



The Scottish Parliament  
Pàrlamaid na h-Alba

scottish parliamentary corporate body  
**environmental annual report**

08/09





energy use down

2.7%

waste to landfill down

59%

paper use down

23%

Keep Edinburgh  
Clean Award

Carbon Footprint down

7%

Energy Performance  
Rating B

I am pleased to be able to introduce the Scottish Parliamentary Corporate Body's second environmental annual report. Once again in 2008/09 we have worked hard to improve the environmental performance of the Parliament building, reduce the impact of the goods and services we buy and to plan for a future where wise environmental stewardship will be as important as good financial management.

In 2008/09 we achieved the majority of our headline environmental targets which has led to an overall reduction in our carbon footprint of around 7% or 313 tonnes compared to 2005/06. Once again the amount of waste we sent to landfill is down and our recycling rates have increased. Total energy use is also down and, encouragingly, electricity consumption dropped by 10%. I am grateful to all who have contributed towards these achievements by supporting our initiatives and programmes in 2008/09 from the technicalities of energy management to recycling.

I am personally committed to ensuring that the SPCB achieves its stated environmental vision "to be a role model for best practice in environmental performance and to contribute to sustainable development". My hope is that we will become an organisation that is genuinely run and organised according to the principles of sustainable development. I have challenged my staff to work hard toward our vision and deliver further tangible progress in 2009/10.

If you have any comments on this report or our approach to environmental management I would be very pleased to hear them.

I hope you find this report interesting and informative.

A handwritten signature in dark blue ink, appearing to read 'Paul Grice', with a large, sweeping flourish at the top.

Paul Grice  
Chief Executive



**Stewart Gilfillan**

Assistant Clerk/Chief Executive  
and Chair of the Environmental  
Management Steering Group

I have been the chair of the Environmental Steering Group since 2006 and it has been a privilege to help steer environmental management from being seen as a relatively minor issue for the SPCB to a core strategic concern. The Group plays an increasingly important role in identifying the strategic direction of environmental management in this fast moving and ever more challenging field.

The Group meetings are never dull, with discussions ranging from the latest information on climate change to how to reduce paper use in the Parliament. I am very pleased and encouraged that colleagues from across the organisation are prepared to participate and take the issues seriously.

We achieved a lot during 2008-09. We need, however, to continue to work hard to reduce our environmental impact and to realise our vision of contributing towards sustainable development.



**David Fairhurst**

Environmental Performance  
Manager

2008-09 has been another interesting and varied year for environmental management in the Parliament. By the end of April 2009 the legislation which would become the Climate Change (Scotland) Act 2009 was well on its way through Parliament; while at the same time numerous individuals from across the organisation have been working hard to hit our environmental targets and reduce the environmental impact of their offices.

Our environmental policy and strategy is continually evolving and being developed in response to legislation and technology, but increasingly in an effort to keep pace with colleagues' expectations. It is always encouraging to be asked questions ranging from how to recycle a CD, to where are the apples grown which are on sale in the restaurant and to then be given a good suggestion on how to reduce energy use.

The next twelve months will undoubtedly present new challenges with new and far reaching targets already agreed and a Carbon Management Plan to develop.



**Linda Stewart**  
Working Group Member

I have found being a member of the Working Group to be very enlightening. It is an excellent forum in which to put forward improvement suggestions, ideas and innovative solutions that either myself or my office have come up with. These are then discussed by the Group and if appropriate recommended to the Steering Group for consideration. In addition, it gives me the opportunity to find out what other offices are doing in terms of environment, how the Parliament is performing as a whole and to contribute to how we should promote environment information/updates to all building users.

Being a working group member has certainly opened my eyes and I would recommend other building users to join or be more involved.

## **Environmental Management Groups and Employee Participation**

Two groups provide leadership for environmental management and help to implement environmental initiatives. The Environmental Management Steering Group (chaired by Stewart Gilfillan, Assistant Clerk / Chief Executive) provides strategic direction on environmental management. The Environmental Management Working Group translates the Parliament's environmental objectives into practice. The Working Group includes representatives from across the Parliament. Both groups met four times during the year in pursuit of their respective roles.

