# **UPDATED 2024/25 ZERO CARBON IMPLEMENTATION PLAN**

Department: Sustainability Group

## **EXECUTIVE SUMMARY**

- The purpose of this report is to present an updated draft 2024/25 Zero Carbon Implementation Plan.
- The Zero Carbon Plan, adopted by Council in September 2023, sets out the key shifts Dunedin as a city will need to become a Zero Carbon city, and action areas for the Dunedin City Council (DCC) to help bring about those shifts.
- Due to the decision to prepare an Annual Plan for 2024/25, an Implementation Plan for 2024/25 is required. Future years' Implementation Plans will be determined through the 9 year plan process.
- The proposed 2024/25 Zero Carbon Implementation Plan has been updated following consideration by the Zero Carbon Plan Advisory Panel and is now in two parts:
  - a) Attachment A sets out specific timebound projects
  - b) Attachment B sets out 'business-as-usual' actions.

#### **RECOMMENDATIONS**

That the Council:

a) **Notes** the proposed 2024/25 Zero Carbon Implementation Plan.

### **BACKGROUND**

### Zero Carbon Plan sets out the DCC's role

- The Zero Carbon Plan sets out the key shifts Dunedin as a city will need to become a Zero Carbon city (excluding biogenic methane), and the actions the Dunedin City Council (DCC) will take to help bring about those changes. The Zero Carbon Plan built on work already underway and identified additional actions for the DCC to take to help Ōtepoti Dunedin achieve its emissions reduction goals.
- The modelling used to develop the Plan showed that while there is a long way to go for Dunedin to achieve emissions reduction targets, net zero emissions by 2030 is possible if organisations, businesses and communities in Ōtepoti Dunedin collectively pull all the available levers as hard as possible to achieve the scale of change required. Ōtepoti Dunedin's emissions reduced between 2018/19 and 2021/22. Fewer emissions were generated, and the city's forests grew, absorbing more carbon. However, to reach net zero, Plan modelling confirmed much more needs to be done.
- 7 In September 2023, Council adopted the Zero Carbon Plan:

Moved (Mayor Jules Radich/Cr Brent Weatherall):

That the Council:

a) Adopts the Zero Carbon Plan 2030;

#### **Division**

The Council voted by division

For: Crs Sophie Barker, David Benson-Pope, Christine Garey, Carmen Houlahan,

Marie Laufiso, Cherry Lucas, Mandy Mayhem, Jim O'Malley, Steve Walker,

Brent Weatherall and Mayor Jules Radich (11).

Against: Crs Bill Acklin, Kevin Gilbert, Lee Vandervis and Andrew Whiley (4).

Abstained: Nil

The division was declared CARRIED by 11 votes to 4.

Motion carried (CNL/2023/210)

### Implementation plans to guide delivery

To deliver on the Zero Carbon Plan 2030, actions are needed across a range of sectors. In September 2023, Council noted an implementation plan for the 2023/24 year:

Moved (Mayor Jules Radich/Cr Brent Weatherall):

That the Council:

c) **Notes** the Zero Carbon implementation plan for the current financial year

#### Division

The Council voted by division

For: Crs Sophie Barker, David Benson-Pope, Christine Garey, Carmen Houlahan,

Marie Laufiso, Cherry Lucas, Mandy Mayhem, Jim O'Malley, Steve Walker,

Brent Weatherall, Andrew Whiley and Mayor Jules Radich (12).

Against: Crs Bill Acklin, Kevin Gilbert and Lee Vandervis (3).

Abstained: Nil

The division was declared CARRIED by 12 votes to 3

### Motion carried (CNL/2023/212)

- 9 The 2023/24 Zero Carbon Implementation Plan included actions that could be progressed with existing resources. Alongside these, indicative actions for 2024-2034 were identified.
- 10 It was anticipated that future years' Implementation Plans would be determined through the 10 year plan process.

## A 2024/25 Implementation Plan is required

- Due to the decision to prepare an Annual Plan for 2024/25, an Implementation Plan for 2024/25 is required.
- The 2024/25 implementation plan contains actions that can be delivered from within existing department budgets. Future years implementation plans will be subject to 9 year plan decisions.
- In August 2024, Council considered the 2024/25 Implementation Plan and referred it to the Zero Carbon Advisory Panel, which was established in the same Council meeting.

Moved (Cr Sophie Barker/Cr Cherry Lucas):

That the Council:

a) Notes the proposed 2024/25 Zero Carbon Implementation Plan.

## Motion carried (CNL/2024/157)

Moved (Cr Sophie Barker/Cr Cherry Lucas):

That the Council:

b) **Refers** the proposed 2024/25 Zero Carbon Implementation Plan to the Zero Carbon Advisory Panel to refine the implementation plan for approval by Council before 31 October 2024.

Motion carried (CNL/2024/158)

#### **DISCUSSION**

# 2024/25 Implementation Plan updated following Advisory Panel meeting

- 14 The 2024/25 Zero Carbon Implementation Plan has been updated following consideration by the Zero Carbon Plan Advisory Panel, and is in two parts:
  - a) Attachment A sets out specific timebound projects
  - b) Attachment B sets out 'business-as-usual' actions.
- 15 'Business-as-usual' actions are actions that are ongoing as part of Council's normal operations until at least 2030, and include advocacy/partnership based actions, and Zero Carbon Policy implementation actions.
- In addition to separating 'business-as-usual' actions and discrete projects into separate tables, updates include:
  - a) Where relevant, adding the name of the partner to the 'role of DCC' column
  - b) Removing discontinued actions to reflect related decisions of Council.
- 17 'Progress to date' commentary in the implementation plan has not generally been updated since the August report. Reporting against the actions in the implementation plan will commence once it has been formally noted by Council.

