

Our contribution to community outcomes



Rakaia Gorge

Environment Canterbury's contribution

This section contains details of our contribution to the community outcomes, set out under the following groups of activities:

1. Air quality
2. Coastal environment
3. Democratic process
4. Emergency management
5. Energy
6. Hazards
7. Land
8. Navigation safety
9. Pests and biosecurity
10. Public passenger transport
11. Regional land transport
12. Waste, hazardous substances and contaminated sites
13. Water quality, quantity and ecosystems

What has changed since the 2006-16 Long Term Council Community Plan?

We have recently made some organisational changes within Environment Canterbury with a view to improving the way we deliver services to the community. A new Regional Programmes Group has been established that will develop strategies for implementing the council's plans and strategies. Resource consent processing is now combined with policy planning work to ensure integration of these two important aspects of resource management. As a consequence of these organisational changes, the scope and content of some Activities in the Groups of Activities no longer align with the way work is managed internally, its accountability or how it is delivered in the community. To ensure annual plan activities align with these organisational changes the following changes have been made:

1. Establishing a new Strategy activity to allow this work to be shown separately from policy development work,
2. Renaming the 'Policy making and planning' activity 'Planning and consents' to reflect the new organisational arrangements,
3. Renaming the 'Regulating and enforcing' activity 'Regulating' to reflect its more focused compliance and enforcement role.

Work undertaken in the strategy activity continues to be funded by the same revenue and financing policy category as when previously in the policy making and planning activity.

None of the above Activity changes involves altering the intended level of service provision, a new work programme, the way work is financed or any of the other specific matters referred to in the Local Government Act 2002 that would require an amendment to the LTCCP or to any of the funding and financial policies.

For a full list of community outcomes, refer to page 9 of the 2006-16 Long Term Council Community Plan.

Air quality

Air quality is an issue of widespread concern in Canterbury, largely associated with poor wintertime air quality in Christchurch and other urban areas.

Key issues for 2008/09

Wintertime air quality: Emissions from home heating are the major cause of wintertime air pollution in Canterbury (in Christchurch home heating contributes approximately 80% of particulate matter (PM₁₀)¹; motor vehicle and industrial emissions contribute approximately 10% each). Health guidelines are exceeded 30-40 times a year. Geography and meteorology contribute to this through cold air being held under layers of warmer air, trapping air pollution near the ground. The economic impact for Christchurch alone is estimated at more than \$150 million a year.

Motor vehicle emissions, outdoor burning and spray drift from agrichemicals: Hazardous air pollutants, such as volatile organic compounds and dioxins, are of increasing concern as knowledge improves about the effect these pollutants have on people's health.

Complying with the National Environmental Standards for air quality: Standards have been set for particulate matter (PM₁₀), carbon monoxide (CO), nitrogen dioxide (NO₂), sulphur dioxide (SO₂) and ozone (O₃). Seven airsheds² in Canterbury have been identified (Christchurch, Timaru, Kaiapoi, Rangiora, Ashburton, Geraldine and Waimate) and these communities will require assistance to meet the PM₁₀ standard. In Christchurch, this is partly provided by the Clean Heat Project, which provides financial support for households to install cleaner forms of heating and insulation. This may extend to other towns if the community wishes. However, it is expected funding over and above that provided by the Clean Heat Project will be required.

» What's changed since the 2006-16 LTCCP?

No change.

Amendment to the 2006-16 LTCCP

The 2006-16 LTCCP has been amended to introduce the Clean Heat Project in Timaru, Ashburton, Kaiapoi and Rangiora to provide incentives to home owners to convert to cleaner forms of heating.

Refer to Appendix 1 for further information.

¹ Particulate matter that is less than 10 microns in diameter.

² "Airsheds" are specified areas set for National Environmental Standards for air quality.

The air quality group of activities contributes to the following community outcomes:

- Air, beaches and ocean and land are all in a healthy condition
- Business and farming activities do not harm the environment

Environment Canterbury's role is as the lead agency for controlling the discharge of contaminants into air and ensuring the National Environmental Standards for air quality are met.