These groups remain a vital component of our effort to deliver sustained improvements in our environmental performance with group members responsible for encouraging their colleagues to follow good environmental practice in the office.

## Energy Performance Rating

An Energy Performance Rating has been calculated for the Parliament by an independently certified company. The certificate had to be produced to comply with European legislation by January 2009.

The certificate is a document which states the energy efficiency of a building based on how it was constructed. This is calculated using computer software to replicate the building. Information entered into the model includes building geometry, insulation values and heating and lighting systems. The energy rating allows different buildings to be compared as standardised-use patterns are assumed. The energy rating is presented on a scale of A to G with A being the most efficient. The Parliament's energy rating is B.

## Keeping Edinburgh Clean

The Keep Edinburgh Clean Awards is a City of Edinburgh Council programme which allows businesses and public bodies to measure their environmental performance and to contribute to a cleaner and more sustainable city. The aim of the award is to engage organisations in their community, helping to instil a sense of pride, build a positive connection with the local area and contribute to their Corporate Social Responsibility requirements.

In July 2008 the Scottish Parliament achieved the gold award for its work towards keeping the area clean and reducing waste by reducing, reusing and recycling.

Building Energy Performance		Scotland
<p>Carbon Neutral</p> <p>A (9 to 15) B (16 to 20) C (21 to 25) D (26 to 30) E (31 to 35) F (36 to 50) G (50+)</p>	Building type Other	Current rating Excellent       Very Poor
<b>Carbon Dioxide Emission</b> The number value is the calculated dioxide emissions in terms of kg per m <sup>2</sup> of the floor area.		<b>30</b>
Approximate current energy use (kWh/m <sup>2</sup> of floor area).		<b>126</b> (net/ind)
Main heating fuel: Natural Gas Renewable energy source:	Building Services: Heating with hot, warm Electricity: Grid supplied	
Carbon Dioxide is greenhouse gas which contributes to climate change. Less Carbon Dioxide emissions from buildings helps the environment.		
<b>Recommendations</b> A building of this type built to building regulations standards at current at the date of issue of this certificate may be expected to achieve the following energy performance. Where the accompanying recommendations for the cost effective improvement of energy performance also applies, the building could have a rating of:		<b>23</b> <b>B</b> <b>29</b> <b>B</b>
<b>Recommendations for the cost-effective improvement (lower cost measures) of the energy performance</b>		
1. Include dimming control  2. Review lighting installation  3. Replace 28mm diameter (T12) fluorescent tubes on fixtures with 26mm (T8) tubes.		
<b>Address:</b> The Scottish Parliament, EDINBURGH, EH99 1SP <b>Conditioned area (m<sup>2</sup>):</b> 30250.463 <b>Name of protocol organisation:</b> CERISE Certification Ltd. (LCEA17/2008) <b>Date of issue of certificate:</b> 30 Jan 2009. Valid for a period not exceeding 10 years. This certificate is a requirement of the Domestic Energy Rating (DER) in the energy performance of buildings. NB THIS CERTIFICATE MUST BE AFFIXED TO THE BUILDING AND NOT REMOVED UNLESS REPLACED WITH AN UPDATED VERSION AND FOR PUBLIC BUILDINGS DISPLAYED IN A PROMINENT PLACE.		

Energy Performance Certificate



WWF - Earth Hour Logo 2010

## Earth Hour

On Saturday 29th March from 8.30 to 9.30 an extra effort was made to turn off all lights at the Parliament signalling our support for the second year running of the global "Earth Hour" event. The purpose of this WWF event is to highlight the need to reduce green house gas emissions to limit climate change. The Parliament joined a list of iconic landmarks taking part including the Forth Bridge, Christ the Redeemer statue in Rio de Janeiro, Table Mountain in Cape Town, Sydney Opera House, the Eiffel Tower in Paris, CN Tower in Toronto and the Millennium Stadium in Cardiff.

## Environmental Management System

The SPCB achieved ISO 14001:2004 - the internationally recognised standard for environmental management systems - in January 2007 for the way it runs its building and the facilities within it. To achieve the standard, an organisation must be able to demonstrate to an external environmental auditor that an environmental management system has been implemented and is thoroughly maintained. The system ensures that environmental considerations are embedded across the organisation and the areas that create an environmental impact or carry an environmental risk are regularly reviewed and controlled as part of measures to achieve continuous improvements.

