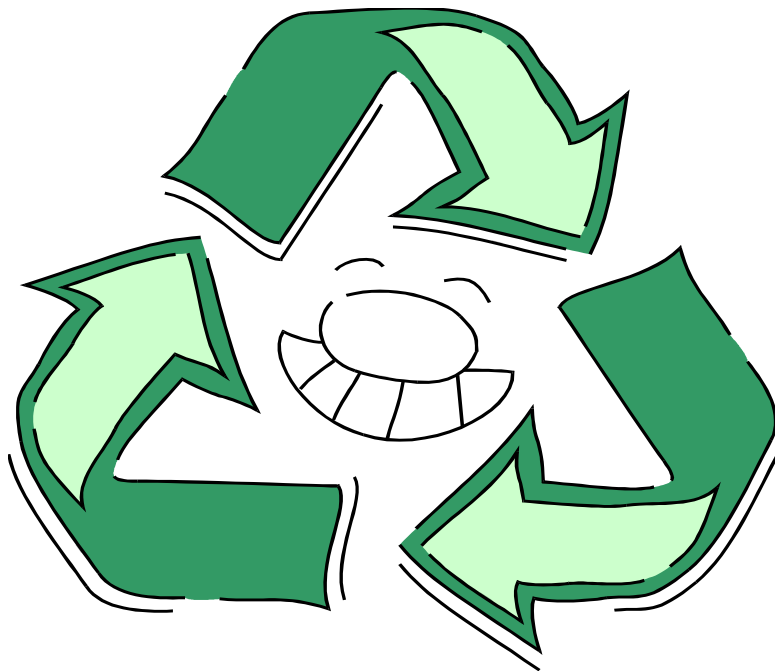


THE SOUTHERN EDUCATION & LIBRARY BOARD

ENVIRONMENTAL IMPROVEMENT PROGRAMME

ANNUAL REPORT 2003/2004



1.0 INTRODUCTION

- 1.1 This is the fourth annual report on greening operations in line with the adoption by the board of an Environmental Policy Statement in July 2000.
- 1.2 The purpose of this report is to focus on the board's performance in 2003/04 in respect of greening its operations related to the management of the estate and travel. In particular it focuses on two main aspects –

The management approach and systems including procurement and education, and its operational environmental impacts covering energy consumption, transport, waste, recycling, water, paper and bio-diversity.

- 1.3 In order to show progress in each area; each section of this report begins with the relevant target or objective and a comment about achievement and/or performance. The targets and objectives are drawn from the Environmental Policy Statement and/or current public sector targets in the relevant area of activity.

- 1.4 The key to the use of graphics is –

Smiling Face 😊 - Objective/target met.

Normal Face 😐 - On course to meet longer-term objective/target or performance is variable across the Board.

Sad Face ☹️ - Evidence of only limited progress across the Board.

2.0 MANAGEMENT APPROACH AND SYSTEMS

2.1 HEADLINE INDICATOR

Establish Accredited Environmental System across the board's estate.	
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SUMMARY OF ACHIEVEMENTS AND PERFORMANCE

- Publicly available Environmental Policy Statement and Improvement Programme.
- Publicly available Annual Report.
- Energy Efficiency Accreditation.
- Appointment of consultants in association with other boards' to assess impacts, aspects and legislative requirement.

2.2 POLICY AND APPROACH

- 2.2.1 The board has continued to develop its approach to environmental management and the systems used to support it since the adoption of a policy statement in 2000. Annual reports have been published and made publicly available over a four year period and the Environmental Improvement Group chaired by a member of the Senior Management Team continues to meet quarterly to assess progress.
- 2.2.2 The current Environmental Management System operated by the board is not certified to ISO 14001, however as an initial step in this process the board sought and achieved Energy Efficiency Accreditation by the National Energy Foundation. The board is currently leading a joint board appointment of Environmental Consultants to identify key aspects, impacts and legislative requirements for all its properties enabling the implementation of ISO 14001 in the longer term.
- 2.2.3 Current environmental management systems within the board's Architects Department include activities in respect of –
- Buildings and estate management.
 - Greening operation activities, guidance and advice.
 - Board corporate energy management activities.
 - Service development planning with set objectives and key targets as part of the steps to excellence approach.

Other systems and mechanisms that assist delivery of improved environmental performance include –

- The requirement for each department to incorporate key environmental targets within service development plans.
- Energy monitoring and benchmarking which assists customers to validate and monitor energy performance.
- Participation in Department of Finance & Personnel's benchmarking of public sector buildings, which enables comparisons across the education sector.
- Partnership with Councils, Northern Ireland Environment Link and the Environment & Heritage Service in promoting a province wide schools waste awareness and action programme.