Uncertainties

For 2008/09, the following is uncertain:

a) in Christchurch: the rate at which homeowners with open fires and non-complying woodburners will convert to cleaner forms of home heating; and whether the number of conversions funded with assistance from Environment Canterbury's Clean Heat Project plus voluntary conversions will be enough to meet the National Environmental Standard.

b) in Timaru, Ashburton, Kaiapoi, and Rangiora: the rate at which homeowners with open fires and non-complying woodburners will convert to cleaner forms of home heating and the scale and scope of any subsidised Clean Heat Project likely to be accepted by those communities.

The details and form of each of these Projects may change. For example, the extent of programmes may be able to increase with additional funding, or the level of ratepayer funding may be able to be reduced in future LTCCPs or Annual Plans.

c) in Geraldine and Waimate: the rate at which homeowners with open fires and non-complying woodburners will convert to cleaner forms of home heating.

d) in Canterbury airsheds: whether the straight line paths identified in the "Levels of service" can be achieved because achievement is dependent on a number of factors including: extreme meteorological conditions; changes in home heating behaviour; resource consent applicants proposing to use the best available technology and/or offer reductions in existing discharges of PM₁₀ from other sources; and resource consent holders and permitted activities complying with conditions of consent and Resource Management Act 1991 requirements.

» What's changed since the 2006-16 LTCCP?

The number of conversions required to meet the National Environmental Standard in Timaru, Ashburton, Rangiora, Kaiapoi, Geraldine and Waimate has now been estimated - see Assumptions b) and c).

Assumptions

For 2008/09, it is assumed that:

a) in Christchurch: the number of conversions funded with assistance from Environment Canterbury's Clean Heat Project (forecast cost of \$58.249 million over 10 years) and voluntary conversions shown in the following table will be achieved. There will be a substantial shortfall of Clean Heat and voluntary conversions to meet the National Environmental Standard (estimated additional cost \$2.9 million. See the financial summary on page 18).

Estimated conversions for Christchurch required to meet National Environmental Standards							
	Actual 2002/03	Actual 2003/04	Actual 2004/05	Estimated 2005/06	Estimated 2006/07	Estimated 2007/08	Estimated 2008/09
Christchurch							
Clean Heat Project	703	1,741	1,474	2,058 (Actual, 3,055)	3,322 (Actual, 3,639)	3,924	3,639
Voluntary conversions	not measured	not measured	data not yet available	200	200	200	600
Shortfall	-	-	-	-	1,490	1,779	1,779
Total	703	1,741	1,474	2,258	5,012	5,903	6,038

b) in Timaru, Ashburton, Kaiapoi and Rangiora: the number of conversions funded from assistance from Environment Canterbury's Clean Heat Project (refer to Appendix 1)(forecast cost over 10 years for Timaru - \$1.98 million; Ashburton - \$1.79 million; and Kaiapoi and Rangiora - \$2.26 million) shown in the following table will be achieved. There will be a substantial shortfall of conversions to meet the National Environmental Standard. How that shortfall will be addressed will be detailed in the 2009-19 LTCCP.

Estimated conversions for Timaru, Ashburton, Kaiapoi and Rangiora required to meet National Environmental Standards in 2008/09	
	Estimated 2008/09
Timaru	
Clean Heat Project	280
Shortfall ¹	750
Total	1,030
Ashburton	
Clean Heat Project	168
Shortfall ¹	432
Total	600
Kaiapoi and Rangiora	
Clean Heat Project	240
Shortfall ¹	480
Total	720

¹ The shortfall will be met to some extent by voluntary conversions, but by how much is uncertain.

Levels of service

These services deliver Environment Canterbury's contribution to the community outcomes.

c) in Geraldine and Waimate: the current measures in Chapter 3 - Air quality of the Proposed Canterbury Natural Resources Regional Plan should result in compliance with the National Environmental Standard.

d) any shortfall in conversions required to meet National Environmental Standards in any of the seven airsheds would be provided from additional rating revenue, regulatory measures, voluntary changes and additional revenue from alternative sources such as central Government agencies. (See the financial summary on page 18.)

» What's changed since the 2006-16 LTCCP?

Estimates of the number of open fire and non-complying woodburner conversions required to meet the National Environmental Standard been completed for Timaru, Ashburton, Kaiapoi and Rangiora.

