



Otago
Regional
Council

Draft Strategic Climate Action Plan

2024





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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 whilst concurrently increasing our resilience, but we need a clear plan of how to do this. This is ORC's plan.



Gretchen Robertson
ORC Chair

Introduction

ORC has a vision for a low-emissions Otago with climate-resilient ecosystems, communities and businesses.

The purpose of this plan is to align ORC's work programmes with our vision, and clearly communicate how we are doing this for the communities we serve.

We will work towards our vision by focusing on 10-year goals through the actions described in this plan.

The plan will be reviewed and updated every three years — or more often if needed — to

take advantage of emerging opportunities and ensure we stay on track to achieve our goals.

This plan will support our role in promoting the social, economic, environmental and cultural wellbeing of Otago's communities, taking a sustainable development approach. It will ensure we are best serving Otago across our work programmes as we become increasingly impacted by climate change.

We will monitor and report on our progress as described in the [tracking progress](#) section of this plan, and continually improve this as we build up our internal and external reporting systems.

The bigger picture

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.

We operate within a wider context of climate action. In 2015, the Paris Agreement was agreed to by almost every country in the world. This committed signatories to take action to limit global warming to 2°C, strive for 1.5°C and adapt to the adverse impacts of climate change by fostering climate resilience. The signing of the Paris Agreement, the increasingly frequent and severe climate-related events, and changing consumer preferences have catalysed climate action. There is an expectation we should all play a part in this global effort — from the corporate world and food producers to councils, communities and individuals.

In Aotearoa New Zealand, the Climate Change Response Act sets out the Government's commitments to address climate change. This includes emissions reduction targets of reducing all gases except biogenic methane to net zero by 2050 and reducing biogenic methane by 24%–47% by 2050, with an interim

target of 10% by 2030. These targets are guided by five-yearly Emissions Reduction Plans, which set out the Government policies to reduce emissions towards these targets — many of which will involve councils, including ORC.

On adaptation, the Act commits the Government to publish a National Climate Change Risk Assessment every six years, and address the risks identified through a National Adaptation Plan. The Government is also undertaking work to develop a framework to strengthen Aotearoa New Zealand's adaptation response.

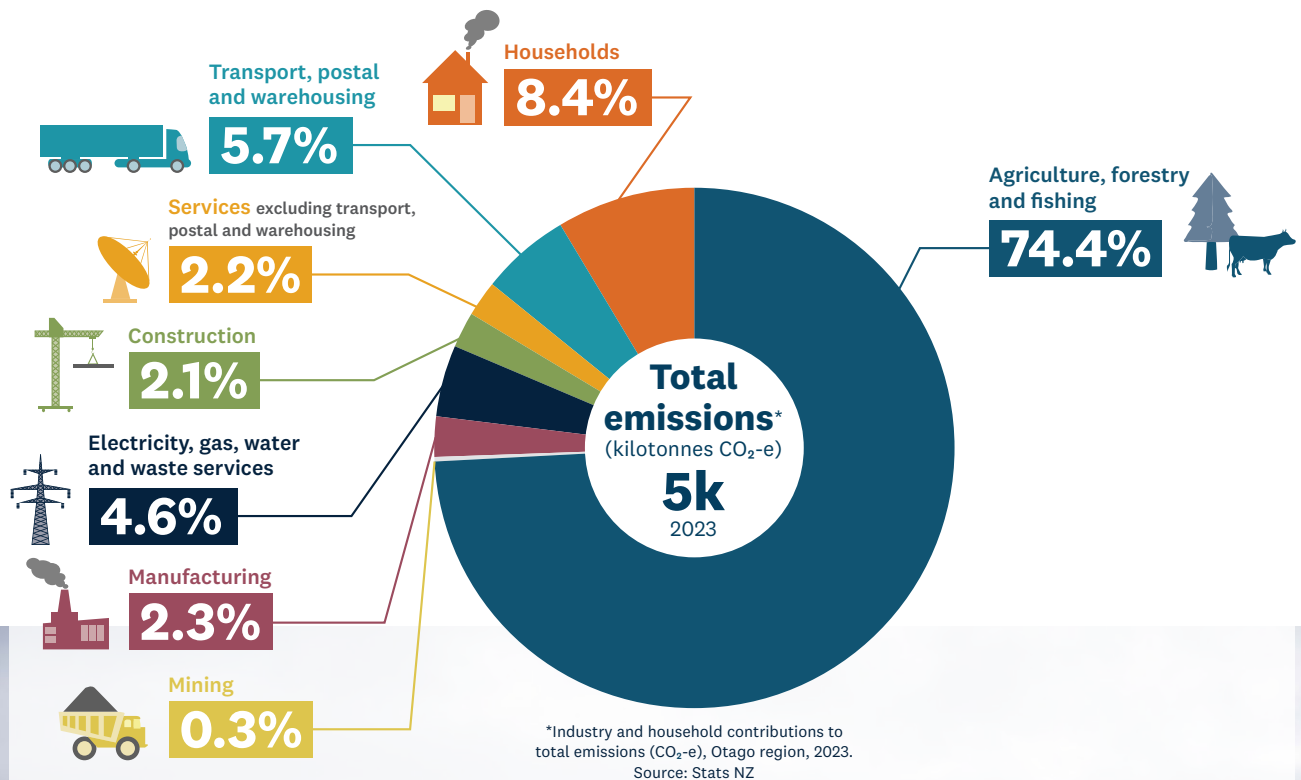
Otago people are taking action to address climate change. For example, businesses are reducing their emissions and addressing their climate vulnerabilities to grow their success and resilience in a sustainable, climate-aware future.