2.2.4 The Southern Education & Library Board was placed in Quintile 2 of the Arena Network survey aimed at examining the environmental impacts of 200 leading companies and 26 local authorities in Northern Ireland. Participation in this ongoing survey will enable the board to benchmark its position, further developing awareness of the issues involved.

2.3 FOCUS FOR FUTURE ACTION

- Revise and update the Improvement Programme in light of new legislation.
- Continue to produce a publicly available annual report.
- Seek to develop an ISO certified web-based system for environmental management.

3.0 ENERGY

3.1 HEADLINE INDICATORS

(Cross government target) – reduce energy emissions (CO ₂) by 1% from 1999-2000 level (and each year thereafter)	☺
Initiate programme to obtain 10% of the board's energy from renewable sources	☺

SUMMARY OF ACHIEVEMENT AND PERFORMANCE

- 90% of all electricity from renewable sources.
- 35% overall savings in CO₂ emissions since the base year.
- Energy Efficiency Accreditation awarded to the board.
- Major renewable energy investment in solar water heating and photovoltaics.

3.2 BACKGROUND

3.2.1 In 1977 under the Kyoto Protocol the UK agreed to a legally binding target to reduce greenhouse emissions by 12.5% below 1990 levels by 2008/2012.

3.2.2 The board has over a number of years been involved in the public sector initiative within the province to meet these targets. Achievements in this area have been significant, however longer term government targets released in a recent white paper may be more challenging. This white paper entitled "Our Energy Future – creating a low carbon economy" represents a shift in government energy policy to place environmental issues above both security and competitiveness of supply.

3.2.3 Key targets include –

- To work toward cutting emissions of carbon dioxide by 60% by 2050.
- To maintain reliability of energy supplies.
- To promote competitive energy markets in the UK and beyond.

3.2.4 The key to achievement of these targets is a range of practical measures which include significant investment in renewable energy technologies, reforming planning, speeding up of changes to Building Regulations, incentives for suppliers to help customers improve energy efficiency, promotion of a carbon trading system and working with EU and car manufacturers to improve vehicle efficiency.

3.3 CORPORATE POSITION

3.3.1 The board's Annual Report on energy consumption at Appendix 1 shows a reduction in CO₂ emissions by 35% since the base year of 1999/2000.

3.4 SPECIAL INITIATIVES

- 3.4.1 The board has been awarded €104,000 in grant funding to conduct a solar water heating project in 20 school buildings. In addition the board has been successful in raising £121,000 for a 29.8/kWp photovoltaics system at Fivemiletown High School and £45,000 for 5kWp systems at Banbridge High School and Craigavon Primary School, Gilford.

3.5 ENERGY BENCHMARKING AND ACCREDITATION

- 3.5.1 Following improvements in energy monitoring and benchmarking of buildings over a considerable period the board applied for and was awarded Energy Accreditation by the Energy Foundation. This process looked at all the current energy management procedures and awarded points in relation to –

- Monitoring and targeting.
- Communications etc.

Recommendations emanating from this process will be actioned in future years.

3.6 FOCUS FOR ACTION

- Action areas highlighted during the Accreditation process.
- Review and act on results of annual school benchmarking activities.
- Explore and consider the scope to introduce further alternative power sources (such as solar or wind) at sites across the estate.

4.0 WASTE AND RECYCLING

4.1 HEADLINE INDICATORS

Set target to reduce solid waste produced from the board's premises	😊
Monitor and audit waste disposed of from premises to ensure effective management and adherence to regulations.	😐

SUMMARY OF ACHIEVEMENTS AND PERFORMANCE

- Recycling rates improved across a range of schools.
- Partnerships with Environment & Heritage Service and Councils' have initiated a programme of waste recovery across the education estate.
- Duty of Care procedures implemented board wide.
- Waste data included in benchmark data.

4.2 BACKGROUND

- 4.2.1 The Northern Ireland Waste Management strategy sets out the long term vision for the future development of waste management in Northern Ireland. This strategy which is currently under review by the Environment & Heritage Service lays down targets in relation to the land filling of industrial, commercial and biodegradable municipal wastes, and outlines the need for promotion and awareness of the issues involved. A recent review of the strategy by the Waste Management Advisory Board was scathing with regard to the general targets achieved to date and called for increased priority to be given to this area.