## Environmental Performance Targets

In March 2006, environmental performance targets for energy, waste and paper use were set for March 2009 along with additional interim annual targets. Targets were agreed for areas where it was recognised that the environmental impact was significant and that it was feasible to reduce that impact.

In March 2008 the targets were revised and made more challenging in recognition of the good progress that had been attained. The energy target was increased from 8% to 9%, the waste target from 50% to 55% and paper from 10% to 15%.



**Original target:**

To reduce total energy (gas and electricity) use by March 2009 by 8 per cent of the 2005-06 total.

**New target:**

To reduce total energy (gas and electricity) use by March 2009 by 9 per cent of the 2005-06 total.

**Total reduction achieved: 2.7%. Electricity use down by 10%. Gas use up 12%.**

**Electricity use has been reduced by enough to power 180 Scottish homes for a year.**

An overall reduction in energy use was achieved, but due to a colder winter in 2008-09 than in the baseline year of 2005-06, the target was not achieved. Electricity use was reduced by 10%.

Initiatives that have contributed towards reducing energy use include:

- Operating the computer server rooms at higher temperatures to reduce the demand for intensive cooling.
- Operating the combined heat and power unit more frequently.
- Installing energy efficient lighting in the Garden Lobby.
- Draft proofing around a number of windows and doors.

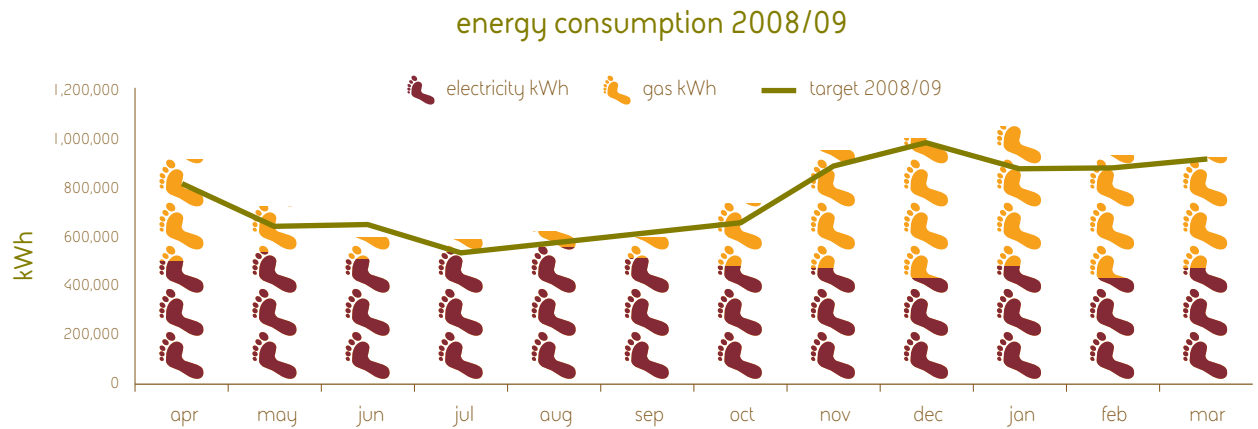




The Scottish Parliament Garden Lobby

energy target *	Total (kWh)	Gas (kWh)	Electricity (kWh)
Baseline year 2005/06	9955654	3349163	6606490
2008/09	9683547	3772127	5911420
Change	-2.7%	12%	-10%

\*The energy target is based on recommendations made by the Carbon Trust. Energy is the total gas and electricity used on site between 1 April and 31 March in the stated year.



**Original Target:** To reduce landfill\* waste by March 2009 by 50% of the 2005-06 total.

**New Target:** To reduce landfill\* waste by March 2009 by 55% of the 2005-06 total.

**Total reduction:** 59% reduction achieved.

\*Waste includes all waste from offices and from catering. It doesn't include waste generated by contractors during works.

