



# AIR QUALITY STRATEGY FOR OTAGO



# ABOUT THIS STRATEGY

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This strategy aims to identify the Otago Regional Councils approach to delivering good air quality. It establishes a starting point for discussions with stakeholders and community. It will evolve as new knowledge is developed, stakeholders become invested and national legislation is reviewed.





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# AIR QUALITY IN OTAGO

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**Air quality affects everyone in Otago. Poor air quality has an impact on the health of our people. The aim of this strategy is to ensure that, air quality issues are resolved and air is safe to breathe for everyone, at all times of the year.**

Air quality is important to everyone. Pollutants can cause unpleasant smells and poor visibility, but most importantly poor air quality impacts on human health.

Air pollution can come from many sources both natural and anthropogenic - environmental pollution originating in human activity. Research shows that once inhaled these pollutants can have numerous adverse health effects, particularly for the elderly, the very young and those with existing respiratory conditions.

In 2004 the government developed national standards for air quality, in part to guarantee a level of protection for the health of all New Zealanders. Most of the year air quality in Otago is very good, but in winter when chimney emissions peak, ambient (outdoor) air quality is often degraded, particularly in areas such as Alexandra, Arrowtown, Clyde, Cromwell, Milton and Mosgiel.

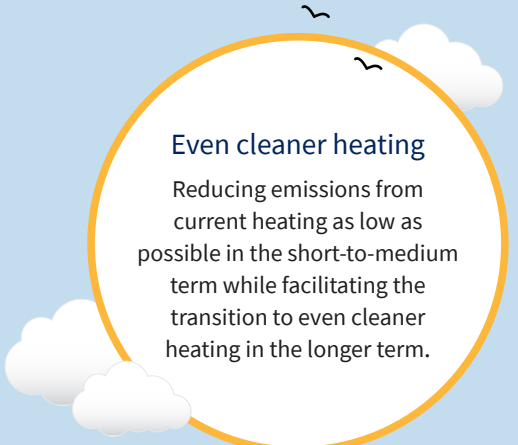



Ten years ago, the Otago Regional Council developed a multi-faceted strategy to managing air quality in Otago, with the aim of meeting the national standards for air quality.

Since then, emissions have significantly reduced in the towns with air quality problems. However, they have not reduced enough for air quality to meet the national standards and World Health Organisation standards for human health.

The Otago Regional Council approach needs to be revisited, to ensure that, in time, air quality issues are resolved and air is safe to breathe for everyone, and at any time in Otago.



# KEY ISSUES

Issue	Effect	Desired Outcome
<p><b>Widespread reliance on solid fuel burners for domestic heating</b> Solid fuel burners are widely used, and still the source of heating of choice for Otago households.</p> <p>The cumulative emissions from domestic heating account for most emissions to air. They result from the density of households using solid fuel burners in any area, the type of burner used and how efficient it is, and how people operate and maintain their burner.</p> <p>Exacerbating factors include:</p> <ul style="list-style-type: none"> <li>• The frequency of inversion layers in Central Otago,</li> <li>• The cost of clean fuels, such as electricity</li> <li>• The state of current housing, with a large number of Otago houses being old and badly insulated</li> <li>• The rapid growth of Central Otago towns in areas where temperature inversion occurs</li> </ul>	<p>Communities are exposed to harmful concentrations of air pollutants in some Otago towns.</p> <p>We will not achieve clean air everywhere in Otago if cleaner heat is not widely adopted in Otago.</p> <p>The use of typical solid fuel burners that currently meet national wood burner design standards will not deliver clean enough heat:</p> <p>Otago’s communities will need to go a step further with “ultra-low” emission burners, electricity or gas heating, pellet fires, emission control devices or other innovative low emission heating.</p>	 <p><b>Even cleaner heating</b> Reducing emissions from current heating as low as possible in the short-to-medium term while facilitating the transition to even cleaner heating in the longer term.</p>
<p>Outdoor burning is still practiced in Otago, for the management of green waste, diseased material and for pasture management.</p>	<p>Outdoor burning adds to the overall pollution of an area. Its smoke can be a nuisance for local residents and visitors.</p>	 <p><b>Reduced reliance on outdoor burning</b></p>
<p>People do not always manage their discharges properly, especially with regard to those who may be impacted by their discharges.</p>	<p>People can be directly affected by nuisance smoke or smells.</p>	 <p><b>No nuisance from emissions</b></p>
<p>Chemical spraying is a common practice to manage pests.</p>	<p>Chemicals have impacts beyond their intended purpose:</p> <ul style="list-style-type: none"> <li>• Drift of pesticides can affect the neighbouring crops and ecosystems</li> <li>• Some pesticides are detrimental to important ecosystems services such as pollinators</li> </ul>	 <p><b>No toxic emissions impacting on people and ecosystems</b></p>



