



CLIMATE CHANGE COMMISSION 23 JUNE 2008

Report of the Director of Corporate and Adult Services

Building Schools for the Future – Sustainability Aspects

RECOMMENDATION

1. To note the report

SUPPORTING INFORMATION

- 2.1 Following the Commission's meeting on 1 April 2008 a report on the sustainability aspects of Building Schools for the Future was requested by one of the Members.
- 2.2 Appendix 2 sets out the current thinking and work being done to ensure sustainability measures are built in to the Building Schools for the Future Programme which will take place in schools across the city.

For more information contact: Ellen Bird 01332 255599 e-mail ellen.bird@derby.gov.uk
Background papers: None
List of appendices: Appendix 1 - Implications
Appendix 2 –
Building Schools for the Future – Sustainability Aspects Report

IMPLICATIONS

Financial

1. None arising from this report.

Legal

2. None arising from this report.

Personnel

3. None arising from this report.

Equalities impact

4. Effective scrutiny is to the benefit of all Derby people.

Corporate Priorities

5. This report links with Council's priority for 2008-11 to:
 - Give you excellent services and value for money.
 - Leading derby towards a better environment.
 - Supporting everyone in Learning and Achieving

Appendix 2

Climate Change Overview and Scrutiny Commission - 23 June 2008

Building Schools for the Future – Sustainability aspects

DCC Children and Young Persons Strategy for Change Part 2 document for Building Schools for the Future (BSF), (Section 1.10) has recently been submitted to Partnership for Schools for approval. This indicated that Derby City Council has set itself a target of a 25% reduction in carbon emissions from all its activities by 2011.

Although none of the schemes in Derby's BSF programme will be complete by 2011, the programme gives the Council a unique opportunity to drive down carbon emissions and promote sustainable behaviours in Derby schools and to improve the sustainability of its communities by showcasing best practice and leading by example to encourage behaviour change. Alongside this, there will be careful consideration of re-cycling opportunities.

The BSF programme will target this by developing a sustainable energy strategy for each school in the programme. Specifically, the aim is to achieve a BREEAM 'Very Good' rating for all new build schools. The current BSF Pathfinder School, Sinfin Community School, achieves this rating through the use of a biomass boiler, a wind turbine installation and an intelligent building management system.

We will be seeking to achieve this standard in our new build schools and also aim to reduce carbon emissions in our refurbishment schemes by prioritising sustainability in the design process.

We aim to make our school buildings showcases of sustainability and we will work with school users to encourage sustainability practices in schools. We recognise that user behaviour is very important to support this. All schools in the programme will have a school travel plan and we will support school involvement in the Green Flag initiative to save energy and exhibit sustainable behaviour.

Currently various design options for each school are at a very early stage, dealing with siting and accommodation scenarios to meet the planned student numbers for 2017, as required under the BSF forward planning proposals.

The school design options will be developed during the next stage; Outline Business Case. This stage will examine and estimate the accommodation possible solutions and will incorporate a range of sustainability measures to contribute towards the above principles.

There are seven key sustainable areas to be considered which partly include:

1	Reduce carbon dioxide emissions of buildings by use of: • Energy efficient equipment and sensible assessment of internal heat gains. • Sub metering where appropriate e.g. kitchens, swimming
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	pools and remote monitoring of all meters • Simple and effective controls. • Maximising good daylighting. • Controlling solar gain. • Natural ventilation and the use of passive engineering techniques. • Improved insulation and air tightness. • Sources of renewable energy. • Aim to better part L of the Building Regulations • Lean construction/prefabrication/right first time. • Avoidance of waste in design and manufacture. • Use of local materials and suppliers and avoidance of CO2 intensive components.
2	Reduce consumption and wastage of potable water in buildings by: • Use of water saving devices. • Seeking opportunities for grey water recycling and use. • Collection and use of rainwater. • Use of sustainable drainage systems. • Adopting benchmarks recommended by the Waste and Resources Action Programme – WRAP
3	Reduce the amount of material extracted from the ground by: • Use of products and components made from recycled materials wherever possible. • Ensuring all timber comes from sustainable sources • Use of materials that make the least demands upon the earth where recycled products are not available or suitable. • Designing buildings to withstand the effects of climate change without the need for major changes at a later date.
4	Reduce the amount of construction and demolition material and other construction waste going to landfill by: • Reduction – design out waste. • Re-use – look for opportunities to reuse materials on site. • Recycling – look for opportunities for others to use your waste. • Recovery – turn waste into useful energy.
5	Limit urban sprawl and use of green field sites by: • Advising clients on appropriate site use
6	Ensure the building and its services are used effectively and efficiently by: • Training building occupants, caretakers, facility managers in the effective use of the building and its systems

7	Minimise the ecological impact of development and maximise the enhancement of sites for both new and existing buildings by: • Designing for ease of building modification during its life. (Designed for life) • Protecting from damage, during the construction process, parts of the site and its surroundings that are important for wildlife. • Minimise the use of herbicides and use biodegradable products. • Use environmentally friendly ways of controlling unwanted pests/vandals. • Where appropriate provide secure storage, changing rooms and showers for cyclists. • Protecting and enhancing existing ecological features (trees, water courses, wildlife and hedges).
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To help maximise the above within the BSF programme we aim to make the best use of available funding and to bid for additional funds, up to £50/m², available through this programme where possible alternative solutions are cost effective.

The above, in addition to evolving best practice, will be discussed with schools and students, and built into the developing school design solutions.

Derek Jinks
CAS, Property Services Dept.

5 June 2008