

## 1. CLEAN AIR PROGRAMME - LOW INCOME ASSISTANCE

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The purpose of this report is to present a detailed implementation plan for the low-income household assistance part of the Clean Air and Energy Efficiency Programme.

### BACKGROUND

With the view that the existing Clean Air and Energy Efficiency Programme may not be sufficient to meet low-income homeowners' ability to fund the conversions to cleaner home heating, the Council decided at the April 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."*

Funding in excess of \$1M has been provided over four years for this new initiative as follows:

**Table 1**

1999/2000	\$200,000
2000/01	\$347,200
2001/02	\$437,950
2002/03	\$109,250

It was envisaged at that stage that by February 2000 the status of the Canterbury Regional Council's (now Environment Canterbury) 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. There were further delays with the introduction of the Regional Air Plan, so the Council resolved at the February 2000 meeting that:

*"the proposed incentives programme for low income householders commence in February 2001."*

Subsequently, the \$200,000 funding has been carried forward from 1999/00 to the 2000/01 financial year.

### PROGRAMME OBJECTIVES

While the main objective of the existing Clean Air and Energy Efficiency Programme is to improve the air quality in Christchurch (by reducing the amount of particulate discharged into the atmosphere by home heating), 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 more efficient ones. This will also help to achieve healthier living conditions at reduced running costs.

This objective can be best achieved by improving home insulation which enables the installation of smaller heating appliances and using lesser amounts of fuel or electricity.

### PROGRAMME PRINCIPLES

Having considered a number of funding options, the Council decided at the April 1999 meeting that the increase in the level of assistance to low-income home-owners will:

*"...consist of the provision of 100% financial assistance for the costs of disabling an open fire or coal burner, 80% of the installed cost of a budget electric heating appliance and 100% assistance for installation of energy efficiency measures, all up to maximum amounts detailed in the report."*

It was further resolved that:

*"the eligibility criterion for additional assistance to low income home owners be whether the house owner has a community services card"*

and that:

*"no retrospective payments to those who have already participated in the incentive programme be made."*

It is important that improved insulation will be a primary objective and the heating device will be secondary. In other words, the grant for a replacement heater will be conditional upon the acceptance of appropriate thermal insulation.

#### **FREE ENERGY ADVICE TO PARTICIPANTS**

It is recommended that an initial visit by a Council Energy Adviser be an integral component of the programme. This will guarantee that the necessary insulation measures are included in the installation package according to energy efficient priorities. The Energy Adviser will make an assessment of the participant's eligibility for the grants, the extent of the works to be undertaken and will also provide advice on other recommended energy efficiency measures (not covered by the incentives programme) as well as on heater options.

It is envisaged that this service to the programme participants will be free. Costs of the site visits will be covered from the programme administration expenditure that has been allowed for in the programme budget.

#### **PROGRAMME IMPLEMENTATION DETAILS**

Participants eligible for grants would need to satisfy the following criteria:

- (a) are home owners;
- (b) are current community services card holders;
- (c) have an open fire or coal burner as the main source of heating in the home;
- (d) are Christchurch City Council ratepayers;
- (e) act on the advice of the Council's Energy Adviser.

Taking into account statistical information available and many uncertainties, the estimated number of eligible households ranges between 1200 to 3000. All calculations of funds required were based on a likely number of 1200 potential participants.

Estimated maximum amounts granted for an installation are those indicated in Table 2.

**Table 2**

Thermostatically controlled electric heater	\$279
Dedicated fixed wiring installation	\$72*
Seal open fire	\$135
Ceiling insulation at no more than **	\$7.00 per m <sup>2</sup>
Underfloor insulation at no more than **	\$6.00 per m <sup>2</sup>

\* Assuming that \$88 be paid by the home-owner.

\*\* More accurate maximum amounts are to come as a result of tendering.

An average amount of grant per household is estimated at \$900-\$1000. This is because not every house would require the installation of insulation (some houses already have ceiling insulation; in some houses underfloor insulation cannot be installed as they either have concrete floors or the sub-floor is too low).

On the basis of the adopted funding option, the programme participants would be able to fully insulate their home and install a budget electrical appliance in their main living area at a cost to them of around \$88. This customer contribution can be repaid from reduced energy bills within one-two winter months at a significant improvement to living conditions in the house. If householders choose an alternative more expensive heating appliance, such as a more expensive electric heater or a nightstore heater, complying solid fuel burner, flued gas or diesel appliance or a heat pump, they would receive the same grant allocation as for 80% of the budget electric heater, but have to meet the extra costs themselves. If the householders choose alternative more expensive insulation products they also have to meet the extra costs themselves.

Should a householder choose to disable the open fire and install no fixed heating appliance at all (for example, use a portable heater), then this household would be eligible for the insulation grants. In such a case the householder would not have to bear any expense (except for the cost of the portable heater).

It is envisaged that tenders will be called for the supply and installation of insulation products for this project so the maximum amounts of grants (in dollars per square metre) will be those from a successful tender.

Clean Air heating appliances and insulation must be purchased through and installed by a retailer or installer who is registered with the existing Clean Air programme. Grants would not be available for householders wishing to carry out the installation themselves. This is mainly to ensure that appliances and insulation are installed to meet regulations and specifications.

Details of the programme operation are described in the attached "Guidelines and Eligibility Criteria". This document forms the basis for a contractual relationship between the Council and registered retailers and installers, and is intended for use by the retailers/installers (not householders).

### **SUFFICIENCY OF FUNDING**

The available funds will be sufficient for 1200 low-income households. It is more likely that the actual demand over the four years would be at least 2000 households. In such a case, the following additional funds would be required over the four years of the programme operation:

**Table 3**

2000/01	0
2001/02	\$200,000
2002/03	\$400,000
2003/04	\$200,000

### **POSSIBILITY OF LOANS SCHEME**

The Council agreed at the April 1999 meeting that the report on assistance to low-income home-owners

*"...should also address the possibility of instituting a loans scheme as well as grants, to encourage early conversion of existing appliances."*

It is envisaged that such a scheme would operate in parallel with the grants scheme and that the "clean air" loans would be interest-free and repayable at the resale (or change of ownership) of the property. It is expected that the scheme would assist to encourage early conversion of existing non-complying heaters in houses.

It is also envisaged that the loan scheme would target a broader market including those households that use not only open fires and coal burners but also non-complying wood burners. It may even include households that use "clean air" heating appliances (e.g. electric heaters) but require a loan to install thermal insulation.

The extent of assistance required under the loan scheme would depend on the extent of the proposed regulatory measures under Environment Canterbury's "Proposed Natural Resources Regional Plan" that is due for release by the end of 2000. The plan will determine the number of households to be affected by the proposed regulatory measures and a timetable of these measures implementation. It is also expected to receive from Environment Canterbury updated and more accurate data on numbers of operational open fires, coal burners and older wood burners.

A detailed report on the loans scheme is pending upon the availability of clear information on the above matters from Environment Canterbury, as well as the return of Orion's Clean Air Loan Fund of about \$257,000 to the Council.

- Recommendation:**
1. That the Corporate Services Manager be authorised to proceed with the implementation of the programme, as set out in the report and in the attached guidelines, from February 2001.
  2. That the Annual Plan Working Party be requested to consider allocating additional funds in 2001-02 for the implementation of the programme as outlined in the report.
  3. That the Energy Manager be asked to investigate, in conjunction with the relevant parties, the availability of domestic coal burners that would comply with the standards, and the availability of coke as a fuel.