As we developed this plan, we considered international, national and local action, recognising the need for a plan to help us play our part in leading climate action in Otago.

Addressing climate change in Otago

Otago's emissions

The information below from StatsNZ helps us to understand the sources of greenhouse gas emissions in Otago. Through this plan, we have identified what ORC should do to influence these emissions and support Otago's transition towards a low-emissions region.



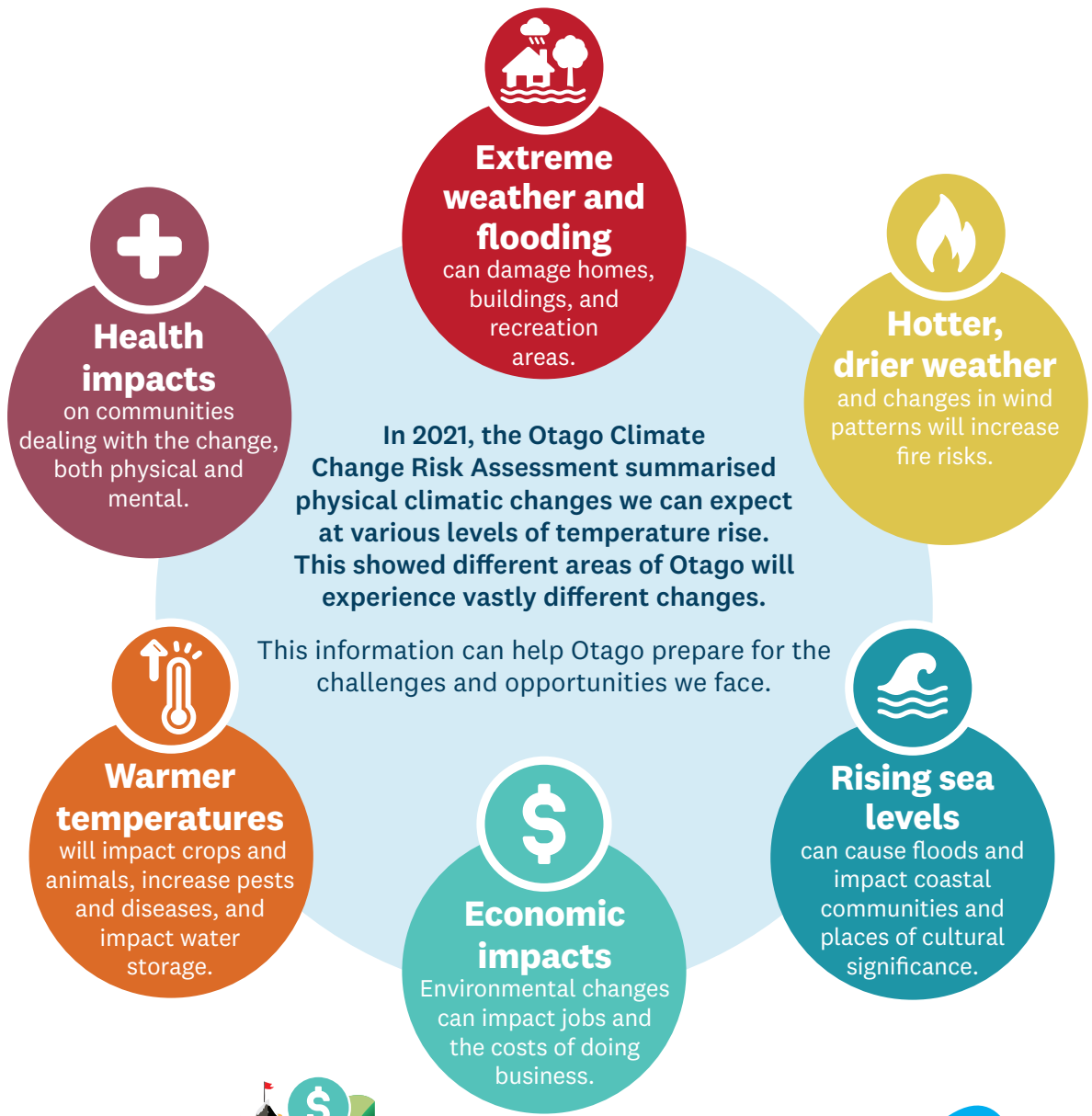
Bob's Cove, Queenstown

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>





Otago Regional Council within this wider climate change context

ORC's roles and responsibilities are defined by legislation. The Local Government Act 2002 sets our purpose, general powers, principles and processes. This says we should take a broad role in promoting the social, economic, environmental and cultural wellbeing of our community, taking a sustainable development approach. 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 priorities. Our overall vision for Otago, as described in our Strategic Directions 2024-2034, is:

Our environment and communities are healthy and connected ki uta ki tai (from the mountains to the sea).

Climate change is affecting how we work and a significant number of climate change focused workstreams are underway. We recognise we must be proactive and consider how we are addressing climate change across all our work programmes to promote the social, economic, environmental and cultural wellbeing of Otago

people. This prompted the development of this plan.

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. These roles include leading action, partnering and collaborating on actions and influencing one another's actions. It is important we focus on the action we are best positioned to deliver and to work together effectively and efficiently.

This plan focuses on what ORC is doing and will work on. It will guide ORC's work to support emissions reduction and adaptation to the impacts of climate change, which will support the health, safety and wellbeing of our communities.

Through the development of this plan, we received feedback from mana whenua and key stakeholders to understand what they are doing regarding climate change and how ORC can align its work so our roles are complementary.



Vision and goals

Our vision for a low-emissions Otago that has climate-resilient ecosystems, communities and businesses is ambitious and we cannot achieve this on our own.

Our vision has two components: **climate mitigation** and **climate adaptation**. Our goals define our role in contributing to our vision and form our toolbox for climate action. Many are linked, which shows our commitment to working as a coordinated organisation.