# 2024/25 Implementation Plan reflects changed Government policies

- The Zero Carbon Plan 2030 was developed in an environment of central government co-funding for activities relating to climate adaptation and response, particularly in the Transport sector. Since the indicative actions for 2024-2034 were developed, the change in Government has led to changes in government policy and removal of some co-funding opportunities.
- As reported to Council in August 2024, the draft 2024/25 Zero Carbon Implementation Plan only includes actions that can be progressed with existing resources and reflects the context of current government policy.
- Transport and Urban Form chapter actions have been the most impacted by government policy changes. The transport sector is the second highest emitting sector in Dunedin after agriculture, and marked shifts from business-as-usual will be required by 2030 to achieve targets. The indicative actions for 2024-34 presented to Council in September 2023 therefore had a strong

- emphasis on projects that would support increased walking, cycling and use of public transport, as well as electrification of the vehicle fleet.
- The draft 2024/25 Zero Carbon Implementation Plan reflects that changes in government policy and the availability of funding have delayed, deferred or stopped a number of these actions. The changed context also impacts other Plan chapters, albeit to a lesser degree.

## Implementation Plan includes actions that can be delivered from existing resource levels

Like the 2023/24 implementation plan, the 2024/25 implementation plan only includes actions that can be progressed from existing resource levels.

# Future implementation plans subject to LTP budget decisions

- 23 Future actions that require additional resourcing will be subject to annual approved budgets.
- 24 Council requested in September 2023 that High and Medium Zero Carbon packages be developed for consideration as part of 9 year plan development. The implementation plan for 2025 and beyond will therefore be finalised following the 9 year plan budget decisions.

#### **OPTIONS**

25 There are no options, as this is a noting report only.

#### **NEXT STEPS**

26 The 2024/25 Zero Carbon Implementation Plan will progress within approved 24/25 departmental budgets.

# **Signatories**

Author:	Florence Reynolds - Zero Carbon Senior Policy Analyst, Sustainability
	Jinty MacTavish - Principal Policy Advisor Sustainability
Authoriser:	Scott MacLean - General Manager, Climate and City Growth

# **Attachments**

Title Page

- A Proposed 24/25 Zero Carbon Implementation Plan Specific time-bound projects
- B Proposed 24/25 Zero Carbon Implementation Plan Business-as-usual actions

#### SUMMARY OF CONSIDERATIONS

### Fit with purpose of Local Government

Implementation of the Zero Carbon Plan is anticipated to promote the social, economic and environmental wellbeing of communities in the present and for the future, by facilitating the transition to a low carbon economy.

## 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	✓		

Elements of the Plan have been assessed as directly contributing to the goals of all strategies and the DCC's Emissions Management and Reduction Plan.

### Māori Impact Statement

A critical Treaty of Waitangi analysis was prepared previously as part of the Zero Carbon work programme. This indicated that, in general, taking action on climate change is aligned with Treaty of Waitangi obligations because a wide range of taonga are at risk from climate change. Individual Implementation Plan projects will need to consider the Māori Strategic Framework and incorporate mana whenua and mātāwaka inputs during planning and delivery.

## Sustainability

Without 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 co-benefits in terms of community wellbeing.

# LTP/Annual Plan / Financial Strategy /Infrastructure Strategy

The 2024/25 Implementation Plan includes actions that can be progressed within existing resourcing.

### Financial considerations

There are no additional costs for the recommended option. The 2024/25 Implementation Plan includes only actions that can be undertaken within existing resourcing. Further Implementation Plans will be considered through the 9 year plan process.

#### **Significance**

The 2024/25 Zero Carbon Implementation Plan is considered low significance as it relates to an existing Plan adopted by Council.

#### Engagement – external

Substantial external engagement was undertaken during development of the Zero Carbon Plan.

## **SUMMARY OF CONSIDERATIONS**

## Engagement - internal

Substantial internal engagement was undertaken in Zero Carbon Plan and Implementation Plan development. Teams have provided updates on the actions they are leading.

# 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. Audit New Zealand currently has a focus on reporting on progress towards emissions reduction targets.

# **Conflict of Interest**

No conflict of interest has been identified.

# **Community Boards**

A workshop involving members of all community boards was held to inform Zero Carbon Plan development.

Specific	time-bour	nd projects					
Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP action	Emissions Reduction Potential	Comment on progress to date
Resourc	e Use and	Waste					
Resources	KS1	Use resources in a more circular way					
Resources	KS2	Divert more waste from landfill					
Resources	AA 1	Enable communities to re-use and recycle resources					
Resources	R1.1.4	Work with community partners to support three or more communities to establish new community-led resource/recycling centres in local neighbourhoods	WES with support from ZC	DCC-led	Yes	Priority Action	Engagement across a range of communities has commenced and will continue. Community site opportunities and options pending. Refer R1.1.5 below.
Resources	R1.1.5	Complete business case for a wider network of community-led resource/recycling centres in local neighbourhoods	WES with support from ZC	DCC-led			Work underway. Part of R1.1.5 above.
Resources	AA 2	Support collaboration for circularity				Moderate	
Resources	R1.2.1	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.	WES	DCC-led	Yes		Opportunities to expand in these areas is ongoing. Some actions would likely be included in the new WMMP for 2024-2030.
Resources	R1.2.2a	Progress collaborative work on circular economy with partners	ZC with WES support	In partnership with Zero Carbon Alliance		Priority Action	Progressing through actions underway e.g. construction and demolition waste business case development (underway), and Zero Carbon Alliance. Waste minimisation community network established.
Resources	AA 3	Enable food and garden organics to be composted				Moderate	
Resources	R1.3.1a	Work to secure resource consent for Green Island redevelopment for composting facility	WES	DCC-led	Yes		Organics receivals building operating now. Resource consent pending for GI redevelopment.
Resources	AA 4	Enable construction waste to be reduced, re-used and recycled				Moderate	
Resources	R1.4.1a	Work to secure resource consent for Green Island redevelopment for storing and sorting timber diverted from landfill (refer to R1.1.1. and R1.2.2a) ${\sf Constant}$					
Resources	R1.4.3	Explore with community partners the potential for construction waste re-use hub(s)	WES with ZC support	DCC-led			Initial site assesment criteria developed. Discussions ongoing with community and C&D partners.
Resources	R1.4.5	Explore options for incentives to encourage low carbon, circular, low waste design for construction projects	WES with ZC support	DCC-led			Research underway to identify options.
Resources	R1.4.7	Explore ways to support the establishment and operation of building deconstruction services	WES with ZC support	DCC-led			Exploring case study opportunities through Zero Carbon Alliance.
Resources	R1.4.9	Deliver a pilot programme for construction waste separation	WES	DCC-led			Original skip pilot being expanded in scope to include other construction site solutions e.g. fadge bags.
Resources	R1.4.10	Undertake and publish case studies on separating construction waste and reducing waste in design	WES	DCC-led			Two existing case studies, more being prepared.
Resources	R1.4.11	Publish information about best practice for reducing construction material use and waste through design and construction	WES	DCC-led			Webpage set up to enable publication of best practice resources.

Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP action	Emissions Reduction Potential	Comment on progress to date
Resources	AA 5	Enhance waste minimisation education and facilities				Minor	
Resources	R1.5.2	Work to secure resource consent for Green Island redevelopment to provide more infrastructure for waste diversion (refer to R1.1.1. and R1.2.2a)					
Resources	R1.5.4	Explore how to best support businesses to undertake waste audits and develop waste minimisation plans	WES	DCC-led	Yes		Opportunities for business waste minimisation education and support, including waste audits, are being investigated.
Resources	<b>AA</b> 6	Improve data on resource use and waste				Minor	
Resources	R1.6.3	Undertake study to determine source of paper sent to landfill	WES	DCC-led	Yes	Priority Action	To be scoped in 2024/25.
Resources	R1.6.5	Undertake study to determine source and composition of textiles sent to landfill	WES	DCC-led	Yes		To be scoped in 2024/25.
Resources	KS 3	Improve landfill and wastewater gas management					
Resources	AA 7	Divert biosolids and minimise emissions from wastewater treatment					
Resources	R3.7.1	Explore options for a long-term biosolids solution	3W / WES	DCC-led	Yes		Strategy, including interim solutions is in place. Steering Group has been established with Aukaha membership supporting iwi interests and communication.
Resources	AA 8	Improve landfill and wastewater gas capture				Minor	
Resources	R3.8.2	Purchase and install gas engine at Green Island Landfill	WES	DCC-led	Yes	Priority Action	On track. Preparatory work likely to commence in 24/25, installation in 25/26.
Resources	R3.8.4	Deliver a gas flare at Mosgiel Waste Water Treatment Plant	3W	DCC-led	Yes		Programmed for delivery. Construction delayed.
Transpo	rt and Urb	an Form					
Transport	KS1	Nurture low emissions urban form					
Transport	AA 1	Encourage density close to centres and public transport				Moderate	
Transport	T1.1.1	Build Zero Carbon considerations into the 3 Waters growth capital programme	3W with support from ZC	DCC-led			Prioritisation tool for 3W Growth Capital Programme has been developed.
Transport	T1.1.2	Deliver the 3 Waters growth capital programme	ЗW	DCC-led			Implementation of prioritisation tool for 3W Growth Capital Programme part of 2024/25 Capex and ongoing.
Transport	T1.1.5a	Undertake a review of 2GP provisions and develop associated guidance documents to support Zero Carbon outcomes including related to the following:  • Improved on-site amenity for multi-unit residential developments  • Shared transport options for multi-unit residential and commercial developments  • Ehd of trip facilities for commercial developments  • Shared infrastructure for EV charging in multi-unit residential and commercial developments	City Development	DCC-led			The City Development team are currently reviewing the rules that manage the design of multi-unit housing, this review will look at whether the Plan should manage on-site amenity beyond the current standards in the Plan. The other elements are not currently included in the forward work programme and would require funding or additional resourcing to progress.

Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP action	Emissions Reduction Potential	Comment on progress to date
Transport	AA 2	Strengthen neighbourhood centres				Minor	
Transport	T1.2.2	Consider actions to promote the use and reuse of vacant spaces, including through residential use, as part of Heritage Action Plan implementation plan development	City Development	DCC-led			Heritage Action Plan complete. Implementation Plan in development, to be considered as part of 9YP. The actions that may get undertaken or funded are unclear at this stage. The building incentives review (report to 9YP) being led by Principal Policy Advisor Housing is also covering this topic.
Transport	T1.2.6	Complete South Dunedin Library	Property	DCC led			Project continuing as planned.
Transport	KS2	Target closer markets, encourage local destinations, and in	spire longer st	ays			
Transport	AA 4	Align destination and events management				Moderate	
Transport	T2.4.2	Establish a baseline for emissions from cruise vessels	zc	In partnership with Port Otago			Nearing completion.
Transport	KS 3	Unlock remote solutions					
Transport	AA 8	Provide virtual and low-emissions mobile solutions				Minor	
Transport	T3.8.3	Deliver DCC eServices programme	BIS	DCC-led			First large release has successfully gone live with 'Solicitors Portal' allowing our solicitor community to organise the day of sale transfer through the new portal.
Transport	KS 4	Develop convenient and attractive cycling and walking netw	vorks and publ	ic transport ser	vices		
Transport	AA 9	Complete urban cycleway networks and improve priority pedestrian networks				Moderate	
Transport	T4.9.1	Develop <i>Otepoti - Dunedin pathways: A walking and cycling plan</i> that aligns with Zero Carbon goals	Transport / Zero Carbon	DCC-led			Plan drafted, presenting to ISCOM in October 24 with a costed porgramme of works for consideration in the 9YP.
Transport	T4.9.3	Deliver Dunedin Tunnels Trail	Transport	In partnership - Dunedin Tunnels Trails Trust			Work underway. Ongoing work to be considered in 9YP.
Transport	T4.9.8	Deliver Transport Choices - South Dunedin Schools programme (behaviour change elements only)	Transport	DCC-led			Infrastructure changes were cancelled, behaviour change (Transport Choices Schedule 2, which remained funded at a 90% FAR rate) is currently being delivered.
Transport	T4.9.11	Plan and deliver remaining stages of the Central City Plan	PPSO / Transport	DCC-led			Report to be tabled with council in September 2024. Funding decisions to form part of 9YP.
Transport	T4.9.15	Deliver SFDT Central City Cycle and Pedestrian Improvements – St Andrew St	Transport	Partner-led - NZTA			Currently working on this with NZTA, as part of the revocation process of swapping SH88 from St Andrew St to Frederick St.
Transport		Support improvements in public transport service frequency, operating hours and quality, while maintaining affordability for users				Moderate	
Transport	T4.10.6	Complete feasibility study into passenger rail, with an initial emphasis on a service between Mosgiel and Dunedin	Transport	DCC-led			Study almost completed. Costing available for consultation on rail passenger services as part of the 9Y plan.

Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP action	Emissions Reduction Potential	Comment on progress to date
Transport	KS 5	Boost travel demand management to support use of active					
Transport	AA 13	Align parking management and consider other pricing mechanisms				Moderate	
Transport	T5.13.1	Develop a Parking Management Policy that aligns with Zero Carbon goals	Transport with support from ZC	DCC-led			
Transport	T5.13.2	Implement the Parking Management Policy, including through area-based parking management plans	Transport	DCC-led		Priority Action	Delayed due to resourcing constraints. However, will be completed in the 2024/25 year.
Transport	AA 14	Establish and promote car share					
Transport	T5.14.1	Facilitate establishment of commercial car share in Dunedin	Transport with support from ZC	In partnership with ZCA and supplier		Priority Action	Project has revenue implications. Next step is Council consideration through 9YP. If funded in 9YP, delivery will continue within Transport team resource.
Transport	AA 15	Expand workplace and school travel planning and road safety promotion				Moderate	
Transport	T5.15.4	Develop the Dunedin Road Safety Plan	Transport	DCC-led			
Transport	KS 6	Shift freight to low emissions modes					
Transport	AA 18	Support freight to shift to rail and coastal shipping				Minor	
Transport	T6.18.1	Complete a feasibility study of inland freight hub(s)	Transport	DCC-led			Freight hubs are being investigated. To be aligned with Zero Carbon, it would need to result in reduced truck movements.
Transport	KS 7	Electrify light vehicles					
Transport	AA21	Support electrification of service vehicles and last mile delivery				Moderate	
Transport	Т7.21.3	Invest in infrastructure to support continued DCC fleet electrification	Fleet / Property with ZC support	DCC-led	Yes		Detailed planning work to progress in 24/25, for delivery in 25/26 (dependent on 9YP funding for 25/26).
Transport	KS 8	Decarbonise heavy vehicles, marine and aviation					
Transport	AA 23	Support transition to low- and zero-emission fuels for heavy vehicles				Minor	
Transport	T8.23.2	Consider if freight needs should be included in planning for EV charging infrastructure	Transport	Central Govt/Private sector led, with some role for DCC			

Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP action	Emissions Reduction Potential	Comment on progress to date
Building	s, Energy	and Industry					
Energy	KS1	Switch to low carbon stationary energy sources					
Energy	KS2	Improve energy efficiency of buildings and industry					
Energy	AA 1	Support the transition to fossil-fuel free process heat				Moderate	
Energy	E1.1.3a	Explore options to support businesses using fossil fuelled boilers/process heat with a capacity less than 500kW (especially LPG boilers) to develop decarbonisation plans	zc	DCC-led			EECA's Regional Energy Transition Accelerator programme identified a possible role for the DCC working to identify building owners/energy users with fossil-fuelled process heat smaller than 500kW, and supporting their transition. Possible approaches to progress this will be considered alongside the SME support programme.
Energy	AA 2	Replace fossil fuels and improve energy efficiency of DCC facilities				Minor	
Energy	E1.2.1	Deliver heat recovery system at Moana Pool	PARS	DCC-led	Yes		Decisions pending on timeframe to deliver second heat recovery system. Existing heat recovery system is still operational.
Energy	E1.2.3	Develop detailed cases to improve energy efficiency and displace LPG use at - Civic Centre - Dunedin City Library - Dunedin Public Art Gallery - Toitu Otago Settlers Museum - Dunedin Railway Station - Regent Theatre	Property	DCC-led	Yes		Civic Centre, Dunedin City Library, Dunedin Public Art Gallery, Toitu all progressing as planned, in the early stages of investigation and planning.
Energy	E1.2.7	Explore options to displace stationary diesel use at wastewater treatment plants	3W with ZC / Property support	DCC-led	Yes		Works programmed for some short - medium term improvements. (To increase incinerator efficiency/capacity and to decrease diesel consumption).  Opportunity to implement improvements to incinerator not able to be realised in 2023/24. May require additional long term funding.  Consideration within scope of Long Term Bioresources Strategy. R3.7.1
Energy	E1.2.11	Implement preferred option to improve the overall energy efficiency and displace LPG use at Andersons Bay Crematorium	PARS	DCC-led	Yes		Options to reduce LPG at Andersons Bay Crematorium were investigated in 2023/24. Upgrade to LPG boilers to improve energy efficiency to be delivered in 24/25.
Energy	AA 3	Support energy efficiency and the transition away from fossil fuels in homes				Minor	
Energy	E1.3.1	Explore options to increase residential and community energy efficiency and address energy hardship through Housing Action Plan implementation, and design programme or solution	Housing, with ZC support	DCC-led			Forms part of wider incentives work programme. A report on options is due in time to inform 9YP.
Energy	E1.3.2	Pilot residential energy efficiency programme	Housing, with ZC support	In partnership - Community Energy Network (CEN), Aukaha			Original pilot proposal received insufficient co-funding from Central Government. Some significantly de-scoped actions undertaken.

Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP	Emissions Reduction	Comment on progress to date
Energy	E1.3.3	Explore options to promote or incentivise transition to low emissions solutions for heating and cooking in existing homes	Zero Carbon with Housing support	DCC-led			Forms part of wider incentives work programme. A report on options is due in time to inform 9YP.
Energy	E1.3.5	Explore options to promote or incentivise energy efficient, low emissions new builds and retrofits	Housing with ZC support	DCC-led			Forms part of wider incentives work programme. A report on options is due in time to inform 9YP.
Energy	E1.3.9	Support development of an Otago Climate Strategy – refer to Forestry, Land and Agriculture chapter					
Energy	KS3	Increase local renewable generation					
Energy	AA 5	Grow renewable energy generation in the community				Minor	
Energy	E3.5.2	Explore options to promote or incentivise renewable energy generation on community assets and residential property	ZC with Property support	DCC-led			Forms part of wider incentives work programme. A report on options is due in time to inform 9YP.
Forestry, Land and Agriculture							
FLAG	KS1	Reduce emissions from agriculture					
FLAG	AA 1	Support emissions reduction in agriculture				High	
FLAG	F1.1.1	Support the development of an Otago Climate Strategy that aligns with Zero Carbon goals	ZC	Partner-led - ORC		Priority Action	In progress.
FLAG	KS2	Grow sequestration that aligns with mana whenua and com	munity values				
FLAG	AA 2	Support growth of sequestration that aligns with mana whenua and community values				High	
FLAG	F2.2.1	Support the completion of a regional sequestration study	zc	Partner-led - ORC			DCC has co-funded work commissioned by ORC to study existing and potential capacity within the district.
FLAG	F2.2.2	Explore options to encourage and support growth in sequestration that aligns with mana whenua and community values, including the role of DCC and DCHL offsetting (if any)	ZC	DCC-led			Research phase ongoing, planning for engagement once ORC-led sequestration study results finalised and understood (see F2.2.1).
Commun	nities and I	Economies					
Communities & Economies	KS1	Build resilient and connected communities, including by en	abling local foo	d, resource sha	ring, and	access to local a	menities.
Communities & Economies	AA 1	Foster local and regenerative food systems				Moderate	
Communities & Economies	C1.1.2a	Consider options for community food hub through broader ED work programme	ED Lead, Community Development support	In partnership - food stakeholders in the City, possibly Central Government partners			

Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP action	Emissions Reduction Potential	Comment on progress to date
Communities & Economies	C1.1.10	Explore with relevant stakeholders ways to encourage people to join the food industry	ED	In partnership with Start Up Dunedin and other local food stakeholders			Tracking as expected. Ongoing BAU.
Communities & Economies	AA 2	Strengthen local communities				Moderate	
Communities & Economies	C1.2.1a	Progress work on community resource hubs (see Action area 1 in Resource Circularity chapter)					
Communities & Economies	AA 3	Empower the community to respond				High	
Communities & Economies	C1.2.4a	Explore ways to better support community-led emissions reduction activity through grants, including - the potential role of place-based community funding linked to emissions reduction initiatives - the potential role of zero carbon community response grants to support community action and events	ZC with Community Development support	DCC-led		Priority Action	ZC scoping work complete. Linked to broader Grants Review.
Communities & Economies	C1.3.1	Develop a zero carbon community outreach, engagement and activation plan	ZC with support from Comms and Marketing, Community Development	DCC-led			In progress. To be developed to align with 9YP Zero Carbon investment packages.
Communities & Economies	KS3	Support innovation and grow diverse low carbon sectors an	d businesses				
Communities & Economies	AA 5	Support low carbon innovations to establish and grow				Moderate	
Communities & Economies	C3.5.3a	Pilot incentives for entrepreneurs to tackle emissions, and support start-ups that aim to contribute significantly to low carbon goals	ZC with support from ED	In partnership - supplier, businesses, Business South			
Communities & Economies	AA 6	Support development of a diverse low carbon economy				High	
Communities & Economies	C3.6.1	Build Zero Carbon considerations into the revision of the Economic Development Strategy, including by way of a low carbon future economy opportunities/innovation scan nationally and globally	ED with support from ZC	DCC-led		Priority Action	Research complete. Integration ongoing.
Communities & Economies	C3.6.3	Grow circular economies - See action areas 1-5 in the Resources chapter					
Communities & Economies	KS4	Support businesses and sectors to reduce emissions from t	heir operations	3			
Communities & Economies	AA 7	Support businesses to transition				Very high	
Communities & Economies	C4.7.3a	Deliver scaled up pilot of zero carbon business transition support programme	ZC with input from ED	In partnership - supplier, businesses, Business South			Initial pilot complete. Scaled up pilot in planning phase.



