## 4. CLEAN AIR AND ENERGY EFFICIENCY INCENTIVES PROGRAMME

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|--|---------------------|--|
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The purpose of this report is to inform the Council on the progress of the Clean Air and Energy Efficiency Incentives Programme to date and to present options for consideration of ways to continue the Council's antismog activities after the funds allocated for clean air incentives are exhausted.

#### BACKGROUND

Following submissions from citizens on the Annual Plan, the Council decided in 1997 to allocate a sum of \$2.42M over five years to encourage householders to replace open fireplaces and other polluting domestic heaters with cleaner heating alternatives. Provision was subsequently made in the Annual Plan and Budget for the following sums:

|           | Table 1   |
|-----------|-----------|
| 1997/98   | \$500,000 |
| 1998/99   | \$500,000 |
| 1999/2000 | \$670,000 |
| 2000/01   | \$670,000 |
| 2001/02   | \$80,000  |

The Council, after considering the information provided by the Canterbury Regional Council as part of its Air Plan preparation, decided that incentives should be provided to householders who close off or remove open fireplaces or remove coal burning appliances. These two home heating sources accounted for over half the  $PM_{10}$  emitted on a typical winter night. A detailed programme implementation plan was based on the objectives to encourage householders to replace their open fireplaces and coal burning appliances with cleaner heating appliances and to install measures that would make their homes more energy efficient so they would need to burn less fuels to heat the homes. The first objective was to be funded from the fund above and the second from money from the Energy Saver Fund (ESF) administered by the Energy Efficiency and Conservation Authority (EECA).

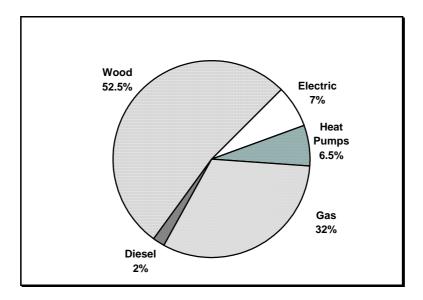
The programme was seen to be a community initiative, led by the Christchurch City Council, but largely operated in the community by the community. It was considered important that retailers and installers of energy equipment be involved. Not only were there administrative advantages in this arrangement but it also enabled wider publicity to be given from more sources with minimal cost to the programme.

On the basis of the work undertaken at the programme design stage, the total eligible market was estimated to be about 12,000 households (excluding government owned premises). It was determined by the consultant, with the level of incentives suggested that about 60% of the target market, or about 7,000 households, would be willing to participate.

The Clean Air and Energy Efficiency Programme started on 1 May 1998. It provides the following financial assistance to its participants, with the home-owner meeting the balance of the costs: a \$500 grant towards the installed costs of a solid fuel, LPG or diesel burner or a heat pump or, in case of a less expensive electric appliance, 80% up to \$300 towards the installation costs;  $3.00 / m^2$  for ceiling insulation;  $1.60 / m^2$  for under floor insulation.

#### **PROGRAMME UPDATE**

Since programme implementation started in May 1998, a total of 3,200 open fires and coal burners have been permanently closed or removed. The following graph shows the percentage by type of clean air heating appliance installed.



To date a total of \$1,550,000 has been spent on clean air grants to householders including administration and marketing of the programme.

Energy efficiency measures (mainly ceiling insulation and underfloor insulation) have been installed in approximately 300 homes. Energy efficiency grants of \$76,000 have already been made available to Christchurch householders.

## PROGRAMME TIMETABLE

The original budget (Table 1 above) was based on an estimated uptake rate and assumed that the Programme would last till the end of winter 2001.

Since the Programme started in 1998, the annual budgets have been adjusted to match the actual uptake rate and actual annual expenditure but the total programme budget of \$2.42M remained unchanged.

The actual uptake rate to date was higher than anticipated in 1997 and it is expected to be even higher in the autumn/winter 2000. As a result, the availability of funds budgeted for the clean air grants are expected to end in December 2000 - about nine months earlier than originally planned.

By the time the budgeted funds are exhausted, the number of open fires and coal burners removed would reach the 5,000 mark. This is less than the estimated size of the target market of 7,000 potential participants. To date, 93% of the programme participants opted for more expensive non-polluting heaters associated with a \$500 grant and only 7% of participants installed less expensive electric heaters eligible for a \$300 grant. As a result, an average clean air grant was \$486 and the number of grants available within the existing budget reduced accordingly.