Commissioner decisions in relation to Chapter 3 of the Proposed Canterbury Natural Resources Regional Plan may result in stricter regulatory measures.

1. Meeting National Environmental Standards for CO, NO₂, SO₂ and O₃ concentrations to protect human health

Measure	Target for 2008/09
CO: 10 milligrams per cubic metre, in an 8-hour period	Exceeded no more than once a year
NO ₂ : 200 micrograms per cubic metre, in a 1-hour period	Exceeded no more than 9 times a year
SO ₂ : 350 micrograms per cubic metre, in a 1-hour period	Exceeded no more than 9 times a year
SO ₂ : 570 micrograms per cubic metre, in a 1-hour period	Never exceeded
O ₃ : 150 micrograms per cubic metre, in a 1-hour period	Never exceeded

Source: Environment Canterbury.

Note: These targets are being met in all seven airsheds (as required under the NES).

» What's changed since the 2006-16 LTCCP?

No change.

2. Converting to cleaner forms of home heating to reduce the most significant source of PM₁₀ emissions

Measure

The total number of homes in the Christchurch, Timaru, Ashburton Kaiapoi and Rangiora airsheds converting to cleaner forms of home heating through the Clean Heat Project (excluding voluntary conversions and conversions funded by additional rating revenue or alternative sources).

Target

Refer to table below.

Conversions undertaken by Environment Canterbury's Clean Heat Project							
	Actual 2002/03	Actual 2003/04	Actual 2004/05	Actual 2005/06	Actual 2006/07	Estimated 2007/08	Estimated 2008/09
Christchurch	703	1,741	1,474	3,055	3,639	3,924	3,639
Timaru	-	-	-	-	-	-	280
Ashburton	-	-	-	-	-	-	168
Kaipoi and Rangiora	-	-	-	-	-	-	240

Note: The actual number of conversions made in Christchurch is established by an annual survey. Source: Environment Canterbury.

» What's changed since the 2006-16 LTCCP?

Now includes targets for the airsheds of Timaru, Ashburton, Kaiapoi and Rangiora.

3. Meeting National Environmental Standards for PM₁₀ concentrations to protect human health

Measure

The second-highest concentration of PM₁₀ in the airsheds of Christchurch, Timaru, Kaiapoi, Rangiora, Ashburton, Geraldine and Waimate, for a 24-hour period from midnight to midnight.