Actions t	that are BA	NU .					
Includes actio	ons that not spec	ific time-bound projects - such as actions that are ongoing un	til at least 2030,	advocacy/pa	rtnership bas	sed actions, an	d Zero Carbon Policy actions
Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP action	Emissions Reduction Potential	Comment on progress to date
Resource	Use and Wa	ste					
Resources	KS1	Use resources in a more circular way					
Resources	KS2	Divert more waste from landfill					
Resources	AA 1	Enable communities to re-use and recycle resources				Minor	
Resources	R1.1.1	Continue to develop and support existing resource recovery parks: Green Island, Waikouaiti, Middlemarch	WES	DCC-led	Yes		Green Island RRP resource consent pending.
Resources	R1.1.8	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	WES	DCC-led	Yes		Ongoing - from in-house resource, through contracted external providers and via waste minimisation community grants.
Resources	AA 2	Support collaboration for circularity				Moderate	
Resources	R1.2.3	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)			Yes		
Resources	AA 3	Enable food and garden organics to be composted				Moderate	
Resources	R1.3.4	Encourage and support waste-related improvements to the Land and Water Regional Plan including improving provisions for composting	WES and ZC	Partner-led - ORC	Yes		Provisions in early draft, but timing dependent on LWRP programme.
Resources	AA 4	Enable construction waste to be reduced, re-used and recycled				Moderate	
Resources	R1.4.2	Continue collaborating with other councils to identify or create solution for timber and other regional waste processing infrastructure	WES	In partnership with Otago TAs	Yes	Priority Action	Regional waste officer appointed to progress Otago TA partnership projects.
Resources	AA 5	Enhance waste minimisation education and facilities				Minor	
Resources	R1.5.1	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	WES	DCC-led	Yes		Opportunities to expand these services are being investigated.
Resources	R1.5.5	Support business to undertake waste audits and develop waste minimisation plans	WES	DCC-led	Yes	Priority Action	Dependent on outcomes of above investigation.
Resources	KS 3	Improve landfill and wastewater gas management	•	•	•	•	
Resources	AA 7	Divert biosolids and minimise emissions from wastewater treatment				Minor	
Resources	R3.7.3	Build Zero Carbon considerations into 3 Waters Integrated System Planning	3W with support from ZC	DCC-led	Yes		Technical documents completed. Dynamic Adaptive Pathway Plan identified for each water with pathway to projects identified.
Resources	AA 8	Improve landfill and wastewater gas capture				Minor	
Resources	R3.8.3	Continue work to optimise gas capture and destruction at Green Island Landfill	WES	DCC-led	Yes	Priority Action	Work continues as planned.
Transport	and Urban	Form					
Transport	KS1	Nurture low emissions urban form					
Transport	AA 1	Encourage density close to centres and public transport				Moderate	
Transport	T1.1.3	Build Zero Carbon considerations into 3 Waters Integrated System Planning – Refer Resources Key shift 3					
Transport	AA 2	Strengthen neighbourhood centres				Minor	
Transport	T1.2.7	Build Zero Carbon considerations into aquatic, reserves management plans, sports facilities, and open space network reviews	PARS with support from ZC	DCC-led			Reserve Management Plans underway, currently in draft. Zero Carbon considerations built into process.

Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP action	Emissions Reduction Potential	Comment on progress to date
Transport	AA 3	Design urban form for connectivity				Minor	
Transport	T1.3.2	Continue to improve DCC pre-application and consent processes to achieve better outcomes for connectivity and urban design, with an initial focus on major subdivisions and developments	City Development Engineer with support from PARS, Transport, City Development	DCC led			Pre-application meetings between DCC and developers have resulted in positive outcomes for larger subdivisions, reducing rework and confusion. The pre-application meetings are still a work in progress and are being refined every time DCC use them.
Transport	T1.3.3	Encourage and support ORC to involvement in pre-application and consent processes for major subdivisions and developments to maximise potential integration with the public transport network (including through RLTP and RPTP processes, and Otago Climate Strategy development, as appropriate)	Transport and City Development with support from ZC	In partnership with ORC			All consent processes for major subdivisions involve a transport assessment (or if they are larger a full integrated transport assessment). As part of that assessment there is an evaluation of the available public transport to support the area in question. As part of the FDS, the Transport team alongside City Development identified the areas of growth and what additional public transport infrastructure would be needed. The ORC were also part of the FDS so they could consider the growth in their planning for bus routes.
Transport	KS2	Target closer markets, encourage local destinations, a	nd inspire long	er stays			
Transport	AA 4	Align destination and events management				Moderate	
Transport	T2.4.1	Build Zero Carbon considerations into Destination Management Plan implementation and other Regional Tourism Organisation (RTO) activities	ED with support from ZC	In partnership with Visitor sector		Priority Action	Activity commenced and will continue to be delivered as part of ODMMP in 2024/25.
Transport	AA 6	Encourage low carbon recreation				Minor	
Transport	T2.6.1	Implement the Play Spaces Plan 2021 and Recreation Tracks Plan 2022	PARS	DCC-led			Upgrades to playgrounds at St Clair and Botanic Garden scheduled.
Transport	T2.6.2	Explore opportunities to optimize promotion of local destinations and recreation opportunities to local people, and implement options identified.	PARS with support from ED	DCC-led			Work is ongoing.
Transport	T2.6.3	Support community groups developing and implementing regional cycleway connections:  - Waihola to Wingatui cycle trail connection  - Cycle trail connecting coastal communities north of Dunedin	Transport and ZC	Partner-led - Dunedin Tracks Network Trust			
Transport	T4.9.21	Consider planning phase walking/cycling/public transport improvement projects (including relevant Shaping Future Dunedin Transport programme projects, additional stages of the Central City Plan, Dunedin Tunnels Trail) through 9 Year Plan development	Transport, ZC	DCC-led			
Transport	KS 4	Develop convenient and attractive cycling and walking	networks and	public trans	port service	s	
Transport	AA 10	Support improvements in public transport service frequency, operating hours and quality, while maintaining affordability for users				Moderate	
Transport	T1.10.1a	Encourage and support the ORC to improve public transport service frequency, especially on key routes, while maintaining affordability for users (including through RLTP and RPTP processes and the Otago Climate Strategy development, as appropriate)	Transport with support from ZC	Partner-led - ORC			
Transport	T4.10.5	Encourage and support the ORC to align public transport services to better meet the needs of students and staff travelling to school and after-school sports (including through RLTP and RPTP processes and the Otago Climate Strategy development, as appropriate)	Transport with support from ZC	Partner-led - ORC			Integrated into BAU.
Transport	AA 11	Support extensions to the geographic reach of public transport services				Moderate	
Transport	T4.11.1	Encourage and support ORC to investigate, trial and implement new network units (routes) as per the RPTP (including through RLTP and RPTP processes and Otago Climate Strategy development, as appropriate)	Transport with support from ZC and ED	Partner-led - ORC			Integrated into BAU.
Transport	T4.11.3	Encourage and support central government and other agency investigation and implementation of inter-regional public transport (including through changes to government regulatory and investment processes, RTO activities, and Otago Climate Strategy development, as appropriate)	ZC with support from Transport and ED	Partner-led - Zero Carbon Alliance partners, government			Integrated in BAU. DCC has also been working with Otago University through the Zero Carbon Alliance to investigate events-based train service.
Transport	AA 12	Support improvements in the quality and consistency of bus stops and bike facilities				Minor	
Transport	T4.12.1a	Respond to any opportunities to improve the quality and consistency of bus stops and bike facilities (including through changes to government regulatory and investment processes, RTO activities, and Otago Climate Strategy development, as appropriate)	Transport	DCC-led		Priority Action	No funding available.



Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP action	Emissions Reduction Potential	Comment on progress to date			
Transport	KS 5	Boost travel demand management to support use of active and public modes								
Transport	AA 13	Align parking management and consider other pricing mechanisms				Moderate				
Transport	T5.13.3	Encourage and support central government to expand and align pricing and enforcement tools and provide best practice guidance on their application by local government	Transport / ZC	Partner-led - Central Government			Central Government proposed parking fee increases. Due to short submission timeframe (3 working days), DCC did not submit. BAU to submit for future opportunities if possible.			
Transport	AA 15	Expand workplace and school travel planning and road safety promotion				Moderate				
Transport	T5.15.2a	Continue to deliver existing travel demand management programmes, including for schools.	Transport	In partnership with schools		Priority Action				
Transport	T5.15.4	Develop the Dunedin Road Safety Plan	Transport	DCC-led						
Transport	AA 17	Improve connections between modes				Minor				
Transport	T5.17.2	Encourage and support the owners/operators of existing transport infrastructure to improve connections between modes: - Dunedin bus hub - Dunedin Airport - Port Otago (including through RTO activities, the DCHL Carbon Roadmap, and Otago Climate Strategy development as applicable)	ZC with support from ED / Transport	Partner-led - ORC, DCHL			Integrated in BAU.			
Transport	KS 6	Shift freight to low emissions modes								
Transport	AA 19	Support growth of e-bikes and micro-mobility for last mile delivery				Minor				
Transport	T6.19.3	Consider the needs of low emissions last-mile delivery modes in the Central City Upgrade and other centers upgrades	PPSO with support from Transport, City Development	DCC-led			As part of the George St Retail Precinct Upgrade, DCC ran a trial with e-bike courier services and provided incentives for businesses to participate. Lack of Waka Kotahi co-funding may constrain further action.			
Transport	KS 8	Decarbonise heavy vehicles, marine and aviation								
Transport	AA 23	Support transition to low- and zero-emission fuels for heavy vehicles				Minor				
Transport	T8.23.1	Encourage and support the ORC to fast-track planned shifts to low emission vehicles or alternative fuels and technologies for contracted public transport services, as per the RPTP (including through RLTP and RPTP processes, Otago Climate Strategy development, and the ZCA, as applicable)	Transport with support from ZC	Partner-led			Integrated into BAU.			
Transport	AA 24	Support the transition to low- and zero-emission fuels for marine and aviation				Moderate				
Transport	T8.24.1	Encourage and support central government to take action to reduce emissions from shipping and aviation	zc	Partner-led - central government			Submission made to Climate Change Commission on this topic in 23/24. Future opportunities to progress this action will be undertaken as they arise.			
Transport	T8.24.2	Encourage and support key stakeholders to explore the provision of shore power at Port Chalmers (including through RTO activities, the DCHL Carbon Roadmap, and the Otago Climate Strategy, as appropriate)	ZC with support from ED	Partner-led - Port Otago, DCHL		Priority Action	Port Otago have kept DCC updated on progress regarding this through 2023/24. The feasibility of shore power has been investigated, with no current plans to install shore power due to capacity constraints/considerable investment required and a lower activity base that does not enable cost recovery. DCC will keep in contact with Port Otago for updates on any changes to the investment/policy settings.			
Transport	T8.24.3	Encourage and support Dunedin Airport to position for early adoption of low carbon aviation fuels (including through RTO activities, the DCHL Carbon Roadmap, and the Otago Climate Strategy, as appropriate)	ZC with support from ED	Partner-led - DCHL		Priority Action	During 23/24 all members of the Zero Carbon Alliance, including DCC, submitted letters of support for the joint Southern Airport Alliance bid to host New Zealand's first commercial zero emissions plane. This bid was unsuccessful. DCC will progress this action as any opportunities arise.			



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Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP action	Emissions Reduction Potential	Comment on progress to date			
Buildings, Energy and Industry										
Energy										
	KS2	Improve energy efficiency of buildings and industry								
Energy	AA 1	Support the transition to fossil-fuel free process heat				Moderate				
Energy	E1.1.1	Encourage and support central government to progress planned decarbonisation of the national electricity grid	zc	Partner-led - central government			Integrated into BAU.			
Energy	E1.1.5	Build Zero Carbon considerations into the revision of the Economic Development Strategy, including by way of a low carbon future economy opportunities/innovation scan (see Communities and Economies chapter AA 6)								
Energy	AA 2	Replace fossil fuels and improve energy efficiency of DCC facilities				Minor				
Energy	E1.2.12	Explore and implement other upgrades to improve energy efficiency and displace stationary diesel and LPG use at other PARS facilities	PARS	DCC-led	Yes		Investigations into alternatives to LPG are ongoing. Smaller use sites with short periods of high demand for hot water (such as sportgrounds) are currently impractical and/or cost prohibitive to switch from LPG.			
Energy	AA 3	Support energy efficiency and the transition away from fossil fuels in homes				Minor				
Energy	KS3	Increase local renewable generation								
Energy	AA 4	Grow renewable energy generation from DCC-owned assets				Minor				
Energy	E3.4.1	Consider opportunities for renewable generation associated with 3 Waters infrastructure as part of 3 Waters Integrated System Planning	3W	DCC-led	Yes					
Energy	E3.4.4	Explore options for renewable energy generation associated with other DCC assets, as part of other energy efficiency and decarbonization work programmes	Property	DCC-led	Yes		Investigation and detailed planning on use of wastewater thermal energy has occurred through 2023/24, continuing into 2024/25.			
Energy	AA 5	Grow renewable energy generation in the community				Minor				
Energy	E3.5.1	Encourage and support implementation of the DCHL Carbon Roadmap (refer Communities and Economies Action Area 4)								
Energy	KS4	Reduce emissions from refrigerants								
Energy	AA 6	Reduce refrigerant emissions and liabilities				Minor				
Energy	E4.6.1	Continue to reduce the GWP of refrigerants on DCC property, as part of other energy efficiency and decarbonization work programmes	Property	DCC-led	Yes		Reducing reliance on refrigerants, and reducing the GWP of refrigerants required in new energy systems is part of BAU design and planning (see action E1.2.3).			
Forestry, La	and and Ag	riculture								
FLAG	KS1	Reduce emissions from agriculture								
FLAG	AA 1	Support emissions reduction in agriculture				High				
FLAG	F1.1.4	Explore with relevant stakeholders ways to support innovation in the agricultural sector within the region (refer Communities and Economies KS1)								
Communiti	Communities and Economies  Communities and Economies									
Communities & Economies	KS1	Build resilient and connected communities, including I	by enabling loca	al food, resou	urce sharing	, and access	to local amenities.			
Communities &	AA 1	Foster local and regenerative food systems				Moderate				
Economies				In partnership						
Communities & Economies	C1.1.1	Connect the network of food stakeholders in Dunedin to create visibility and connectivity in the sector	ED Lead, Community Development support	with food stakeholders in the City			Ongoing, on track as usual.			
Communities & Economies	C1.1.3	Support Kiwiharvest and other organisations to rescue food	WES	In partnership - Kiwiharvets and other food rescue organisations			On track, Kiwiharvest is supported with a community service agreement grant. Love food hate waste campaign support ongoing.			
Communities & Economies	C1.1.4	Develop `produce local' and `buy local' campaigns	ED	In partnership with food stakeholders in the City			Some communications undertaken. Will continue as BAU ongoing marketing.			