4.3 MEASUREMENT

- 4.3.1 Measurement of waste is extremely difficult across a large property portfolio such as the board operates. Currently the board relies on data in relation to the number of bins collected at a site together with their relevant size and estimated weight. There is an obvious anomaly in that bins may not always be full, however in the absence of on site sampling and more accurate weighing techniques, figures provided by the six councils are utilised to provide comparisons.

4.4 RECYCLING ACTIVITY

- 4.4.1 As a primarily office based organisation the board's waste streams are similar to those of other service sector organisations and include paper, glass and can, catering waste, human hygiene waste, office furniture, computers and electronic equipment. In addition to reductions in office waste the board objective is to reduce all types of waste, including hazardous waste, as well as dealing with hazardous substances according to the law and best practice.
- 4.4.2 Recycling systems operate throughout the board's estate for a wide range of materials including paper, cardboard, glass, cans, toner cartridges and fluorescent tubes. All six Councils whose areas are encompassed by that of the board now promote various schemes, which are supported to a significant extent by schools.
- 4.4.3 In an effort to promote a comprehensive waste recycling and education programme within schools, the board has been involved in discussions with the Environment & Heritage Service and the Councils' in its area. Following discussions plans are ongoing to introduce a dry recyclable scheme at all schools with funding being provided by the Environment & Heritage Service to all Councils in the current financial year. Most Councils appear to be incorporating dry recyclable collections with their current Blue Bin schemes.

4.5 WASTE ARISING

- 4.5.1 Waste arising from premises in each Council area are as follows –

COUNCIL AREA	SCHOOLS (tonnes)	MEALS KITCHENS (tonnes)	RECYCLING (tonnes)
Armagh City & District Council	300.74	334.6	109.72
Banbridge District Council	311.44	158.7	190
Cookstown District Council	343.77	201.12	189
Craigavon Borough Council	536.52	431.88	115.68
Dungannon & South Tyrone Borough Council	426.26	319	0
Newry & Mourne District Council	*506	369.60	12
TOTALS	2424	1815	616

* Assumed same as 2002/2003 – no up to date figure for schools in that Council area available.

- 4.5.2 Waste charges are now incorporated in the annual benchmark figures published for schools to make comparisons and to highlight the issue.

4.6 FOCUS FOR ACTION

- Continue to encourage schools and out centres to extend and refine waste and recycling monitoring.

- Maximise participation in the schools recycling and education initiative by the Environment & Heritage Service.

5.0 PAPER

5.1 HEADLINE INDICATORS

Review all operations with a view to maximising the use of IT and electronic media to replace the use of paper.	☺
Identify the quantity of printer/copy paper purchased and introduce programmes to save paper through – eg double-sided printing and copying.	☺

SUMMARY OF ACHIEVEMENTS AND PERFORMANCE

- 12% of all paper purchases are recycled paper.
- All schools and out centres issued with guidance encouraging the use of recycled paper.
- In-house photocopying facilities reviewed with new multi faceted machines facilitating double sided copying.
- Maximum use of e-mail for in-house circulars, minutes etc.

5.2 BACKGROUND

- 5.2.1 The need to reduce paper and actively promote the use of recycled products was recognised by the Environmental Management Group at an early stage. In-house and following a recommendation by the Group the board has been purchasing significant amounts of recycled paper for its own use with no noticeable difference in quality or machine maintenance requirements. Unfortunately, a policy decision would not be made on behalf of schools and only advice and guidance could be given. The board's last procurement contract which facilitates paper purchasing by all five boards' is based largely on historic purchasing data and therefore when tendering the assumption was naturally made that little recycled paper would be purchased. Proposals currently in place will see the board act as procurement centre of excellence for paper procurement across the Northern Ireland Public Sector. This should reduce the cost of recycled paper and make the purchasing option more attractive.
- 5.2.2 Another key element in the drive to reduce paper is the installation of a new PC infrastructure, which enables increased on-line form completion and electronic messaging. With the completion of Classroom 2000 more direct electronic communication will be enabled.

5.3 CORPORATE POSITION

- 5.3.1 Paper procurement at board headquarters amounted to 13574 reams with 85% being recycled paper comprising over 90% genuine post consumer waste.
- 5.3.2 In an effort to promote the use of recycled paper generally all schools and out centres were circulated with guidance related to the creation of markets and the environmental benefits that can accrue.
- 5.3.3 Following a major upgrade of photocopying and printing facilities in board headquarters, double sided copying is now the norm. Teachers Centres' that provide a range of support services to schools have now agreed to promote the concept of using recycled paper and where appropriate will use them in documents produced for schools. This is a major step forward as these centres are among the largest users of paper within the organisation.
- 5.3.4 Paper procurement across the board's estate amounted to 218,604 reams of which 27,443 reams were recycled in the last financial year. This represents approximately 12.5% of the total purchased.