#### LOW INCOME HOMEOWNERS

With the view that the existing programme may not be sufficient to meet low income home owners ability to fund the conversion, the Council decided at the February 1999 meeting to:

"... approve in principle an increase in the level of assistance to low income home owners, subject to the Canterbury Regional Council Air Plan coming into force and the City Council approval of appropriate budgetary provisions in the annual plan for 1999/00 and further financial years."

While the main objective of the existing Clean Air and Energy Efficiency Programme is to reduce air pollution in Christchurch, the supplementary programme for low-income home owners will have a different objective of a more social nature. It will provide them with extended special monetary assistance to meet capital costs of conversion from polluting and inefficient forms of home heating to cleaner efficient ones, and also help to achieve healthier living conditions.

At the April 1999 meeting the Council confirmed in principle the introduction of a new scheme to assist low-income home owners. Funding in excess of \$1M has been provided over four years for this new initiative. It was envisaged that by February 2000 the status of the Canterbury Regional Council's proposed regulatory measures with regards to coal burning and open fires would be clear and, if the regulatory measures are introduced, it was planned to start the new scheme for low income home owners before winter 2000.

## TIMETABLE FOR THE INTRODUCTION OF REGIONAL RULES FOR THE CONTROL OF AIR POLLUTION FROM DOMESTIC HEATING

Mr Terence Moody, Principal Environmental Health Officer, advises as follows:

"The Canterbury Regional Council, following a decision in the Environment Court that stated it was legal to use section 369(11)(a) and (b) for the purpose, passed a resolution to prohibit the use of coal in domestic fuel burning equipment in Christchurch. This resolution was passed on the 9 October 1998 with a proviso that it not be publicly notified until after the determination of the High Court on another action brought by the Coal Producers' Federation of New Zealand Inc.

The decision of Judge Chisholm was released on 29 October 1998. He pointed out that: 'the merits of the ban are not in issue in this proceeding, which is confined to the process utilized by the Council.' He exercised his discretion in favour of granting relief to the plaintiff, the Coal Producers' Federation, by declaring the decision of the Regional Council banning coal pursuant to section 369(11) of the Act invalid; made an order quashing that decision; and made an order restraining the Regional Council from issuing a public notice pursuant to section 369(11) before it has provided the plaintiff with a proper opportunity to present its case to the Regional Council.

The matter has now been considered by a Hearing Committee of the Regional Council through a lengthy period of hearing evidence and cross-examination of the evidence. This was completed in December 1999.

Currently it is understood the Hearing Committee is deliberating on both the matter of a coal ban under section 369 of the Resource Management Act and introduction of the Air Plan. It is understood the recommendations of the Hearing Committee are expected in March 2000. The Regional Council will then consider them. Should the recommendation support the introduction of a prohibition of the burning of coal in residential premises it is understood this would be publicly notified sometime in April 2000. The prohibition would possibly then come into effect in September 2000.

Should the Hearing Committee recommend the introduction of the Air Plan it is likely the publicly notified Plan would occur about September 2000 with submissions being received up until November 2000. The summary of submissions is expected to be undertaken by April 2001 and the receipt of further submissions completed by May 2001. At this stage it is expected that hearings of the submissions to the proposed plan would be heard commencing in November 2001 with decisions expected in April 2002. It is expected it will not be until late in 2002 that any Environment Court hearings would commence and current thinking is that an operative Plan would be possibly introduced in June 2003."

# OPTIONS FOR OPERATION OF EXISTING CLEAN AIR PROGRAMME BEYOND DECEMBER 2000

Once budget funds for the clean air grants are exhausted, the Council will have the following options.

- Option 1. Terminate the provision of clean air grants when the existing budgeted funds are exhausted.
- Option 2. Allocate additional funds to continue the existing programme over autumn and winter months of 2001, providing either
  - 2a. Unchanged amount of clean air grants, or
  - 2b. Reduced amount of clean air grants.

- Option 3. Reallocate funds from the low-income home owners programme budget, providing either
  - 3a. Unchanged amount of clean air grants, or
  - 3b. Reduced amount of clean air grants.
- Option 4. Terminate the provision of clean air grants under the existing programme and start the new clean air programme for low income home owners from December 2000, irrespective of whether any proposed regulatory measures are or not introduced by the Canterbury Regional Council under the Resource Management Act.