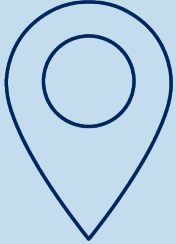
# ORC'S VISION FOR AIR QUALITY





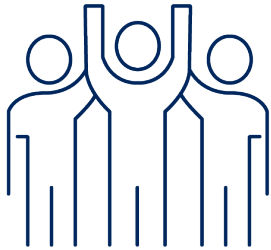
# DELIVERING GOOD AIR QUALITY

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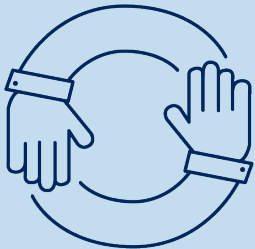
## LOCALLY FOCUSED

- Develop local air quality programmes which considers the specific local context.



## COMMUNITY CENTERED

- Engage local communities in finding practical solutions
- Harness the community's pride and energy
- Support communities and individuals in reducing pollution.



## HOLISTIC

- Liaise with other agencies to integrate energy policies, urban development, building design, and air quality programs.
- Manage all sources of emissions
- Use a multi-dimensional approach which mixes regulatory and non-regulatory tools.



## COLLABORATIVE

- Share knowledge and resources with other regional councils and central government.
- Work alongside territorial authorities, Iwi, industries, and community groups to enhance effectiveness of air quality programs.



# CLEANER HEATING

## Upgrades to low impact heating

ORC will support transition to low impact heating by:

- Supporting monitoring and research in low impact heating and informing people about their options
  - Promoting upgrades to low impact heating
  - Advocating, promoting, and supporting what will facilitate the uptake of low impact heating (e.g. home insulation; or cheaper electricity)
- ORC will do so working with other regional councils, with central government, and with industries.

## No smelly or smokey chimneys

The ORC will focus on its efforts on problem areas (polluted areas, offensive emissions or vulnerable populations), and support people reducing their emissions by working alongside community groups, agencies, and local councils to offer effective assistance to people and communities, while requiring that regional rules are complied with.

The ORC will develop local air quality programs in areas with air pollution issues. Those programs will:

- Combine and align education/information and rule enforcement activities
- Involve the local community, local councils and other potential partners (e.g. suppliers) in designing tailored solutions for their communities

## Low impact heating in new homes

ORC will work with local councils, and with central government to ensure that all legislation are consistent and require low impact heating in new homes, especially in problem areas, and in areas where urban growth creates air pollution risks.





## REDUCED RELIANCE ON OUTDOOR BURNING

### Reduced rural burning

The ORC will work towards outdoor burning being limited to appropriate areas and times through its regional plan. ORC will promote the development and adoption of acceptable alternatives to outdoor burning. It will do so by working with industries.

ORC will also work with local councils to make it easier to dispose of green waste and diseased material appropriately. This will include developing coherent messages and policies for waste minimisation and discharges.

ORC will support councils, industries and people taking initiatives to make appropriate waste disposal easier.

### No burning of offensive waste

ORC will continue requiring avoidance of emissions from offensive waste burning, and will raise awareness of rules and appropriate waste disposal.



# NO NUISANCE FROM EMISSIONS

## New activities are not a nuisance

ORC will advocate for adequate controls in district plans and other relevant legislation for the effective prevention of nuisance, while continuing to respond to complaints received over nuisance.

No smelly  
or smokey  
chimneys

## Reducing outdoor burning including in cities

ORC will tighten up rules on outdoor fires in cities and residential areas, while working with suppliers/industry for adequately-designed outdoor fires in cities and residential areas.



## **NO TOXIC EMISSIONS IMPACTING ON PEOPLE AND ECOSYSTEMS**

### **Toxicity risks are understood**

The ORC will watch the state of knowledge on chemicals, and raise awareness on risks from chemicals.

### **Harmful chemicals are used sparingly, in a targeted and controlled way**

The ORC will support and promote changes to chemical use and practices and inform people about available alternatives to chemicals.



