



Otago
Regional
Council

Climate Strategy

2024





Contents



Page

Foreword.....	4
Introduction.....	5
Our role as a regional council	6
Addressing climate change in Otago	7
ORC's Partnership and Communities aspirations.....	10
Vision and goals	11–16
Tracking progress	17



Foreword from the Chair

Otago is home to diverse communities, landscapes, and wildlife, all of which are already feeling the impacts of our changing climate.

Though we are taking action to reduce our greenhouse gas emissions, we can still expect the impacts to intensify over time. While the changing climate affects us all, it does not affect us all in the same ways.

We must adapt to manage the changes we are currently experiencing, and the changes yet to come. We can significantly reduce our greenhouse gas emissions while at the same time increasing our resilience, and this is a core theme of our Strategic Directions 2024–2034. This climate strategy complements the Strategic Directions, providing an overview of how ORC is addressing climate change through our work.



Gretchen Robertson
ORC Chair

A handwritten signature in blue ink, which appears to read 'Gretchen Robertson', positioned below the printed name and title.

Introduction

ORC has an aspiration for Otago to be a climate-resilient region that plans for and invests in initiatives that reduce emissions and help us adapt to our changing climate.

This aspiration is part of ORC's Strategic Directions 2024–2034. We have developed this climate strategy to provide more detail on what we're doing to deliver on this aspiration.

We're working towards our aspiration by focusing our actions on 10-year goals, which are also provided in the Strategic Directions 2024–2034.

In this strategy, we have detailed what we're currently doing towards each of these goals, as at 2024.

We'll update this strategy every three years — or more often if needed — to reflect on how we're making progress towards the goals.

Our monitoring and reporting of this strategy will be part of a wider framework of outcome reporting undertaken for our Strategic Directions 2024–2034.

ORC's Strategic Directions 2024–2034



Our role as a regional council

We can all play our part in reducing emissions and building resilience to manage the impacts of climate change. This is challenging but also an opportunity to live and work in a more sustainable way.

As a regional council, our roles and responsibilities are defined by legislation. The Local Government Act 2002 sets our purpose, general powers, principles and processes. Other legislation — such as the Resource Management Act, Biosecurity Act and Land Transport Management Act — defines the specifics of what we do.

ORC fulfils its roles and responsibilities as prescribed in these acts, guided by our Strategic Directions 2024–2034, which includes specific climate-related goals.

In relation to climate change, most of ORC's responsibilities relate to adaptation. This is where we can have significant impact in helping Otago adapt. For example, according to the Resource Management Act, we are required to consider the effects of a changing climate on communities and incorporate climate change

into existing frameworks, plans, projects and standard decision-making procedures. This shows how climate change is already at the core of our everyday work. We will also be working on reducing our emissions and supporting others to do the same.

This strategy provides an overview of how we're implementing the climate-related components of Strategic Directions 2024–2034 to guide ORC's work to support the health, safety and wellbeing of our communities.