Target

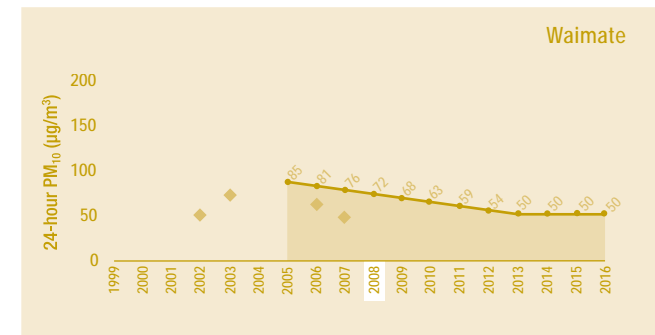
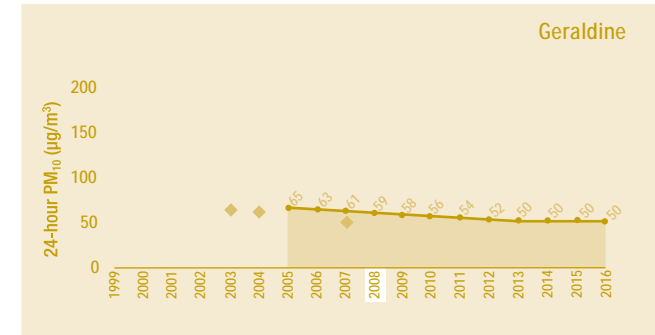
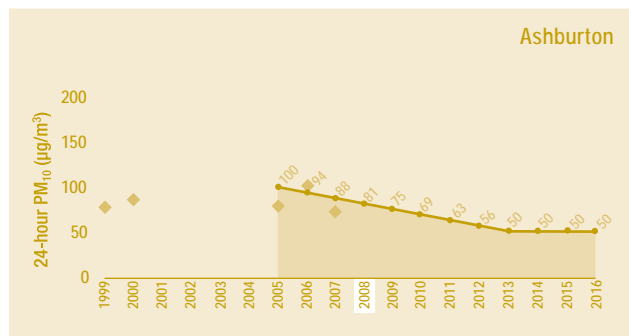
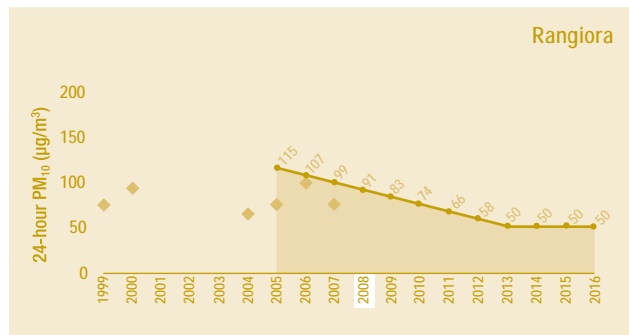
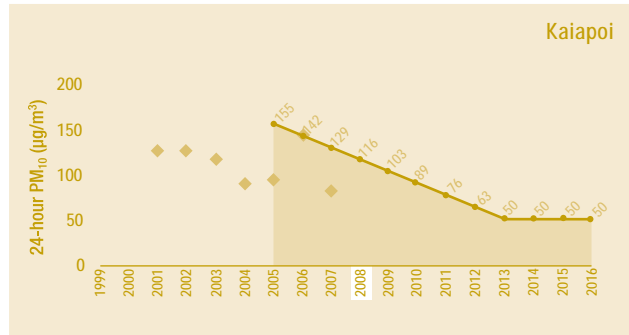
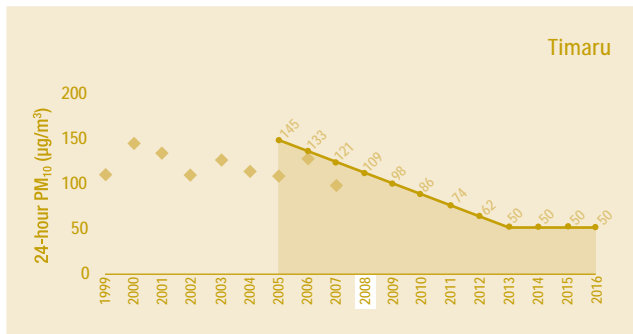
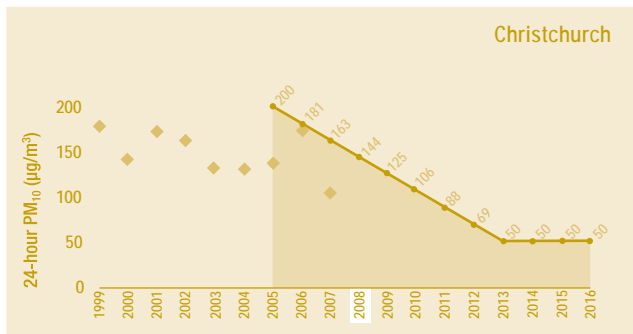
No more than one 24-hour average concentration to be above Environment Canterbury's straight line path for PM₁₀ concentrations.

PM₁₀ concentrations

KEY ♦ Actual 2nd highest PM₁₀ concentration — Straight line path

■ Target zone, where actual 2nd highest PM₁₀ concentrations should lie

PM₁₀ concentrations are measured in micrograms per cubic metre, in the 24-hour period from midnight to midnight.



Source: Environment Canterbury.

Note: The straight line paths are based on historical data and understanding of relationships derived for Christchurch. In other airsheds it may be necessary to further adjust these as site-specific information becomes available.

Note: The National Environmental Standard allows one exceedance of the straight line path a year.

Note: The difference between the second highest concentrations and the straight line path represents the capacity of the airshed to accommodate further discharges to air.

» What's changed since the 2006-16 LTCCP?

No change.