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Communities & Economies	C1.1.5	Explore with relevant stakeholders ways to support innovation in the agricultural sector within the region	ED	In partnership with ORED and stakeholders in the region			Engaging with stakeholders. Likely to require future funding.	
Communities & Economies	C1.1.7	Support food businesses and growers to access marketplaces	ED	Partner-led - growers and food businesses and Start Up Dunedin			Tracking as expected. Ongoing project.	
Communities & Economies	C1.1.8	Support the development of new community gardens and the maintenance of existing gardens	PARS Lead, Community Development support	Partner-led - community garden organisations			Support continues for existing community groups, and support is available for new groups wanting to develop community gardens.	
Communities & Economies	AA 2	Strengthen local communities				Moderate		
Communities & Economies	C1.2.1a	Progress work on community resource hubs (see Action area 1 in Resource Circularity chapter)						
	AA 3	Support energy efficiency and the transition away from fossil fuels in homes				Minor		
Energy	E1.3.8	Encourage and support improvements to the Otago Air Plan relating to energy use and associated emissions	City Development, with ZC support	Partner-led - ORC			Consultation recently opened, with DCC submission anticipated in 24/25.	
Communities & Economies	KS2	Foster collaboration, partnership, and systems change to unlock opportunities and promote a cohesive transition						
Communities & Economies	AA 4	Deepen partnerships and collaboration				Very high		
Communities & Economies	C2.4.1	Support and collaborate with the Zero Carbon Alliance, expand the focus of work, and grow the Alliance as appropriate	ZC with support from ZCA	In partnership - Zero Carbon Alliance		Priority Action	The Zero Carbon Alliance continues to collaborate on emissions- reducing initiatives across their organisations and city-wide. Current work programme focus areas include waste initiatives, as well as initiatives focused on reducing commuting emissions.	
Communities & Economies	C2.4.2	Encourage and support Council Controlled Organisations to reduce emissions and contribute to city-wide emissions reduction efforts, including by supporting implementation of the DCHL Carbon Roadmap	zc	In partnership - DCHL		Priority Action	The DCHL Carbon Roadmap includes a focus area of "Working with DCC to identify and scope opportunities to contribute to city goals." Discussions between the Zero Carbon team and DCHL have continued throughout 2023/24. Conversations specific to each company have been delayed and will take place in 2024/25.	
Communities & Economies	C2.4.3	Implement the Zero Carbon Policy to ensure DCC activities minimise emissions and contribute to the achievement of emissions reduction targets	zc	DCC-led		Priority Action	Zero Carbon Policy guidance documents were completed and published for infrastructure projects, small projects, events and strategy, planning and policy in 2023/24.  Sustainable project management additions to the project management framework were drafted and the first phase of testing was completed in 2023/24. In 2024/25, the changes will be piloted with live projects. Initial exploration work has taken place to determine further opportunities for implementing the Zero Carbon Policy.	
Communities & Economies	C2.4.4	Implement partnership-based actions in other chapters						
Communities & Economies	кѕз	Support innovation and grow diverse low carbon sector	ors and busines	ses				
Communities & Economies	AA 6	Support development of a diverse low carbon economy				High		
Communities & Economies	C3.6.2	Implement in-kind support to help low carbon sectors to grow	ED	DCC-led			Considered as part of EDS refresh.	
Communities & Economies	C3.6.3	Grow circular economies - See action areas 1-5 in the Resources chapter						
Communities & Economies	KS4	Support businesses and sectors to reduce emissions fr	om their opera	tions				
Communities 0	AA 8	Align DCC procurement with Zero Carbon goals				Minor		
Communities & Economies	C4.8.2	Share DCC experience with standardised approach to give effect to the Zero Carbon Policy through procurement to support partners around the city/motu to introduce similar standards	ZC / Procurement	In partnership with interested parties			DCC has presented the approach to several groups and partners in 2023/24. This action will continue in 2024/25.	



Chapter	Reference #	Description	DCC Lead/Support Teams	Role of DCC	DCC EMRP action	Emissions Reduction Potential	Comment on progress to date		
Advocacy across all areas									
All areas		Lobby and advocate to the central government to enable emissions reduction	ZC, with other teams as required	DCC-led			DCC will continue submit on proposed Central Government policy and plans that impact on the DCC's ability to give effect to Action Areas and meet targets.		