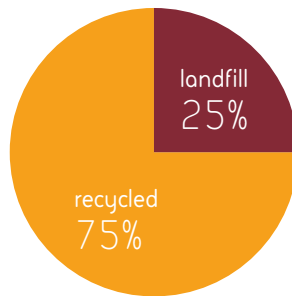
In 2008-09, 62 tonnes of waste were sent to landfill - 91 tonnes less than in 2005-06. This reduction has allowed the frequency at which the general waste skips are emptied to be reduced from six to four times per week.

Waste sent to landfill has been reduced by ensuring that all building users and staff try where possible to reduce, reuse and recycle.

Recycling rates have increased to approximately 75% from 72% in the previous year.

Paper, newspapers, magazines, plastic bottles, plastic bags, envelopes, cans, wood, glass, printer cartridges, batteries and light bulbs are all recycled.

disposal rates 2008/09

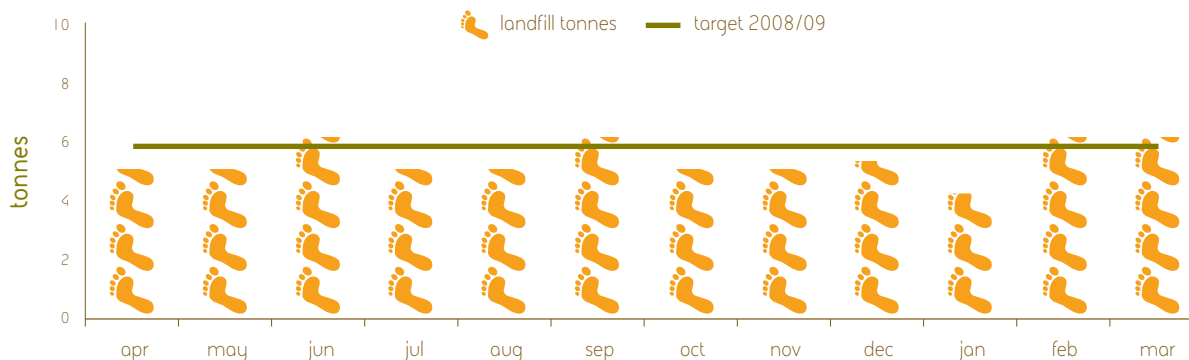


Plastic bottle recycling

Waste Target*	Annual Target (Landfill waste tonnes)	Actual landfill waste (tonnes)	% reduction
Baseline year 2005/06	-	154	-
2006/07 - 5% reduction	146	92	40%
2007/08 - 45% reduction	100	66	57%
2008/09 - 55% reduction	69	62	59%

\*The target is based on the results of waste audits undertaken by Parliament staff. The tonnage of waste sent to landfill is calculated from information supplied by the Parliament's waste disposal contractor.

waste - landfill 2008/09



**Original Target:** To reduce office paper use by March 2009 by 10% of the 2005-06 total.

**New Target:** To reduce office paper use by March 2009 by 15% of the 2005-06 total.

**Total reduction:** 23% reduction achieved.

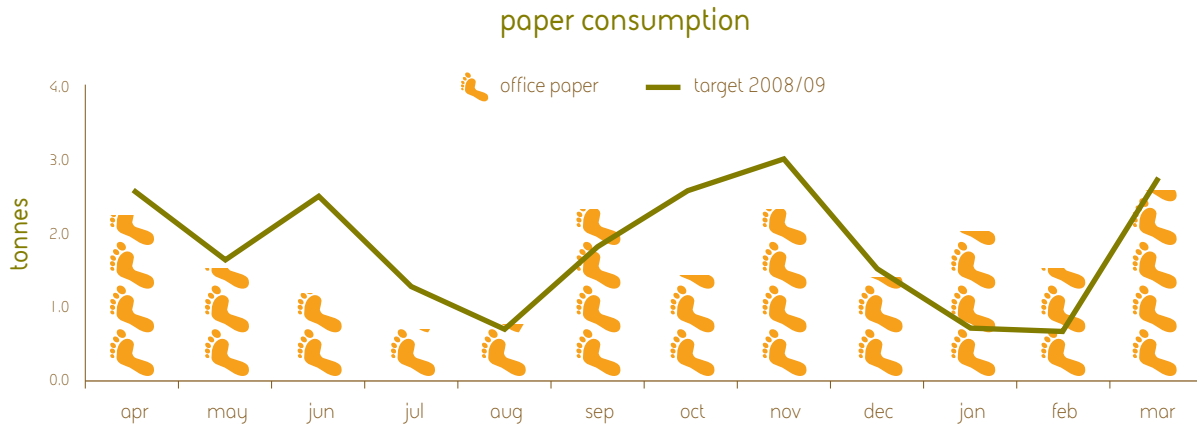
The three-year target to reduce paper use was exceeded in March 2009; consequently a new and more challenging target was agreed. This new target has now been achieved and paper used reduced by 1,300,000 sheets in 2008/09 compared to 2005/06. This reduction in paper has been assisted by initiatives such as the issuing of electronic press cuttings and on-going work to reduce the number of hard copies of committee papers used by building users. Building users aim to reduce printing and print double-sided wherever possible.