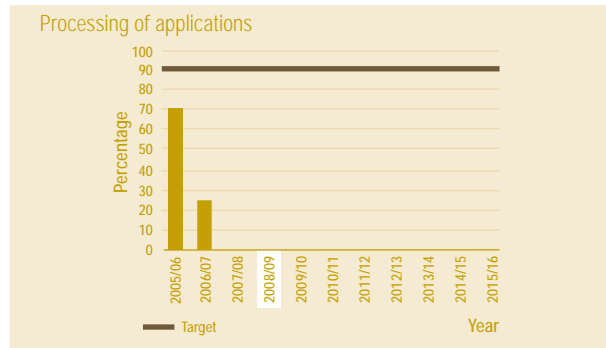
4. Authorising resource users to use natural and physical resources so that the environmental effects remain acceptable to the community

Measure 1

The percentage of resource consent applications processed in compliance with the statutory time frames set down in the Resource Management Act 1991.

Target

90%

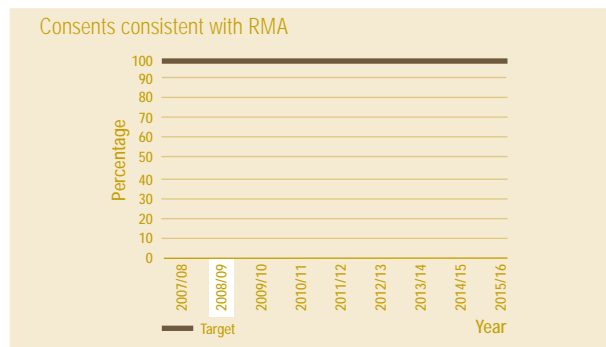


Measure 2

The percentage of resource consents consistent with Resource Management Act 1991 requirements, including proposed and operative regional plan requirements.

Target

100%¹



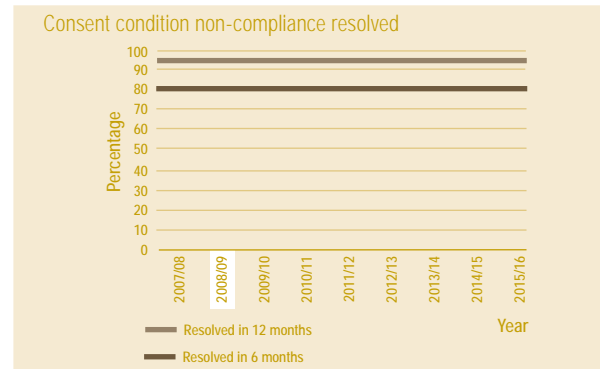
Measure 3

The percentage of significant or major non-compliance² with resource consent conditions resolved³ (no further action is required).

Target

80% are resolved in 6 months.¹

95% are resolved in 12 months.¹

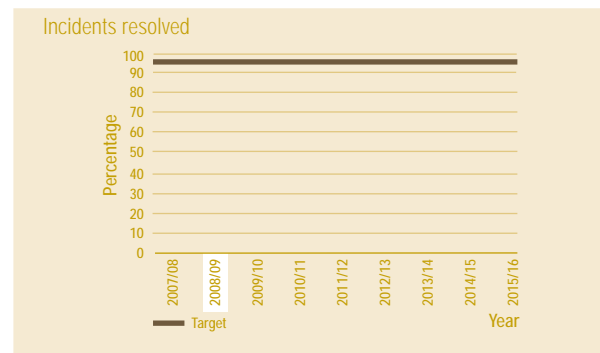


Measure 4

The percentage of environmental incidents resolved (no further action is required).

Target

95%¹

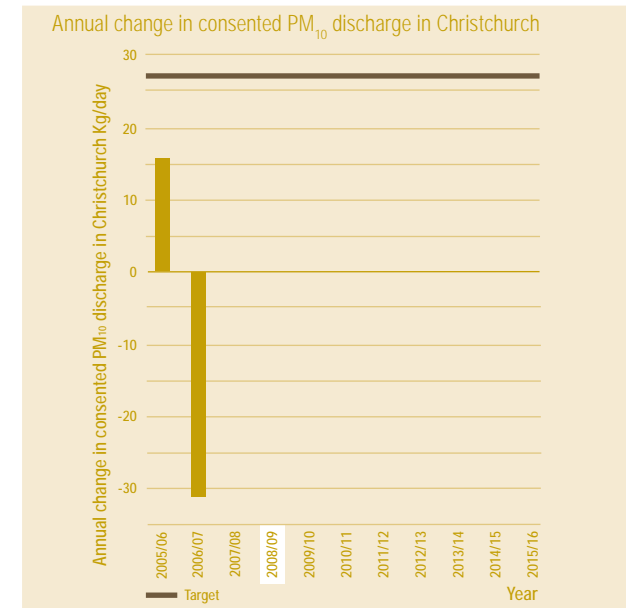


Measure 5

The annual increase in consented PM₁₀ discharge rate in Christchurch.