5.4 FOCUS FOR ACTION

- Through the Cross-Board Environmental Group encourage the purchase of recycled paper.
- Continue to circulate best practice and maximise the use of IT infrastructures to reduce paper use.

6.0 WATER

6.1 HEADLINE INDICATORS

Draw up a programme to monitor water use at metered sites	☺
Establish a reduction target for water consumption.	☹

SUMMARY OF ACHIEVEMENTS AND PERFORMANCE

- Water monitoring procedures improved.
- Water consumption data utilised in benchmarking process for targeted reduction.

6.2 Water management is conducted through the active targeting of excess consumption using Water Service supplied data to highlight anomalies which occur on an individual site basis.

6.3 POLICY & OBJECTIVES

6.3.1 The board's aim is to reduce water use by –

- Following the best practice guidance in the Government's "Conserving Water advice for Government Departments".
- Installing urinal control and spray taps where practicable and where they will improve value for money.
- Specifying water efficient appliances and equipment.

6.3.2 The board has not set a corporate target for water reduction as benchmarks are in the process of being issued by the Department of Finance & Personnel for all public sector properties including schools. It is anticipated that these benchmarks will be in the form of litres/m³/pupil or per metre. It is intended to apply these benchmarks as they are produced.

6.3.3 Water Charges & Consumption

2001/2002	2002/2003	2003/2004
372258 cu mts	371,188 cu mts	295,179 cu mts
£236,485	£220,176	£254,184

6.4 FOCUS FOR ACTION

- Continue to explore opportunities and introduce actions, to apply target benchmarks upon their production.
- Encourage property centres to monitor water on a weekly or monthly basis.
- Take action where appropriate to reduce standing charges and excessive consumption.

7.0 TRANSPORT

7.1 HEADLINE INDICATORS

<p>Compile green transport plans to minimise adverse impacts on the environment.</p>	<p>☹</p>
<p>Encourage staff to use more environmentally preferred means of travel and communication.</p>	<p>☹</p>

SUMMARY OF ACHIEVEMENTS AND PERFORMANCE

- Preference given to car sharers in headquarters parking.
- Five Board Transport Officers Committee undertaking the compilation of "Green Travel Plans".

7.2 TRAVEL PLANS

- 7.2.1 In order to reduce congestion and pollution from commuting, official travel, fleet management, visitors and deliveries, the government recommends the compilation of green travel plans for all major public buildings. In an initial step at compiling green transport plans staff were surveyed to assess current home to work travel arrangements. In order to address the issue of the large number of single occupancy car journeys taking place a system was initiated which gives preference to car sharers for parking at headquarters.
- 7.2.2 In light of the considerable use by the board of transport in various forms such as school buses, fleet vehicles, leased cars etc it is deemed appropriate that the Transport Sections have specific responsibility in compiling green travel plans in each board area. To this end the five boards' Transport Officers Committee has now adopted the issue and will complete plans in due course.
- 7.2.3 The board's Environmental Officer is currently involved with the Craigavon Cycling Forum initiative and also with Sustrans safe routes to schools initiative which aim to improve levels of uptake in both cycling and public transport generally.

7.2.4 **Board Buses** – Every effort is made to reduce consumption of fuel by our transport fleet in order to reduce environmental emissions. Comparisons over the past three years are as follows-

	<u>2001/2002</u>	<u>2002/2003</u>	<u>2003/2004</u>
Total fuel –	876,314.3 litres	612,803 litres	483,458
Cost -	£529,806	£445,097	£339,744
Distance travelled	3,056,880 miles	2,908,672 miles	4,187,260 miles

7.3 OTHER TRAVEL STATISTICS

	MILEAGE 2001/02	MILEAGE 2002/03	MILEAGE 2003/04
Board's own vehicles	20,937	24,712	-
Teachers	278,193	339,816	464,199
Essential users	1,187,267	1,195,700	1,235,316
Casual users	186,384	225,967	254,360
Public transport (used for courses etc)	397,813	325,004	336,172
TOTAL	2,070,594	2,111,199	2,290,047

7.3.1 In order to assess alternative fuel sources boards' have also joined together to trial Biofuels and LPG vehicles. It is hoped that from these trials boards' can assess the possibilities of reducing costs and emissions over coming years.

