

ENERGY AND ENVIRONMENTAL CONSERVATION SPEND TO SAVE 2002/03 PROGRAMME

Abstract

This report seeks approval to the provision of supplementary funding from the Property Renewal and Repair Fund to undertake a short programme of energy and environmental conservation projects in support of the Council's Energy Management Strategy at an estimated cost of £86,000.

RECOMMENDATION

The Committees for their respective interests are recommended to:-

1. note the short programme of energy and environmental conservation projects planned for 2002/03 and
2. approve the bid for supplementary funding in the sum of £86,000 from the Property Renewal and Repair Fund.

1 INTRODUCTION

The Energy Management Strategy adopted by the Council requires the undertaking of programmes of "Spend To Save" programmes which will contribute to a co-ordinated strategy for reducing the greenhouse gasses emissions of Council non-housing properties, in conformance with the objective set by the Government of achieving a 12.5% reduction from 1990 levels by 2010.

It is proposed to carry out a short programme of such projects in 2002/03 and this report seeks approval of funding provisions from the Property Renewal and Repair Fund.

2 BACKGROUND

A series of fuel conversion projects in various council non-housing properties has previously been undertaken, as detailed in Report 1202/01.

These have comprised conversions of heating systems either from oil to gas or electricity to gas. These projects have achieved significant success in reducing carbon dioxide emissions and

have also demonstrated satisfactory financial savings resulting in pay back periods of four to five years.

Consequently additional projects have been identified and a programme has been developed comprising:-

- Carnoustie High School, Oil to gas conversion - £53,000
- Northmuir Primary School Electricity to gas conversion Phase 3 - £33,000

Details of costs, environmental and financial savings are contained within the respective Appendices to this report.

Carnoustie High School presents an opportunity similar to previously successful completed projects at Brechin High School, Forfar Academy and Arbroath Academy. These have produced significant environmental and financial paybacks.

Northmuir Primary School is somewhat different as it presents an opportunity to benefit from the need to replace the failing underfloor electric heating system which has reached the end of its operational life.

Whilst this could have been undertaken using electric storage heaters it was considered more beneficial to install independent gas fired boiler and radiator systems in each block. These will provide more responsive and better quality heating whilst also ensuring maximum environmental benefit.

Due to the scale of the works involved and given the nature of the school, comprising 4 separate blocks, Northmuir Primary School is being converted in 4 phases with funding being made available as detailed below.

The financial payback from such investment is negligible and extremely long term however, given that it was essential that the heating system be replaced and such a level of funding expended, this is not considered important. The environmental payback is both significant and immediate justifying the investment as a "Spend To save" project.

Northmuir Primary School

Phase	Year	Location	Funding arrangements	Cost	Committee Report
1	2000/01	Nursery	Property Renewal & Repair	£ 17,000	701/01 12 June 2001
2	2001/02	Infant Block	Education Capital Budget	£ 54,000	N/A
3	2002/03	Main Block	Property Renewal & Repair	£ 33,000	Current report
4	2003/04	Upper Block	To be determined	£ 33,000	
				£ 137,000	

3 FINANCIAL IMPLICATIONS

The full cost of these works has been estimated at £86,000 as detailed in Appendix 1 and 2.

The cost of carrying out these works cannot be contained within Property Maintenance Revenue budget for the respective departments and there are no provisions in the Capital Programme for 2002/03. It is necessary for supplementary funding to be made available from the Property Renewal and Repair Fund.

The works detailed in this report can be contained within the provisions of the Property Renewal and Repair fund for 2002/03.

4 HUMAN RIGHTS ACT IMPLICATIONS

There are no Human Rights Act implications specific to this report.

Any implications, as a consequence of discharging recommendations detailed in this report, will be managed in accordance with the standing procedures and processes established by the Property Services department.

5 CONSULTATION

The Chief Executive, the Director of Law & Administration and the Director of Finance have been consulted in the preparation of this report.

APPENDICES

Appendix 1 Carnoustie High School

Appendix 2 Northmuir Primary School, Phase 3

BACKGROUND PAPERS

No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (other than any containing confidential or exempt information), were relied on to any material extent in preparing the above report.

M G Lunny
Director of Property Services

Appendix 1 Carnoustie High School

Carnoustie High School Conversion from oil to gas.

Fuel	Consumption	Cost	
Oil	2,091,411	£37,645	Projected oil price for this year
Gas	2,091,411	£27,268	Revised gas prices for this year
	Saving	£10,378	PA

New burners	£12,000	
New gas main	£19,000	
Builderworks	£6,000	
Alteration to pipework	£3,000	
Drain down, de-gas & remove tanks	£5,000	
Gas pipe MH to BH	£3,000	
Works Costs	£48,000	One off cost
Fees	£5,000	
Total	£53,000	

Payback period Approx. 5 years

Advantages

- 1 Annual saving on the fuel costs of £10,378.
- 2 Environmental savings reduction in greenhouse gases

CO ₂	27%	Saving 146 tonnes of CO ₂ PA
SO _x	100%	(1 Tonne of CO ₂ is equal to
NO _x	94%	a 10m Dia. Balloon.)

- 3 Will lead to more accurate prediction of fuel consumption and cost.
- 4 No need to worry about ordering and the delivery of oil.
- 5 Will create additional storage space for the school in the area previously occupied by the tanks.
- 6 Removes the risk of the environmental effects oil spillages.

Appendix 2 Northmuir Primary School, Phase 3

Northmuir PS Conversion from electricity to gas. (Calculations are based on a full conversion.)

Costs

£137,000

Payback period Approx. 25 years

Advantages :

- 1 Annual saving on the fuel costs of £5,509 which represents a **61%** reduction in the cost of energy.

- 2 Environmental savings equate to a significant reduction in the production of CO₂.
i.e. a reduction of **68%** which is equivalent to a saving of .
108 Tonnes of CO₂ PA
(1 Tonne of CO₂ = a 10m Dia. Balloon)

- 3 Introduces flexibility to the provision of heating at the school.