Target

No more than 27kg/day.



Source: Environment Canterbury.

» What's changed since the 2006-16 LTCCP?

The 2006-16 LTCCP proposed that additional measures and targets to more comprehensively reflect the contribution made by the level of service towards the community outcomes would be included in the 2007/08 Annual Plan. Measure 3 replaces measure 2 in the 2006-16 LTCCP and new measures 2, 4 and 5 were added in the 2007/08 Annual Plan.

¹ For measures 2, 3 and 4 no historic data are available. Data collection has started in 2007/08.

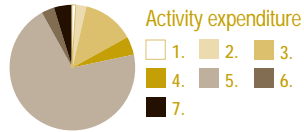
² Means non-compliance assessed as Grade 3 - Significant non-compliance or repeated minor non-compliance - moderate adverse environmental effects, or Grade 4 - Major and/or persistent non-compliance - serious or persistent adverse environmental effects.

³ Means re-assessed as Grade 1 - Fully complying or Grade 2 - Minor non-compliance - nil or minor short-term adverse environmental effects.

Activities

What we plan to do

Work programmes for 2008/09 are set out below.



» Variations and Amendments to 2006-16 LTCCP

Changes have been made to Activity headings: a new activity 'Strategy' has been added, 'Policy making and planning' has been renamed 'Planning and consents' and 'Regulating and enforcing' has been renamed 'Regulating'. These changes better reflect the way the Council's responsibilities are organised internally and delivered to the community. Items listed under the headings 'what we plan to do' that are affected by these new arrangements have been moved to their new activity.

In 'Planning and consents', progress on the air chapter of the Proposed Canterbury Natural Resources Regional Plan continues. The reason for this is that the decisions were released in 2007 and the number of appeals received means that the process will continue into the 2008/09 financial year.

In 'Monitoring', the report on the State of the Environment is to be completed in 2007/08.

In 'Operations', the Clean Heat Project has been extended to include Timaru, Ashburton, Kaiapoi and Rangiora. See Appendix 1 for more detail.

In 'Communicating, educating and advocating', progressing working parties better reflects actual initiatives being undertaken to help develop air quality and Clean Heat initiatives.

1. Strategy

This activity develops regional strategies for Environment Canterbury's contribution to community outcomes for air quality.

What we plan to do

Year 2008/09

- Evaluate strategy options for addressing issues identified in the Regional Environment Report.

» This work has no identified significant negative effects on community well-being.

2. Investigations

This activity investigates air quality issues.

What we plan to do

Year 2008/09

- Improve understanding of the sources of air pollution, including PM₁₀ and hazardous air pollutants.
- Model the dispersion of contaminants in airsheds.

» This work has no identified significant negative effects on community well-being.

3. Planning and consents

This activity develops policy for managing air quality, monitors policy effectiveness and efficiency and processes resource consents.

What we plan to do

Year 2008/09

- Progress the air chapter of the Proposed Canterbury Natural Resources Regional Plan through its statutory processes.
- Ensure consistency between district plans and regional policies for managing air quality.
- Assess the effectiveness and efficiency of the air chapters of the Canterbury Regional Policy Statement 1998 and the Canterbury Natural Resources Regional Plan (when operative).
- Process resource consent applications.
- Review resource consents where appropriate.

■ Refer to Appendix 4 for information on options considered.

» This work has no identified significant negative effects on community well-being.

4. Monitoring

This activity measures concentrations of contaminants in airsheds and assesses air quality against National Environmental Standards and targets in the air chapter of the Proposed Canterbury Natural Resources Regional Plan.