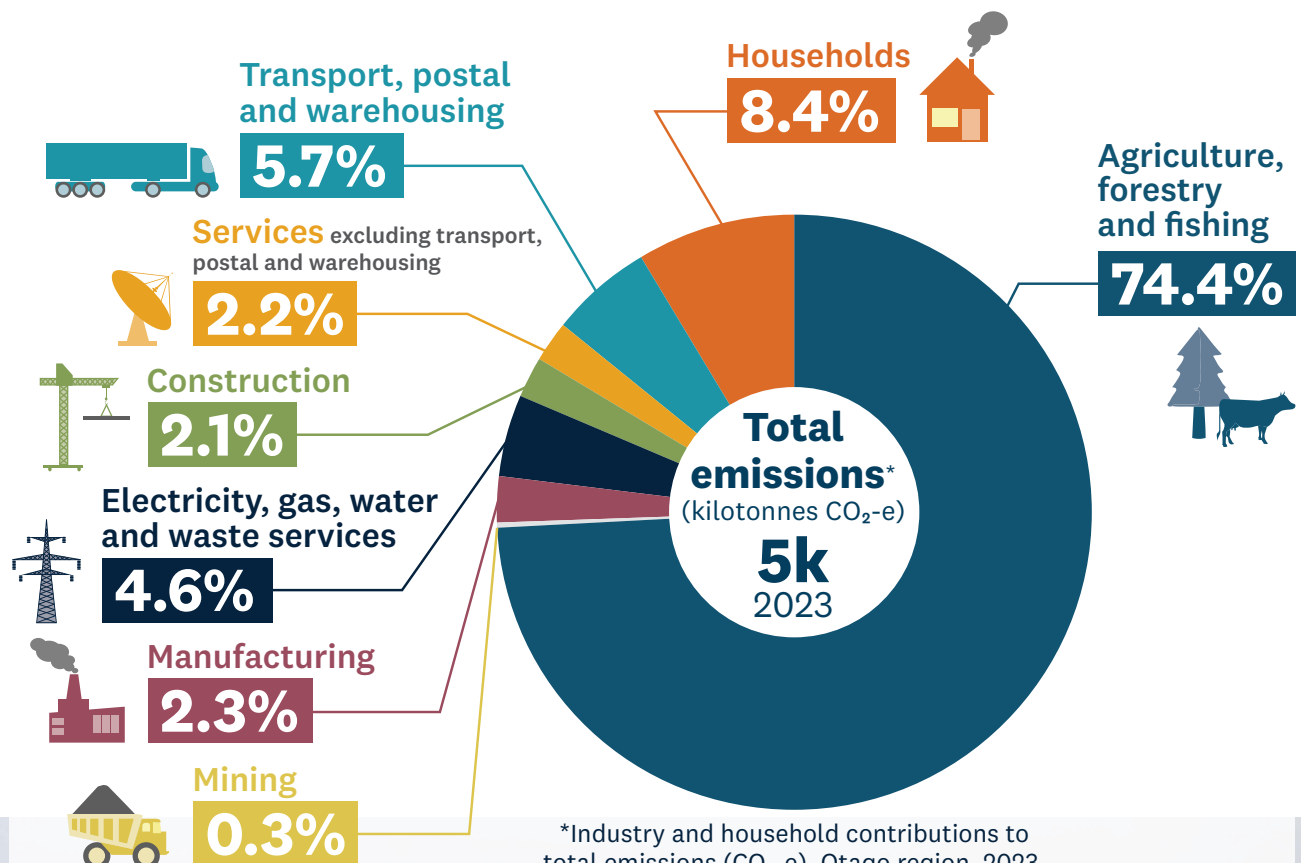
Importantly, ORC is part of a wider network of people and organisations working on climate change. This includes government, mana whenua, other councils, businesses and communities. We will be affected by climate change in different ways and have specific roles in addressing climate change. In developing this climate strategy, we received feedback from mana whenua and key stakeholders to understand what they are doing regarding climate change and how ORC can align our work so our roles are complementary.



Addressing climate change in Otago

Otago's emissions

The information below from Stats NZ helps us to understand the sources of greenhouse gas emissions in Otago. ORC has a role to play by reducing our organisation's emissions and helping others to do the same.