10-year mitigation goals

1.1

ORC provides reliable and relevant information to Otago's leaders, mana whenua, communities and businesses to support them to make well-informed decisions to mitigate emissions.

ORC collects, produces and provides information that supports others to make well-informed decisions about their emissions and sequestration opportunities.

This goal ensures information we produce is useful and reaches the right audience. This is part of our role as a trusted source of information for decision-makers in Otago.

1.2

ORC operates low-emissions, efficient and affordable public transport services that are widely used by Otago people and visitors.

ORC is responsible for providing public transport services. This gives us an opportunity to reduce the region's emissions by offering low-emissions, efficient and affordable options for Otago people and visitors to get to their destinations.

We want more people to use our public transport, which would reduce the region's transport emissions. This would also reduce fuel and parking costs and reduce traffic congestion.

1.3

ORC works in partnership with mana whenua and coordinates and collaborates with other agencies and communities to deliver cohesive climate mitigation action.

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. This goal focuses on the way we act on mitigation in Otago.

Achieving this goal means partnering with mana whenua to support mitigation action, collaborating with other authorities — including other councils and central government to share toolboxes and undertake emissions reduction activities — and working with our communities, who must be at the heart of climate action.

1.4

ORC has delivered on the community's expectations to be a low-emissions organisation.

ORC contributes to climate change through our emissions; we have buildings, a vehicle fleet and contracted work across Otago. We recognise we should be taking the lead by measuring our emissions and managing them according to our vision.

This goal focuses on our commitment to reduce ORC's greenhouse gas emissions at the scale and pace that our community expects.

10-year adaptation goals

2.1

ORC enables 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 empower mana whenua to lead adaptation solutions that will enable them to thrive. We will work in partnership with mana whenua and focus on the vulnerabilities and aspirations of local rūnaka.

2.2

ORC works in partnership with mana whenua and coordinates and collaborates with other agencies and communities to deliver cohesive climate adaptation action.

Our climate action plan will be stronger and more effective if we work together on solutions.