What we plan to do

Year 2008/09

- Continuously monitor PM₁₀ concentrations in the Christchurch, Timaru, Kaiapoi, Rangiora, Ashburton, Geraldine and Waimate airsheds.
- Periodically monitor hazardous air pollutants and CO, NO₂, SO₂ and in the Christchurch, Timaru, Rangiora, Ashburton, Geraldine, Waimate and Kaiapoi airsheds.
- Periodically monitor O₃ for Christchurch.
- Forecast changes in quantities of emissions.
- Publish wintertime air pollution concentrations on the Environment Canterbury website.
- Report breaches of National Environmental Standards in public notices of local newspapers.
- Monitor the number of homes converting to cleaner forms of home heating in Christchurch, Timaru, Ashburton, Kaiapoi and Rangiora.
- Publish results of monitoring programmes.
- Report on the state of the environment.

» This work has no identified significant negative effects on community well-being.

5. Operations

This activity provides incentives through the Clean Heat Project to assist people to move to cleaner forms of home heating and improve insulation.

What we plan to do

Year 2008/09

- Provide Clean Heat Project incentives in Christchurch, Timaru, Ashburton, Kaiapoi and Rangiora.
- » Meeting the cost of funding Clean Heat Project incentives may have a significant negative effect on the economic well-being of the community. However, this is outweighed by increased social well-being arising from health benefits from reduced emissions from home heating devices and warmer homes for project participants and increased environmental well-being from cleaner air.

6. Communicating, educating and advocating

This activity informs the community about air quality issues and impacts, and raises awareness about air quality.

What we plan to do

Year 2008/09

- Educate the community about air quality issues.
- Provide information about managing air pollution.
- Provide air education programmes in primary and secondary schools.
- Undertake the Clean Air outreach programme.
- Progress working parties with district councils to develop air quality and Clean Heat initiatives.
- » This work has no identified significant negative effects on community well-being.

7. Regulating

This activity ensures compliance with resource consent conditions and the Resource Management Act 1991.

What we plan to do

Year 2008/09

- Monitor prioritised resource consents, permitted activities and unauthorised activities for compliance with the Resource Management Act 1991.
- Report significant breaches of resource consents to council quarterly.
- Provide a 24-hour Pollution Hotline response service.
- Promote and enforce compliance with the Resource Management Act 1991.
- » Meeting the cost of complying with conditions for permitted and consented activities may have a significant negative effect on the economic well-being of the community. However, this is outweighed by increased social well-being arising from health benefits from cleaner air and increased environmental well-being from cleaner air.

Financial summary

\$ in thousands	Annual Report 2006/07	Annual Plan 2007/08	LTCCP 2008/09	Annual Plan 2008/09
Operating Revenue				
General rates	2,409	2,434	2,340	2,469
Targeted rates	4,980	5,071	5,065	5,715
Statutory charges/User pays	691	924	823	1,362
Grants	658	-	-	733
Interest	155	238	486	362
Total Operating Revenue	8,893	8,667	8,714	10,641
Operating Expenditure				
Expenditure	10,487	10,537	10,494	12,747
Interest	-	-	-	-
Depreciation	125	105	117	133
Total Operating Expenditure	10,612	10,642	10,611	12,836
Operating Surplus/(Deficit)	(1,719)	(1,975)	(1,897)	(2,195)
Operating Surplus/(Deficit) transferred to Clean Heat Reserve	(1,484)	(1,910)	(1,897)	(1,995)
Operating Surplus/(Deficit) transferred to General Reserve	(235)	(65)	-	(200)

Capital Expenditure

Capital expenditure associated with this group of activities is funded from general funds and included as depreciation expense.

For more information on source of funds and rationale for selection, see:

Funding and Financial Policies

2006/16 LTCCP Part B

Pages 3-33

» Variations and amendments to the 2006-16 LTCCP

Targeted rates for Timaru, Ashburton, Kaiapoi and Rangiora, and their associated Air Incentive Reserves, have been added (\$198,000, \$179,000 and \$226,000 respectively). Refer to Appendix 1 for details.

Statutory charges/userpays revenue has increased to allow for expected increases in resource consent work and for adjustments to the cost of the clean heat loan scheme as better information on the rate of uptake becomes available.

Grants are now being received from EECA's Energywise funding programme which will reduce the cost of the Clean Heat loans scheme.