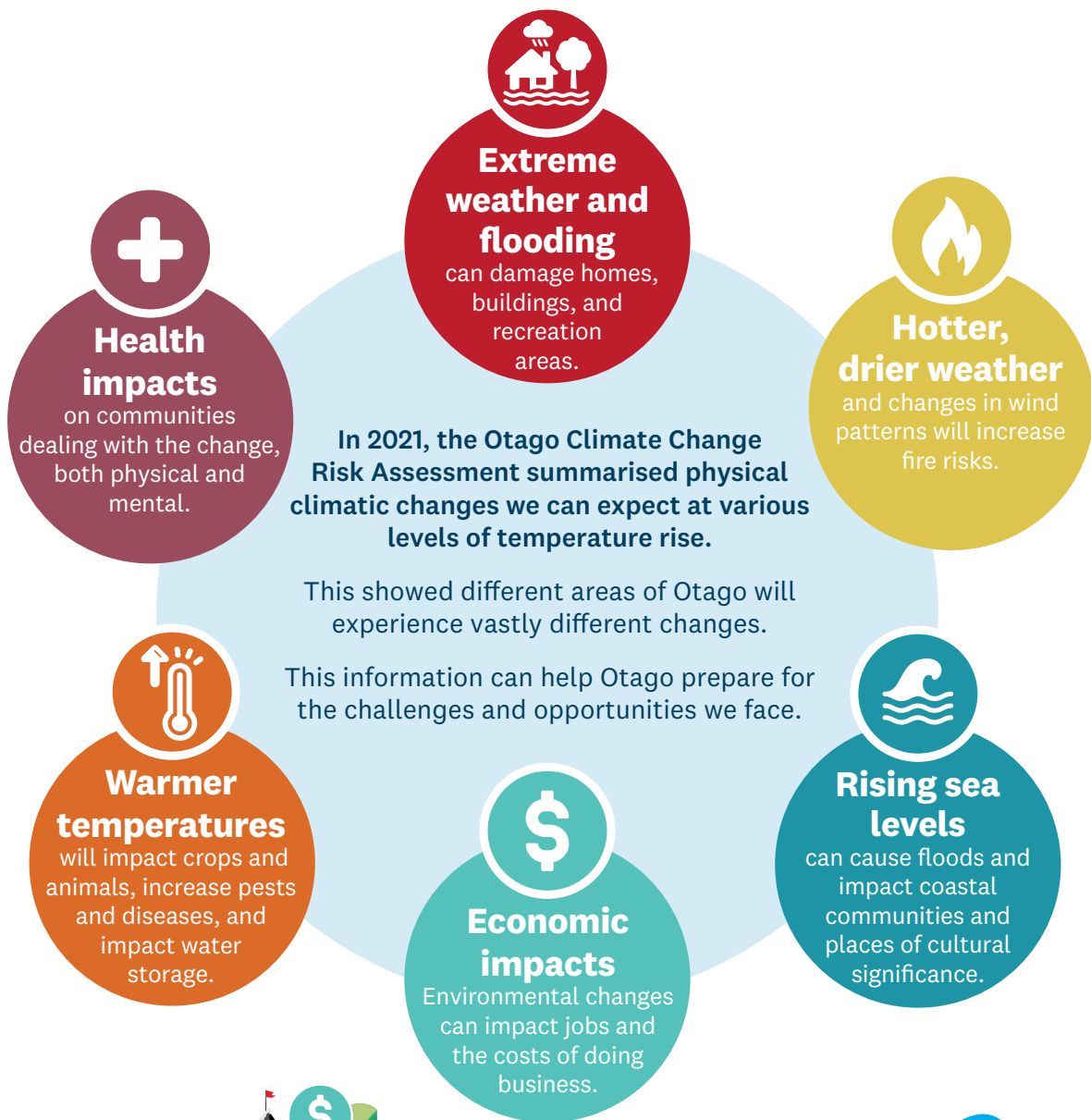
Climate change risks in Otago

Climate change will impact all areas of our lives, including our natural environment, communities, economy, built environment and governance structures.

