

NORTH LANARKSHIRE COUNCIL

REPORT

AGENDA ITEM No. 9

To: Education Resources Sub-Committee	Subject: ENERGY MANAGEMENT : 2004/2005 REVIEW AND PRIORITIES FOR 2005/2006
From: Director of Education	
Date: August 2005	
Ref: MM/NR	

Summary

This report is a progress review of the energy management priorities in 2004/2005. It also makes recommendations on priorities for 2005/2006.

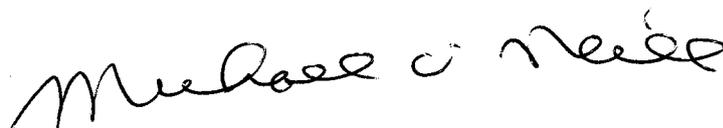
Recommendations

The education resources sub-committee is recommended to: -

- (a) note the progress made in 2004/2005 in meeting energy management priorities.
- (b) approve the energy management priorities recommended for 2005/06.
- (c) request the director of education to provide a further progress report at the end of year 2005/06.

Members wishing further information about the paper should contact:

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NORTH LANARKSHIRE COUNCIL: DEPARTMENT OF EDUCATION

Energy management priorities for 2005/06

Report by the director of Education

1. Background

- 1.1 Gas and electricity fuel provision contracts are negotiated through ABC. The energy contract was tendered in 2004/05 and is presently in the first year of a three year contract. Gas and electricity prices have risen by 26% in the current financial year 2005/06. This trend to higher prices is likely to continue and therefore it is essential to ensure that energy is used efficiently.
- 1.2 At its meeting on 3 September 2003 the education committee approved the energy management policy and priorities for the subsequent years. This report covers the progress made in each priority and recommends further objectives for 2005/2006.

2. 2004/2005 Priorities

2.1 The objectives approved for 2004/2005 were the following:

- (1) to raise energy awareness in all parts of the education service.
- (2) to develop more effective energy monitoring to establish trends in consumption and to identify inefficiencies.
- (3) to promote more efficient energy use including the implementation of spend to save initiatives.

The action taken in each area is detailed below.

2.2 Raising Awareness

- (1) The education department encouraged all heads of establishments to adopt a more proactive energy management approach.
- (2) In collaboration with housing and property services a poster competition was organised to raise pupil awareness and prizes were presented to four pupils and their schools. The winning entry was printed and has been distributed to all schools and offices for display.
- (3) Energy awareness seminars were held for secondary head teachers and janitors. The aim was to increase energy awareness and encourage the

development of local energy policies and action plans.

2.3 Development of energy monitoring

- (1) Software based systems have been established to ensure effective monitoring and to encourage more efficient use of energy in all establishments.

2.4. Spend to save programmes

- (1) Energy efficiency considerations were included in capital projects. For example:
 - all roofing and window projects were specified to increase the insulation of the building
 - all heating projects included boiler control measures
 - all electrical lighting projects included efficiency measures
- (2) A spend to save budget has been established. The main projects undertaken in 2004/05 were:
 - installation of off-peak meters to control storage heaters at Bellshill nursery centre.
 - window adaptations at Langloan nursery class to prevent heat loss and create a more comfortable environment for the children

3. **Priorities 2005/2006.**

3.1 The priorities for 2005/06 together with details of specific action points are described below.

3.2 Priority 1: to raise energy awareness in all parts of the education service

- (1) All educational establishments will be asked to develop their own energy policy. This will encourage more effective monitoring of individual energy use.
- (2) The profile given to energy management in the department will be further consolidated.

3.2 Priority 2: to develop more effective energy monitoring to establish trends in consumption and to identify inefficiencies

- (1) Monitoring will be given high priority and each school will be issued with details of current energy use compared to consumption during the same period in previous years.
- (2) A target 3% reduction has been set for all establishments.

- (3) There are major concerns that the current budget allocations to establishments are inadequate given the substantial price increases.

3.3 Priority 3: to promote more efficient energy use including the implementation of spend to save initiatives

The Scottish Executive has allocated £20 million to an energy efficiency investment scheme for the public sector. North Lanarkshire council will receive £930,000 over two years to establish an “invest to save” fund to implement long term energy efficiency strategies. The aim of the initiative is to reduce energy bills and carbon emissions.

The education departmental allocation from the fund is £125,000. This will be used for the following initiatives to :

- (1) replace swimming pool covers in eight schools which will help reduce energy consumption when the buildings are unused
- (2) install efficient lighting in forthcoming rewiring contracts
- (3) install zoned heating controls in forthcoming re-boiler contracts.

3.4 Priority 4: to continue partnership with energy efficiency bodies

In early 2001 a consortium comprising Scottish Enterprise Lanarkshire, North Lanarkshire Council, Scottish Natural Heritage, Forward Scotland and Central Scotland Forest Trust agreed to pilot wood fuel systems in selected buildings. It involves the installation of biomass wood burning boilers in place of gas boilers. Biomass boilers are termed as ‘carbon neutral’ because the carbon emitted by the boilers during combustion is offset or neutralised by the carbon absorbed by planting trees replacing those harvested to produce the wood fuel. It is anticipated that the installation of the systems will be completed by October 2005. Calderhead High School and Taylor High School are the two educational establishments included in the project.

The initiative will generate savings from fuel use and this will be reinvested in additional systems.

3.5 Priority 5: to promote the inclusion of energy efficient elements in the specifications for building projects

The education department specifications for all capital building projects will be further developed to include energy efficient elements to reduce energy use and carbon emissions.

Options include the following:

- zoned control valves to heating systems
- condensing boilers.

installation of local supplementary heating in small areas of schools which are occupied on a temporary basis only

- additional lighting controls throughout premises including corridors, store rooms and external lighting
- Solar and photovoltaic installations
- Wind turbines
- Heat exchangers

4 Recommendations

The education committee is recommended to: -

- (a) note the progress made in 2004/2005 in meeting energy management priorities.
- (b) approve the energy management priorities recommended for 2005/06.
- (c) request the director of education to provide a further progress report at the end of year 2005/06.