deed and the MOU together will be construed as one instrument.

5. This Deed may be executed in counterparts (including by copy sent via email in PDF format and including by electronic signature). Each counterpart will be deemed to be an original and all counterparts together are to constitute one instrument. A party will enter in to this Deed if it executes a counterpart.

[Execution clause – to be signed as a Deed]

Zero Carbon Alliance Collaboration Group Terms of Reference

Note: Capitalised terms not otherwise defined in this Terms of Reference have the meaning given to those terms in the Memorandum of Understanding in relation to the Zero Carbon Alliance for Dunedin (**MOU**).

1 Purpose

1.1 The purpose of the Zero Carbon Alliance Collaboration Group (**Collaboration Group**) is to provide oversight of, and to facilitate actions required to support, achievement of the following Agreed Objectives:

(a) Greater visibility and support for existing collaborative emissions-reducing initiatives;
(b) Shared understanding of Dunedin's emissions profile;
(c) Sharing of good practice around reducing both organisational and city-wide emissions;
(d) Identification of additional collaborative opportunities to reduce both operational and city-wide emissions generally, and to contribute to the city's Zero Carbon 2030 Target specifically;
(e) Wider and more coordinated promotion of good practice and success in emissions reduction, and the importance of the Zero Carbon 2030 Target;
(f) Opportunities to input into the development of a city-wide emissions reduction plan to give effect to the Zero Carbon 2030 Target; ; and
(g) Opportunities for research that may be transferable to the reduction of emissions in other contexts.

2 Membership

2.1 Collaboration Group Representatives are appointed by each Party in accordance with clause 8 of the MOU. The duration of each Collaboration Group Representative's term is at the discretion of the Party they represent.

3 Chair

3.1 The Collaboration Group Chair is to be determined by Collaboration Group Representatives on an annual basis. The Collaboration Group will strive for a consensus decision as to who will be Collaboration Group Chair, but a simple majority will suffice in the event that consensus cannot be reached. There is no term limit for the Collaboration Group Chair.

4 Meetings

4.1 Collaboration Group meetings (**Meetings**) will be held twice annually, unless otherwise agreed by the Collaboration Group. Meeting dates will be set at the start of each financial year, through liaison of Key Representatives, in discussion (if necessary) with their organisation's Collaboration Group Representatives, through a process led by the DCC.

4.2 Meetings may be attended by the Collaboration Group Representatives by telephone or video. A majority of Collaboration Group Representatives attending will constitute a quorum.

4.3 Agendas and draft minutes will be agreed between Key Representatives, in discussion (if necessary) with their organisation's Collaboration Group Representatives, through a process

led by the DCC. Final minutes will be confirmed by the Collaboration Group at their next meeting.

4.4 Voting will be by simple majority, with the Chair having a deciding vote in case of a tie.

4.5 Key Representatives (or an appropriate nominee) may also be in attendance at Collaboration Group meetings at the discretion of each Party. A minute taker will attend, and others may attend all or part of the meeting by invitation of the Chair.

5 Reporting and Confidentiality

5.1 It is the responsibility of each Collaboration Group Representative, in consultation with their Key Representative, to manage reporting back to the Party they represent.

5.2 The status of each agenda item in terms of confidentiality will be determined by the Collaboration Group at the commencement of each Meeting.

6 Deliverables

6.1 Collaboration Group Representatives will:

(a) Use best endeavours to attend Collaboration Group meetings.

(b) Review progress and provide leadership to achieve collective greenhouse gas emission reduction goals.

(c) Act as a strategic liaison point between the Party they represent, and the Alliance, with respect to facilitating action on the Agreed Objectives. This means:

(i) assisting with the identification of opportunities and initiatives

(ii) supporting the establishment of, and championing progress on, agreed collaborative projects

(iii) ensuring future resourcing requirements required to support agreed collaborative projects are considered by each Party in annual and long-term planning cycles

(iv) keeping mana whenua informed as anticipated by any pre-existing agreements.

ITEMS FOR CONSIDERATION BY THE CHAIR

Any items for consideration by the Chair.

Attachments

There are no attachments for this report.