 Natural Environment	 Built Environment	 Governance	 Communities	 Economy
<p>The ongoing survival and success of Otago's unique species and the ecosystems they rely on is at risk from climate change, as the environment faces increasing temperatures, changes in rainfall, snow and ice, flooding, extreme weather events, drought and ocean acidification.</p>	<p>For buildings, physical infrastructure, and transport, there are already a number of climate hazards and risks, including the ability of our infrastructure and open spaces to cope in the face of changing and extreme weather, sea-level rise and flooding. Many risks relate to reliability of our water supply infrastructure and irrigation systems, and stormwater and wastewater networks.</p>	<p>Governance (our structures and processes for decision making) face several risks from climate change and its impacts. There is the risk that existing planning and legislative frameworks may hinder an effective, long-term, focused response to the challenges of climate change. Another risk is that costs will rise due to climate change impacts, leading to insufficient funding for adaptation and risk reduction.</p>	<p>Climate change brings risks to community cohesion, human health and mental wellbeing from disrupted services, possible migration, housing and livelihood stresses, and other impacts such as food insecurity. Climate change impacts are not spread evenly, which also increases existing inequities and costs of living. Kāi Tahu cultural sites and practices and other cultural heritage sites also face risks from sea-level rise, extreme weather events, and increased wildfire.</p>	<p>There are wide and varied risks from climate change to the Otago economy, as the economy is closely linked to the community, natural environment, and built environment. Risks relate to the impacts of extreme weather, changing temperatures, and drought on the agriculture, forestry, aquaculture, and tourism sectors, among others. Also, there are risks of rising costs of doing business, and costs associated with repair and adaptation.</p>



Dart River estuary near Glenorchy



ORC's Partnership and Communities aspirations guide all our work

PARTNERSHIP

Otago Regional Council has effective and meaningful partnerships with mana whenua, creating better outcomes for our region.

COMMUNITIES

Otago has cohesive and engaged communities that are connected to the environment and each other.



In practice, this means **we will work in partnership with mana whenua, and coordinate and collaborate with other organisations and communities to deliver cohesive climate action.** This recognises that ORC is part of a wider network of people and organisations working on climate change. We will be stronger and more effective if we work together. For example, we're partnering with mana whenua and collaborating with communities to understand which indigenous species and ecosystems are vulnerable to climate change and how we can work together to maintain them.

This also means we're focusing on how we can **enable mana whenua to exercise rakatirataka and increase their climate resilience through supporting the identification of risks to the values of mana whenua and collaborating on Māori-led adaptation planning.** We are committed to making mātauraka Māori an integral part of our work, including in climate adaptation actions. We will work in partnership with mana whenua and focus on the vulnerabilities and aspirations of local rūnaka.

Vision and goals

As described in our Strategic Directions 2024–2034, ORC’s climate aspiration is ‘Otago is a climate-resilient region that plans for and invests in initiatives that reduce emissions and help us adapt to our changing climate’.

Our climate-related goals define our role in contributing to our aspiration and define our priorities for climate action. Many are linked, which shows our commitment to working as a coordinated organisation.

Alongside these goals, you can see some of the actions we’re already taking towards them. While some actions will contribute towards more than one goal, the table on the following pages shows the action alongside the goal that it most closely aligns with.

Despite the significant climate-related work we already do, we need to do more, and do some things differently if we want to achieve our aspirations. We’ll be undertaking a gaps analysis to identify how ORC can — in partnership and in collaboration with others — most effectively deliver on our climate aspirations. We’ll update this table every three years, or more often, if required, to reflect on our progress.



Bob's Cove, Queenstown

Strategic Directions 2024–2034 focus area	Climate-related goal	Actions we’re taking towards the goal
Environment	We predict and address emerging environmental issues before they arise	<ul style="list-style-type: none"> • Undertake a review of the environmental monitoring network to ensure it is fit for purpose and includes additional climate monitoring parameters. • Develop drainage models for assessing scheme capacity against the impacts of climate change (East Taieri, West Taieri, Lower Clutha and Tokomairiro). • Collaborate with Otago’s city and district councils to ensure civil defence and emergency management is informed by specific risks across the region. • Operate a network of near real-time rainfall and water level stations across the region to support flood forecasting and emergency response with a 24/7 duty roster to support forecasting duties and any necessary response. • Review the rainfall monitoring network to determine whether it can be used for purposes other than flood warning, e.g. drought predictions, management of water allocation, etc. • Undertake operational monitoring of coastal mouths and respond to channel flow and flood risks. • Collect data to inform assessments of climate-related impacts in Otago, including coastal, river cross-sections and morphology, landslide and sea-level rise. • Maintain a register of contaminated sites in Otago and advocate for risk assessments and remediation of contaminated sites vulnerable to the effects of climate change. • Undertake an Otago Natural Hazards Risk Assessment and develop a prioritisation framework to assess natural hazard exposure. • Administer the ECO Fund to deliver projects to improve the resilience of local ecosystems and indigenous biodiversity. • Expand ORC’s biosecurity programme to better manage the impact of exotic pest species on indigenous biodiversity and improve the resilience and adaptive capacity of desirable ecosystems.