7.4 FOCUS FOR ACTION

- Transport Departments to develop "green travel plans" for headquarters and other major buildings.
- Develop travel information for staff to raise awareness of green travel issues.
- Aim to capture better information on business road mileage and introduce effective measures to reduce it in coming years.

8.0 PROCUREMENT

8.1 HEADLINE INDICATORS

Introduce training and awareness programmes on environmental issues for purchasing staff and develop systems and procedures for implementing green procurement.	☹
Review contract terms and conditions to ensure that they do not prevent the purchase of re-manufactured refurbished and recycled products and refined mineral oils and vegetable based lubricating oils.	☺

SUMMARY OF ACHIEVEMENT AND PERFORMANCE

- E-procurement initiative trial for catering establishments.
- SELB Centre of Expertise public sector procurement.

8.2 JOINT BOARD PROCUREMENT

- 8.2.1 The joint board procurement strategy has as one of its key objectives the promotion of environmental awareness among suppliers and contractors encouraging them to provide environmentally preferable products and services at competitive prices. To this end the procurement service has continued to assess its systems, procedures, contract specifications and auditing arrangements to ensure that they comply with best practice. In an effort to initiate e-procurement requirements, an inter-board pilot project has been completed for school catering establishments at five different locations. Currently a report is being reviewed, which upon acceptance may see e-procurement as the standard method for catering procurement throughout the service.
- 8.2.2 The purchase of timber is now also a high profile issue and more and more contracts now require suppliers as a term of contract to produce evidence of sustainable and legal timber sourcing. This is also the case in sustainable construction of new school buildings.
- 8.2.3 The board has been selected as paper procurement centre of expertise for the public sector as a whole. Contract documents are currently being prepared for issue to interested parties. With Environmental Procurement now an essential part of the process the procurement of more environmentally friendly products is more likely in the future.

8.3 FOCUS FOR FUTURE ACTION

- Continue to monitor compliance with policy to buy recycled paper.
- Continue integrating environmental factors into purchasing decisions (eg making contractors aware of the board's Environmental Policy, obliging contractors to follow the policy).
- Strive to improve monitoring and reporting of timber purchasing.
- Consider on a case by case basis, opportunities for environmental gains in other procurements.

9.0 EDUCATION

9.1 HEADLINE INDICATORS

Compile index of relevant information, resources and projects as well as links to agencies.	☹
Development of guidelines for schools and identification of where and how specific subjects might contribute.	☺

SUMMARY OF ACHIEVEMENT AND PERFORMANCE

- Examples of policies for schools produced.
- Issues promoted through CASS Service.

9.2 BACKGROUND

9.2.1 In Northern Ireland CCEA identified environmental responsibility as a core value in their recommendations for a revised curriculum in 2001. The proposals state that teachers should help pupils –

- Think globally act locally.
- Cut down on waste and prevent pollution.
- Save energy and natural resources.
- Look after the local environment.
- Encourage bio-diversity.

9.2.2 It is envisaged that these issues will be encouraged through science, geography and more significantly in a new subject called citizenship.

9.2.3 The Southern Education & Library Board supports environmental education by-

- Promoting and facilitating the flow of information and educational materials to schools and the youth service.
- Networking with outside agencies through the Educational Sustainable Development Group.

9.2.4 The Interboard ESD Group has now produced an Education for Sustainable Development (ESD) Good Practice guide for Primary, Secondary and Special Schools which specifically addresses the relevant areas in the new curriculum. This group are also spearheading the promotion of the ECO schools programme throughout the province with significant success.

- Providing guidance for CASS officers and schools via INSET (In-Service Training), NINE (Northern Ireland Network for Education) web site and general school visits.
- Completion of the development of example policies for schools.
- Continuing to feature environmental issues strongly in SELB primary and post primary geography, science and citizenship, INSET and school based support.
- Continued development of the web site to share good practice.
- Supporting schools and youth service through curricular projects at local and international level. These included programmes such as a "Pride of our Place", a project linking schools in the SELB with school in the Republic of Ireland.
- Supporting the tidy schools competition organised by Shell.

10.0 CONCLUSION

10.1 This report presents a complete account of the main greening operating issues for the board's estate. Some gaps still exist, however and will be addressed specifically in relation to waste and travel data.

10.2 In many areas much of the basic planning is complete and focus should now shift to planning the achievement of demonstrable reductions in consumption and improved resource efficiency.

10.3 Education and awareness together with the effective use of partnerships will be of significant importance in any future ongoing campaign.