This goal focuses on how ORC operates and recognises achieving our vision for adaptation requires partnering with mana whenua and collaborating with government, other councils and communities to grow our knowledge, skills and tools to build a climate-resilient future.

2.3

ORC effectively supports communities to reduce the impact of, be ready for, respond to and recover from climate-related events.

We must prepare for the impacts of climate change that are already happening. Droughts are getting worse and water security is becoming an issue. Meanwhile, rainfall intensity is increasing in some areas, creating higher flood risk which is compounded by sea-level and groundwater rise. The 2015 South Dunedin flood event showed the devastation this can cause.

ORC is responsible for Civil Defence Emergency Management and therefore must prepare Otago people for climate-related events so they are stronger and can recover quickly when these events happen. This goal focuses on ORC fulfilling this responsibility so Otago people are more resilient and confident we will support them.

2.4

ORC provides reliable and relevant information to Otago's leaders, mana whenua, communities and businesses to support them to make well-informed decisions to increase their climate resilience.

ORC aims to collect, produce and provide information that supports others to make well-informed decisions to improve their climate resilience. This includes the Otago Climate Change Risk Assessment, but we also have information about opportunities that could arise from our changing climate. This information could inform decision making to improve how we support our ecosystems and local economic growth, founded on reliable environmental projections.

This goal focuses on ensuring information ORC produces is useful and reaching the right audience, which maximises the value we provide.

2.5

ORC supports the resilience of indigenous biodiversity.

Otago's ecosystems and landscapes are important to mana whenua mātauraka and exercise of katiakitaka and rakatirataka. Indigenous biodiversity is also important for the health of our ecosystems and our people, and supports sustainable resource use.

Otago faces biodiversity loss as well as climate change. These crises are linked: climate change puts pressure on biodiversity, and biodiversity decline impacts the natural climate resilience. This goal seeks to address both crises.

We will partner with mana whenua and collaborate with councils, government, communities and businesses to understand which indigenous species and ecosystems are vulnerable to climate change and how we can work together to maintain them.

2.6

ORC effectively manages climate-related biosecurity threats.

In Otago, climate change will exacerbate the pressure from biosecurity threats on indigenous biodiversity and our local economy. As Otago's climate changes, pests and diseases that have previously struggled to survive here may be more successful.

We will mitigate the negative impacts of this through awareness and proactive management. The Biosecurity Act says ORC's role is to prevent, reduce or eliminate adverse effects from harmful organisms. We will partner with mana whenua and collaborate with councils, government, communities and businesses to understand these pressures and threats and work together to manage them.

2.7

ORC has delivered on the community's expectations to be climate resilient in its operations and infrastructure.

We must adapt the way we work as our climate changes and we face new and intensified risks and emerging opportunities. ORC will factor these into our decision making and adapt our infrastructure and the way we work to best serve Otago people. Our infrastructure includes the buildings we work in and flood and drainage infrastructure to keep people dry.

This goal focuses on understanding the risks our organisation faces and ensures we are proactively managing our resources and adapting the way we work and the services we provide to be more climate resilient.

Action plan

This is the first version of the action plan, which shows what we are doing, and plan to do, to deliver our goals. We already do a lot of work on climate change, as this plan demonstrates.

This work includes providing climate-related information, providing public transport services that support low-emissions travel, and undertaking place-based climate and natural hazard planning. We also support emergency management services to support Otago people to reduce their vulnerability to climate-related events, be ready for them, respond to them and recover from them.

do more and do some things differently if we want to achieve our 10-year goals. One of our first new actions will be a gaps analysis. This will help identify what else we should be doing.

We will update this action plan every three years, or more often, if required, to reflect our progress. With each update, the action plan will further meet our goals.

Despite the significant climate-related work we already do, we need to

	Status	Action	Goals this contributes to	Team responsible
Within ORC	New	Undertake a gaps analysis of goals and work programmes to understand where changes are needed. Develop clearer pathways towards achieving each goal.	All goals	• Strategy
	Underway or planned	Develop an organisational emissions inventory.	1.4	• Strategy • Fleet & Facilities
	New	Develop and implement an organisational emissions reduction plan for ORC.	1.4	• Strategy
	New	Develop and implement ORC procurement policies that prefer low-emissions sources.	1.4	• Fleet & Facilities
	New	Conduct an organisational climate change risk assessment (following the agreed regional framework) to scope the risk levels to various ORC assets, infrastructure and operations.	2.7	• Strategy
	New	Reflecting on the organisational climate change risk assessment, implement an adaptation action plan to improve resilience.	2.7	• Strategy
	Underway or planned	Ensure ORC's budgeting process builds in climate assumptions, including emergency funds for repairing/replacing infrastructure and reviewing adaptation needs for ORC infrastructure.	2.3, 2.7	• Engineering • Finance