**Almost no paper is used during the Environmental Working Group meetings.**

**100% recycled paper is used for nearly all purposes.**



Targets *	Annual Target (tonnes of Paper)	Consumed (tonnes)	Sheets (thousands)	% reduction
Baseline year - 05/06	26.59	-	5318	
06/07 - 5% reduction	25.26	26.59	5318	0%
07/08 - 7.5% reduction	24.59	19.03	3806	28%
08/09 - 15% reduction	22.6	20.3	4060	23%



\* The measurement of paper consumption is based on paper purchased for use in the building's printers and photocopiers.



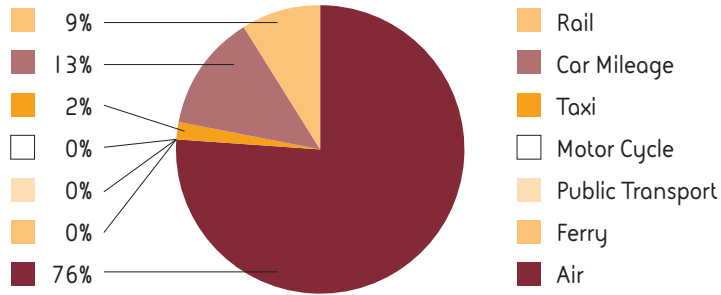
The SPCB policy on travel is to reduce the impact of travel and transport to and from the Parliament, by encouraging the use of more sustainable transport and reducing the need to travel where appropriate.

To help building users travel more sustainably, we have provided:

- cycle parking for 50 cyclists, over 100 lockers and 10 showers.
- a state-of-the-art videoconferencing suite.
- a green travel checklist to help identify the most appropriate travel option for business journeys.

"The Parliament is a cycle friendly employer" Cycling Scotland October 2005.

### Travel Carbon Footprint 2008-2009



### SPCB staff Business Travel 2008/09

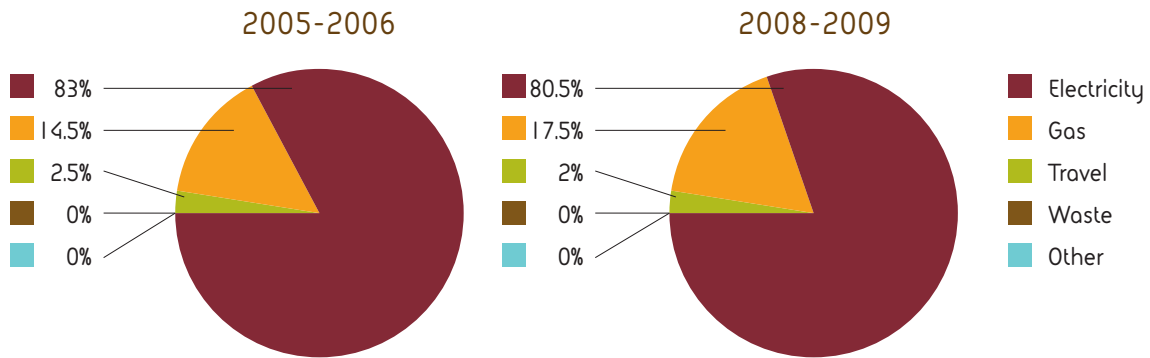
Car Mileage	41135	miles	<b>12.72</b>	tonnes of CO <sub>2</sub>
Air	243435	passenger miles	<b>74.86</b>	tonnes of CO <sub>2</sub>
Public transport	1665	passenger miles	<b>0.31</b>	tonnes of CO <sub>2</sub>
Rail	96316	passenger miles	<b>9.33</b>	tonnes of CO <sub>2</sub>
Taxi	7168	passenger miles	<b>1.98</b>	tonnes of CO <sub>2</sub>
Ferry	3	passenger miles	<b>0.00</b>	tonnes of CO <sub>2</sub>
Motor cycle	167	miles	<b>0.03</b>	tonnes of CO <sub>2</sub>
<b>Total Travel</b>			<b>99.24</b>	<b>tonnes of CO<sub>2</sub></b>