#### DISCUSSION

If Option 1 is adopted, the clean air part of the existing programme would terminate in December 2000. This option has a disadvantage of leaving approximately 2,000 potential participants out of the process of phasing out air-polluting heaters in the city. However, continuing the provision of insulation grants as the only incentive to disable or remove open fires and coal burners would mitigate this. It is estimated that the programme would still continue with the insulation grants only, at a rate of up to 500 per year.

If Option 2 is adopted then another 2,000 potential participants would convert their air polluting heaters into non-polluting appliances before and during the 2001 winter. Estimated additional funds that would be sufficient to provide clean air incentives to the remaining number of potential participants is shown in Table 2 below.

If Option 3 is adopted then another 2,000 potential participants would be given an opportunity to convert to non-polluting home heating in 2001. This option would have an advantage over Option 2 in that it would not require any additional expenditure from the Council's budget in the 2000/01 and 2001/02 financial years. The low-income assistance programme start would be postponed till May 2002, and additional funds would need to be allocated to its budget in the 2002/03 and 2003/04 financial years. The required levels of relocation of funds and additional funds are shown in Table 2.

|  |   |            |           | Table 2   |           |  |
|--|---|------------|-----------|-----------|-----------|--|
|  |   | 2000/01    | 2001/02   | 2002/03   | 2003/04   |  |
| Current<br>budget<br>situation                             | Existing clean air programme                                | \$350,000  | \$80,000  | -         | -         |  |
|  | Existing energy<br>efficiency grants                        | \$150,000  | \$50,000  | -         | -         |  |
|  | Assistance to low<br>income homeowners                      | \$547,200* | \$437,950 | \$109,250 | -         |  |
| Option 2a:<br>unchanged<br>amount of<br>clean air<br>grant | unchanged Add to existing clean air<br>amount of clean air  |            | \$394,000 | -         | -         |  |
| Option 2b:<br>reduced<br>amount of<br>clean air<br>grant   | Add to existing clean air programme                         | \$262,000  | \$410,000 | -         | -         |  |
| Option 3a:<br>unchanged<br>amount of<br>clean air<br>grant | Reallocate to existing clean air programme                  | \$547,200* | \$386,800 | -         | -         |  |
|  | Leave in the low income<br>home owners assistance<br>budget | -          | \$51,150  | \$109,250 | -         |  |
|  | Add to the low income<br>home owners assistance<br>budget   | -          | -         | \$438,000 | \$496,000 |  |
| Option 3b:<br>reduced<br>amount of<br>clean air<br>grant   | Reallocate to existing clean air programme                  | \$262,000  | \$410,000 | -         | -         |  |
|  | Leave in the low income<br>home owners assistance<br>budget | \$285,200  | \$27,950  | \$109,250 | -         |  |
|  | Add to the low income<br>home owners assistance<br>budget   |            | -         | \$438,000 | \$234,000 |  |

\*Note: this sum includes \$200,000 originally budgeted for 1999/2000 that is likely to be carried forward. Due to delays in introducing regional rules for the control of air pollution by the Canterbury Regional Council, it is not expected to start the low income assistance programme in this financial year.

If Option 4 is adopted, the provision of insulation grants under the existing programme would continue (as the only incentive to disable or remove an open fire or a coal burner). Option 4 has an advantage of addressing that particular sector of the community that did not participate in significant numbers in the existing programme so far. The option, however, would have a disadvantage of addressing a narrower sector of potential participants while the general public (who cannot qualify as low-income families) would not be able to access the clean air grants any more.

## RECOMMENDATION

- 1. That Option 3b be adopted.
- 2. That additional funds be allocated for the low income assistance programme in the 2002/03 and 2003/04 financial years.
- 3. That the recommendations 1 and 2 be referred to the Annual Plan Working Party.

The Chairman commented:

As \$1.7M remains unspent I do not see any need to allocate additional funds at this time.

| <b>Recommendation:</b> | 1. | That the current clean air incentives programme be      |  |  |
|------------------------|----|---|--|--|
|                        |    | suspended when the funds allocated to it are exhausted. |  |  |
|                        |    |   |  |  |

- 2. That the proposed incentives programme for low income householders commence in February 2001.
- 3. That the Council review the resourcing of both programmes when the Canterbury Regional Council has finalised its Air Plan.