Strategic Directions 2024–2034 focus area	Climate-related goal	Actions we’re taking towards the goal
Resilience	Plans are in place to ensure that the region’s most vulnerable communities (geographic and demographic) and ecosystems are resilient in the face of natural hazards	<ul style="list-style-type: none"> • Work through Emergency Management Otago to support mana whenua-led approaches to emergency readiness and response by co-funding a two-year emergency management mana whenua facilitator. • Collaborate with Dunedin City Council on the South Dunedin Futures work programme by providing risk assessments, natural hazard investigations, environmental monitoring of groundwater, sea level and rainfall, and supporting the identification and execution of adaptation options. • Work through Emergency Management Otago to raise community awareness of climate hazards and how to prepare, including through the community response network, which provides training and resources to support communities’ capabilities and capacity to manage emergency events. • Support mana whenua in undertaking climate change risk assessments and managing the exposure and vulnerability of taonga by providing technical information and guidance as needed. • Collaborate with Otago’s city and district councils to build on the Otago Climate Change Risk Assessment to provide valuable adaptation information for the region. • Collaborate with Otago’s city and district councils to co-design community education messaging on adaptation needs for the region. • Provide adaptation planning support to mana whenua at a rūnaka level. • Ensure that Catchment Action Plans for different freshwater management units include identification of climate adaptation needs. • Review the Otago Lifelines Infrastructure Vulnerability Assessment to inform ongoing emergency management work. • Collaborate with Otago’s city and district councils to develop shared adaptation priorities based on a consistent risk assessment framework, and to agree on consistent use of dynamic adaptive pathways planning. • Collaborate with Queenstown Lakes District Council on adaptation needs, including regarding wildfire risk on Mount Iron, Ben Lomond and other red zone locations and Gorge Road alluvial fan risk. • Collaborate with Queenstown Lakes District Council on the Head of Lake Whakatipu Natural Hazard Adaptation Strategy to inform adaptation in Glenorchy and Kinloch, considering climate and other natural hazard risks. • Collaborate with Waitaki District Council on adaptation projects and initiatives for Waitaki coastal risk assessment and management.

Strategic Directions 2024–2034 focus area	Climate-related goal	Actions we're taking towards the goal
Resilience	Our infrastructure is designed and built to accommodate variability and uncertainty associated with changing weather patterns and sea level rise	<ul style="list-style-type: none"> • Develop drainage models for assessing scheme capacity against the impacts of climate change (East Taieri, West Taieri, Lower Clutha and Tokomairiro). • Collaborate with Clutha District Council on a multi-hazard adaptation strategy, including reviewing the Lower Clutha Flood Protection scheme regarding engineering solutions compared to retreat, and considering adaptation risks relating to the wider Clutha Delta, including monitoring sea and groundwater levels and shoreline change. • Develop the Lower Taieri Plains Adaptation Strategy, which reviews the flood protection schemes and the impacts of increased climate impacts and natural hazard risks on existing infrastructure, including floodbanks, drainage systems and pump station adequacy. • Conduct an organisational climate change risk assessment (following the agreed regional framework) to scope the risk levels to various ORC assets, infrastructure and operations. • Ensure ORC's budgeting process builds in climate assumptions, including emergency funds for repairing/ replacing infrastructure and reviewing adaptation needs for ORC infrastructure. • Investigate adaptation needs as part of the Leith to Harbour Amenity Project.
Resilience	Our Regional Policy Statement and regional plans control development in areas that are vulnerable to natural hazards	<ul style="list-style-type: none"> • Ensure that climate-related impacts are understood when developing the proposed Regional Plan: Land and Water, and revising the Regional Plan: Coast. • Ensure that climate mitigation and adaptation policies are embedded in the Regional Policy Statement and Future Development Strategies and these reflect the natural hazard and climate impacts and risks for the region. • Advocate to central government for legislation to support local government with managed retreat and other adaptation actions. • Act as a conduit between Fire and Emergency NZ and research institutes to understand how we can best use regulatory settings and regional relationships to manage increased wildfire risk for the region.