	Status	Action	Goals this contributes to	Team responsible
Advice, information, and education	Underway or planned	Provide information about regional greenhouse emissions.	1.1, 1.3	• Strategy
	New	Ensure that common tools and methodologies are used across ORC and Otago's city and district councils to model emissions reduction scenarios, projections and inventories for Otago.	1.1, 1.3	• Strategy
	Underway or planned	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.	1.1	• Strategy
	Underway or planned	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.	2.1, 2.2	• Natural Hazards
	Underway or planned	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.	2.2, 2.4	• Strategy
	New	Ensure the ORC Natural Hazards Portal includes information on climate-related hazards to provide the community with a single location for information.	2.4	• Natural Hazards
	Underway or planned	Ensure that ORC's messaging around climate adaptation and ORC's adaptation workstreams is communicated in a way that is understood by a wide audience.	2.4	• Communications
	Underway or planned	Collaborate with Otago's city and district councils to co-design community education messaging on adaptation needs for the region.	2.2, 2.4	• Natural Hazards • Communications
	Underway or planned	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.	2.4	• Environmental Implementation

	Status	Action	Goals this contributes to	Team responsible
Advice, information, and education continued	Underway or planned	Attend Otago Extension Network meetings hosted by the Ministry for Primary Industries to understand initiatives underway to support farmers to deliver environmental outcomes and ensure ORC is operating effectively in this space.	1.1, 1.3, 2.2, 2.4	• Environmental Implementation
	New	Consolidate research on agriculture and local food resilience in the Otago region considering climate impacts, including climate forecasting, soil moisture and growing season estimates.	1.1, 2.4	• Science
	Underway or planned	Participate in the Enviroschools programme to promote environmentally friendly behaviour change in Otago communities.	1.1, 1.3, 2.2, 2.4	• Communications
	New	Expand Enviroschools to include a specific focus on climate change mitigation and adaptation behaviour change needs for future climate-resilient communities.	1.1, 2.4	• Communications
	Underway or planned	Ensure adapting to our changing climate and mitigating emissions is a regular feature in Te Mātāpuna newsletter as it relates to ORC work programmes.	1.1, 2.4	• Communications
	Underway or planned	Maintain ORC website climate change pages with relevant and up-to-date information, options for council and private mitigation and council's responses.	1.1, 2.4	• Strategy • Communications
	Underway or planned	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.	1.1, 2.2	• Executive Advice
	New	Advocate to government for government work to identify the impacts of climate change on regional economies.	2.2, 2.4	• Policy
	New	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.	2.2, 2.4	• Strategy

	Status	Action	Goals this contributes to	Team responsible
Advice, information, and education continued	New	Investigate energy security issues in Otago to determine whether this is a barrier to reducing reliance on solid fuel burning.	1.1	• Science
	New	Explore opportunities to fund interns from University of Otago and Te Pukenga – Otago Polytechnic to participate in ORC climate work.	1.3, 2.2	• Strategy
	New	Develop consistent assumptions on climate projections for Otago to underlie all ORC work and work to ensure alignment with Otago’s city and district councils.	All goals	• Strategy • Science • Natural Hazards
	New	Ensure that climate change (mitigation and adaptation) is a regular item on the Mayoral Forum for councils to provide updates on their climate work.	1.1, 1.3, 2.2, 2.4	• Strategy
	New	Assess the implications of the Māori Climate Platform (partnership between tangata whenua and MfE) if published and incorporate into ORC’s work programmes.	1.3, 2.1, 2.2	• Strategy
Environmental monitoring	Underway or planned	Undertake a review of the environmental monitoring network to ensure it is fit for purpose and includes additional climate monitoring parameters.	2.3, 2.4	• Science • Environmental Monitoring • Natural Hazards
	Underway or planned	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.	2.3, 2.4	• Environmental Monitoring • Natural Hazards
	Underway or planned	Undertake operational monitoring of coastal mouths and respond to channel flow and flood risks.	2.3, 2.4	• Engineering
	Underway or planned	Collect data to inform assessments of climate-related impacts in Otago, including coastal, river cross-sections and morphology, landslide and sea-level rise.	2.4	• Natural Hazards
	Underway or planned	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.	2.2, 2.4	• Compliance • Natural Hazards