\* Emissions are based on information provided by SPCB staff.

All emission factors are taken from the Green House Gas Conversion Factors, DEFRA, Annexes updated April 2008.

# Carbon Footprint

The Parliament's carbon footprint has reduced by 7% from 2005/06 to 2008/09. This reduction has been achieved mainly through a reduction in electricity use. This footprint information will be used to set future carbon reduction targets. The footprint may change over time as the science of carbon footprinting develops and more elements of the organisation's activity are included in the footprint.



	Electricity	Gas	Travel	Waste	Other	Total
2005-2006	3548	620	99.24	4.20	1.44	4272
2008-2009	3187	670	99.24	1.64	1.44	3959

Figures in graph are measured in Tonnes of CO<sub>2</sub>



The Responsible Purchasing strategy which was launched in January 2008 contains 100 time-bound objectives which are divided into 7 areas:

- Professional standards
- Environmental impact
- Ethical & Social issues
- Small and Medium-sized Enterprises and Scottish suppliers
- Tools for purchasers
- Engagement with suppliers
- Communication plan

A significant resource commitment had been dedicated to Responsible Purchasing and over 75 objectives have already been met.

All SPCB contracts were prioritised in terms of their respective environmental and equalities impacts and selected high risk contracts were audited to identify targets for improvement.

Procurement Services and the Environmental Performance Manager are working together to embed Responsible Purchasing in all new high value/risk contracts. Contractors are required to develop an environmental action plan for their contract and Responsible Purchasing is an integral part of the on-going contractor performance monitoring.

The following targets have been agreed for 2008-09 and March 2015:

### Carbon Footprint Targets

Reduce the carbon footprint by 12% from the 2005/2006 total by March 2015.

**Interim target:** Reduce the carbon footprint by 8% from the 2005/2006 total by March 2010.

### Electricity

Reduce incoming electricity consumption by 15% from the 2005/2006 total by March 2015.

**Interim target:** Reduce incoming electricity use by 11% from the 2005/2006 total by March 2010.

### Gas

Reduce gas consumption per degree<sup>1</sup> day by 5% from the 2008/2009<sup>2</sup> average degree day consumption by March 2015.

**Interim target:** Reduce gas consumption per degree day by 1% from the 2008/2009 average degree day consumption by March 2010.

### Waste

Reduce landfill waste by 75% from the 2005/2006 total by March 2015.

**Interim target:** Reduce landfill waste by 65% from the 2005/2006 total by March 2010.

### Paper

Reduce office paper consumption by 40% from the Session 2<sup>\*</sup> total during Session 4 (2011-2015).

**Interim target:** Reduce office paper consumption by 35% from the Session 2<sup>\*</sup> total during Session 3 (2007-2011).

<sup>1</sup> Degree days are a measure of the severity and duration of cold weather, the colder the weather in a given month the higher the degree day value. If you take these into account it is possible to compare one year with another and to determine whether any initiatives have resulted in energy savings.

<sup>2</sup> 2008/2009 has been set as the baseline year as this is the first year that the combined heat and power plant has worked consistently.

<sup>\*</sup> Paper use for the whole of session 2 is unavailable; this is based on 2005-2007 information.

If you have an enquiry about information in languages other than English or in alternative formats (for example, Braille, large print or audio), please send it to the Public Information Service. We welcome written correspondence in any language.

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