Strategic Directions 2024–2034 focus area	Climate-related goal	Actions we’re taking towards the goal
Climate	The carbon footprint of our organisation is reduced in line with our climate strategy, and we are supporting and collaborating with others to do the same	<ul style="list-style-type: none"> • Develop an organisational emissions inventory. • Develop and implement an organisational emissions reduction plan. • Support and collaborate with the Zero Carbon Alliance and Otago Climate Officers Group to understand shared emissions reduction priorities and ensure we’re coordinating on common emissions reduction pathways and utilising common tools and methodologies. • Participate in the Enviroschools programme to promote environmentally friendly behaviour change in Otago communities. • Collaborate with Otago’s city and district councils to fund the Regional Waste Officer role (employed by DCC) to pursue opportunities for regional-level approaches to waste management including resource recovery, waste reduction at source and sludge management.
Climate	Climate change mitigation and adaptation are key considerations in all our decisions	<ul style="list-style-type: none"> • Develop consistent assumptions on climate projections for Otago to underlie all ORC work. • Collaborate with Health New Zealand Te Whatu Ora, National Public Health Service and the region’s city and district councils to explore and better understand the impacts of climate change on human health, and explore how to incorporate these considerations into decision making. • Develop an Otago Natural Hazards Adaptation Plan. • Revise ORC’s Biodiversity Strategy and ensure it is aligned to this strategy and factors in increased climate impacts and natural hazard risks and sets out actions ORC will deliver to enhance Otago’s biodiversity. • Ensure that climate-related impacts and opportunities are understood when revising other regional plans.
Climate	Our agriculture and horticulture systems are more climate resilient in the face of changing weather patterns, water availability and consumer choice	<ul style="list-style-type: none"> • Provide education and advice through catchment advisor programmes to increase knowledge and interest in environmental issues and build community resilience to the impacts of climate change. • Engage with landowners in Otago to understand existing knowledge about nature-based solutions for water quality and flood hazard mitigation outcomes, with a view to exploring barriers and benefits for adoption at an individual property level.

Strategic Directions 2024-2034 focus area	Climate-related goal	Actions we're taking towards the goal
Transport	Carbon emissions are reduced and air quality is improved across the region, supported by our efficient and affordable public transport services	<ul style="list-style-type: none"> • Provide efficient, reliable and accessible public transport services to meet community needs. • Decarbonise the public transport fleet. • Coordinate public transport services with school travel plans. • Explore opportunities to support decarbonisation through the Total Mobility Scheme. • Undertake total mobility survey, bus user survey and annual survey to understand current modes of transport and community views on reliability, equitability, sustainability and safety.
Transport	Active transport is the preferred mode for short journeys in urban areas	<ul style="list-style-type: none"> • Collaborate with Otago's city and district councils to reduce car use and encourage public transport uptake through traffic demand management initiatives such as parking plans, active transport, micro-mobility and carpooling. • Submit on consent applications at the district level to maximise potential integration with the public transport network. • Develop and implement a public and active transport connectivity strategy to encourage active modes of travel and reduce vehicle emissions.

Tracking progress

Our monitoring and reporting of this strategy will be part of a wider framework of outcome reporting undertaken for our Strategic Directions 2024–2034.

When it's ready, we'll update this strategy to include this reporting information. We'll then keep it updated every three years to reflect on how we're making progress towards these climate goals.