	Status	Action	Goals this contributes to	Team responsible
Addressing climate impacts	Underway or planned	Provide adaptation planning support to mana whenua at a rūnaka level.	2.1, 2.3, 2.4	• Natural Hazards
	Underway or planned	Undertake an Otago Natural Hazards Risk Assessment.	2.4	• Natural Hazards
	Underway or planned	Based on the Otago Natural Hazard Risk Assessment, develop a prioritisation framework to assess natural hazard exposure.	2.4	• Natural Hazards
	Underway or planned	Develop an Otago Natural Hazards Adaptation Plan.	2.4	• Natural Hazards
	New	Collaborate with Otago’s city and district councils to assess how our collective actions address the Otago Climate Change Risk Assessment and the Natural Hazards Risk Assessment, and how we can improve.	2.1, 2.2, 2.3, 2.4	• Strategy • Natural Hazards
	Underway or planned	Collaborate with Otago’s city and district councils to develop shared adaptation priorities based on a consistent risk assessment framework.	2.2	• Natural Hazards • Strategy
	Underway or planned	Collaborate with Otago’s city and district councils to agree on consistent use of dynamic adaptive pathways planning.	2.2	• Natural Hazards • Strategy
	Underway or planned	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.	2.2, 2.4	• Natural Hazards
	Underway or planned	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.	2.2, 2.4	• Natural Hazards
	Underway or planned	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.	2.2, 2.4	• Natural Hazards • Engineering

	Status	Action	Goals this contributes to	Team responsible
Addressing climate impacts continued	Underway or planned	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.	2.2, 2.4	• Natural Hazards
	Underway or planned	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 flood banks, drainage systems and pump station adequacy.	2.2, 2.4	• Natural Hazards • Engineering
	Underway or planned	Investigate adaptation needs as part of the Leith to Harbour Amenity Project.	2.2, 2.4	• Natural Hazards • Engineering
	Underway or planned	Collaborate with Waitaki District Council on adaptation projects and initiatives for Waitaki coastal risk assessment and management.	2.2, 2.4	• Natural Hazards
	Underway or planned	Ensure that Catchment Action Plans for different freshwater management units include identification of climate adaptation needs.	2.4	• Environmental Implementation
	New	Explore opportunities to support Otago's rural economies through water storage related projects.	2.4	• Strategy • Science
	Underway or planned	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.	2.2, 2.6	• Environmental Implementation • Natural Hazards
	Underway or planned	Develop drainage models for assessing scheme capacity against the impacts of climate change (East Taieri, West Taieri, Lower Clutha and Tokomairiro).	2.4, 2.7	• Engineering • Natural Hazards
	Underway or planned	Advocate to central government for legislation to support local government with managed retreat and other adaptation actions.	2.2, 2.4	• Natural Hazards • Policy
	Underway or planned	Advocate to central government for investment in adaptation initiatives through applications for funding through the Ministry for Business, Innovation and Employment, Rivers Special Interest Group and other funding opportunities.	2.2	• Engineering • Natural Hazards

	Status	Action	Goals this contributes to	Team responsible
Biodiversity and biosecurity	Underway or planned	Partner with iwi and collaborate with communities and landowners to develop and implement projects which enhance water quality and indigenous biodiversity in selected water bodies.	2.1, 2.5	• Environmental Implementation
	Underway or planned	Revise ORCs Biodiversity Strategy and ensure it is aligned to this plan and factors in increased climate impacts and natural hazard risks and sets out actions ORC will deliver to enhance Otago's biodiversity.	2.5	• Strategy
	Underway or planned	Implement an indigenous biodiversity monitoring programme in Otago which provides accurate, relevant and timely information to decision-makers and the Otago public.	2.5	• Science • Environmental Monitoring
	Underway or planned	Administer the Eco Fund to deliver projects to improve the resilience of local ecosystems and indigenous biodiversity.	2.5	• Environmental Implementation
	Underway or planned	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.	2.6, 2.5	• Environmental Implementation
	Underway or planned	Deliver on the Regional Pest Management Plan.	2.6, 2.5	• Environmental Implementation
	New	Advocate to government for greater investment in strengthening biosecurity.	2.2, 2.6, 2.5	• Policy • Environmental Implementation

	Status	Action	Goals this contributes to	Team responsible
Emergency management	Underway or planned	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.	2.1, 2.3	• EMO
	Underway or planned	Collaborate with Otago's city and district councils to ensure civil defence and emergency management is informed by specific risks across the region.	2.2, 2.3, 2.4	• EMO • Natural Hazards
	Underway or planned	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.	2.2, 2.4	• EMO
	Underway or planned	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.	2.3, 2.4	• EMO
	Underway or planned	Implement the National Disaster Resilience Strategy.	2.3, 2.4	• EMO
	Underway or planned	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.	2.3, 2.4	• Natural Hazards • Engineering • Environmental Monitoring • EMO
	Underway or planned	Support the Otago Civil Defence and Emergency Management Group in improving the resilience of Otago.	2.3, 2.4	• Engineering
	Underway or planned	Review the Otago Lifelines Infrastructure Vulnerability Assessment to inform ongoing emergency management work.	2.3, 2.4	• EMO • Natural Hazards

	Status	Action	Goals this contributes to	Team responsible
Transport	Underway or planned	Provide efficient, reliable and accessible public transport services to meet community needs.	1.2	• Transport
	Underway or planned	Decarbonise the public transport fleet.	1.2, 1.4	• Transport
	Underway or planned	Explore opportunities to support decarbonisation through the Total Mobility Scheme.	1.2, 1.3	• Transport
	Underway or planned	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 car-pooling.	1.2, 1.3	• Transport
	Underway or planned	Coordinate public transport services with school travel plans.	1.2, 1.3	• Transport
	Underway or planned	Submit on consent applications at the district level to maximise potential integration with the public transport network.	1.2, 1.3	• Policy • Transport
	Underway or planned	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.	1.2	• Transport
	Underway or planned	Develop and implement a public and active transport connectivity strategy to encourage active modes of travel and reduce vehicle emissions.	1.2, 1.3	• Transport
	Underway or planned	Develop a Workplace Travel Plan for ORC to encourage a shift to less emissions-intensive modes of employee transport that are better for human health.	1.2, 1.3, 1.4	• Strategy
	New	Explore feasibility of interregional public transport options and funding with Environment Southland and Environment Canterbury.	1.2, 1.3	• Transport

	Status	Action	Goals this contributes to	Team responsible
Regional policies, plans, future development strategies, long-term plans, consents	Underway or planned	Ensure that climate-related impacts are understood when revising the Regional Plan: Air and Air Quality Strategy, including addressing barriers to greater uptake of low-emissions domestic heating options.	1.1, 1.3, 2.2, 2.4	<ul style="list-style-type: none"> • Strategy • Policy
	Underway or planned	Ensure that climate-related impacts are understood when developing the proposed Land and Water Regional Plan.	1.1, 1.3, 2.2, 2.4	<ul style="list-style-type: none"> • Policy
	Underway or planned	Ensure that climate-related impacts are understood when revising the Regional Plan: Coast.	2.2, 2.4	<ul style="list-style-type: none"> • Policy
	Underway or planned	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.	1.3	<ul style="list-style-type: none"> • Policy
	Underway or planned	Collaborate with the region's city and district councils to ensure common mitigation and adaptation priorities are reflected in long-term plans.	1.2, 2.2	<ul style="list-style-type: none"> • Policy • Strategy
	New	Assess the efficacy of the provisions in the Regional Policy Statement and regional plans to give effect to the goals of this Strategic Climate Action Plan and ORC's organisational strategic goals.	All goals	<ul style="list-style-type: none"> • Strategy • Policy
	New	Provide professional development and training to support the resource consent team to develop capacity to assess new consent requirements regarding greenhouse emissions in the Resource Management Act from 2022. May include improving technical literacy for consent considerations such as process heat standards and processes, alternative low-carbon heat methods and greenhouse gas emissions reduction plans etc.	1.1	<ul style="list-style-type: none"> • Consents
	New	Ensure that submissions made on behalf of ORC advocate for options that are less emissions intensive and/or enable emissions reduction.	1.1, 1.3	<ul style="list-style-type: none"> • Policy

Tracking progress

ORC will track progress of this plan using a framework for reporting, monitoring and re-evaluation. This process will ensure we are continually improving by undertaking the right actions to get us where we want to be.

The reporting framework has two levels:

1. Outcome:

Reporting on progress against our 10-year goals. This outcome monitoring is based on several indicators corresponding to the goals, as these are the outcomes we are seeking to deliver. This is otherwise known as “what success looks like”.

2. Output:

Reporting on progress in delivering the actions that contribute to the outcomes. This will be based on ORC’s internal monitoring and reporting system.

The tables on the following pages demonstrate how we will undertake our outcome reporting. The indicators for tracking progress are based on measures and data sources that are already available to us, or that we will be developing as a priority in the first stage of implementing this plan.

We are still developing an easy-to-read format for our output reporting. This will be based on our internal monitoring and reporting system. We will make this available as part of our first cycle of reporting, monitoring and re-evaluation.

The two levels of reporting will feed into a simple traffic-light monitoring system, through which we will assess whether we are on-track, or whether we need to adjust some areas. This monitoring and reporting will together inform our re-evaluation and, therefore, updates to our action plan.

We will publish our monitoring, reporting, and re-evaluation framework regularly when we update the action plan. This is expected to happen every three years or more often as required. Our first cycle of reporting, monitoring and re-evaluation will establish our baselines for each goal. These baselines will be what we track progress against.



Mitigation goals	Indicator (measure and data source)
1.1: ORC provides reliable and relevant information to Otago’s leaders, mana whenua, communities and businesses to support them to make well-informed decisions to mitigate emissions.	Customer perceptions survey respondents regarding ORC as valuable source of information.
	We publish information on the greenhouse gas emissions in the region.
	Website traffic on ORC information accessed.
	Other notable engagement with ORC material, i.e. increased collaboration with groups on climate mitigation in work programmes.
1.2: ORC operates low-emissions, efficient and affordable public transport services that are widely used by Otago people and visitors.	ORC’s organisational GHG emissions inventory.
	Bus patronage survey response on efficiency and affordability of services.
	Customer perceptions survey responses regarding community views on efficiency and affordability of services.
	Bus delay data.
1.3: ORC works in partnership with mana whenua and coordinates and collaborates with other agencies and communities to deliver cohesive climate mitigation action.	Customer perceptions survey responses regarding ORC coordination and collaboration with others in Otago.
	Direct engagement with rūnaka and local councils regarding ORC coordination and collaboration with others in Otago.
1.4: ORC has delivered on the community’s expectations to be a low-emissions organisation.	ORC’s organisational GHG emissions inventory.
	Customer perceptions survey responses regarding expectations on ORC’s GHG emissions.

Adaptation goals	Indicator (measure and data source)
2.1: ORC enables 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.	Customer perceptions survey regarding ORC support to Kāi Tahu-led adaptation action.
	Direct feedback from rūnaka regarding ORC support to Kāi Tahu-led adaptation action.
	Otago Climate Change Risk Assessment data on vulnerability of places of cultural value.
	National Climate Change Risk Assessment data on vulnerability of places of cultural value.
2.2: ORC works in partnership with mana whenua and coordinates and collaborates with other agencies and communities to deliver cohesive climate adaptation action.	Customer perceptions survey responses regarding ORC coordination and collaboration with others in Otago.
	Direct engagement with rūnaka and local councils regarding ORC coordination and collaboration with others in Otago.

Adaptation goals <small>continued</small>	Indicator (measure and data source)
2.3: ORC effectively supports communities to reduce the impact of, be ready for, respond to and recover from climate-related events.	Alignment of Civil Defence Plan to identified risks in Climate Change Risk Assessment.
	Alignment of Emergency Management Otago plans and strategies to identified risks in Climate Change Risk Assessment.
	Otago Climate Change Risk Assessment and alignment to National Climate Change Risk Assessment.
	National Climate Change Risk Assessment.
	EMO Annual Survey responses regarding effectiveness of ORC approach.
2.4: ORC provides reliable and relevant information to the region's leaders, mana whenua, communities and businesses to support them to make well-informed decisions to increase their climate resilience.	Otago Climate Change Risk Assessment data on number of high-risk areas identified.
	Website traffic on ORC information accessed.
	Other notable engagement with ORC material, i.e. increased collaboration with groups on climate adaptation across work programmes.
	Customer perceptions survey responses regarding ORC as valuable source of information.
	EMO Annual Survey responses on climate risks and alignment to Otago Climate Change Risk Assessment.
2.5: ORC supports the resilience of indigenous biodiversity.	ORC collected data on species at risk from the impacts of climate change.
	Customer perceptions survey responses regarding risks for Otago.
2.6: ORC effectively manages climate-related biosecurity threats.	ORC collected data on species at risk from the impacts of climate change.
	Customer perceptions survey responses regarding risks for the region.
	ORC collected data on spread of exclusion pests.
2.7: ORC has delivered on the community's expectations to be climate-resilient in its operations and infrastructure.	ORC's Organisational Risk Assessment information on ORC infrastructure and operations at risk.
	Budget data on unplanned expenditure for climate-related responses.
	Customer perceptions survey responses regarding expectations on ORC climate resilience.
	Staff survey responses regarding ORC climate resilience.
	Ministry for the Environment Adaptation Preparedness survey input.