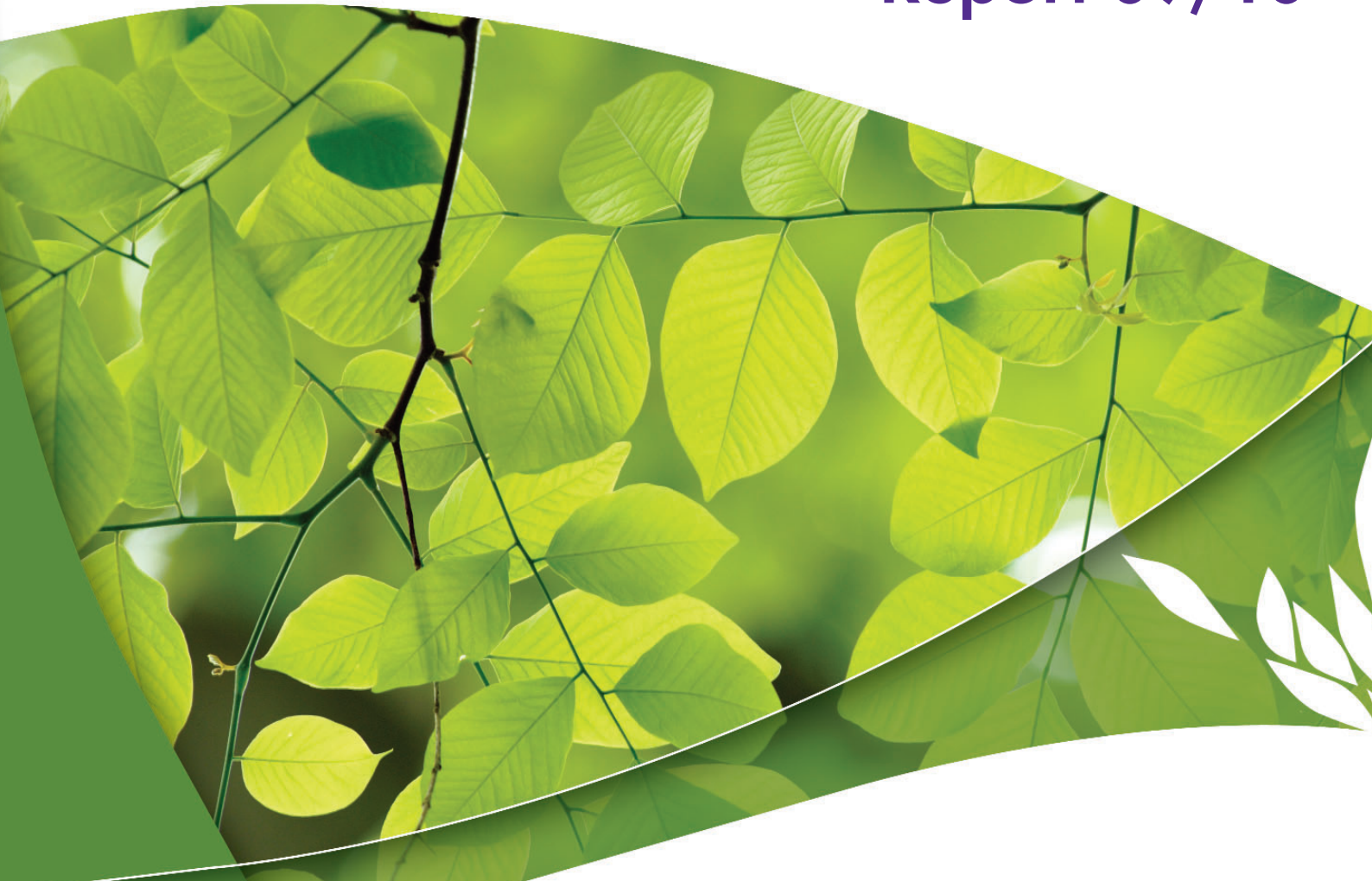




The Scottish Parliament
Pàrlamaid na h-Alba

Scottish Parliamentary Corporate Body
Environmental Annual
Report 09/10





gas use down

15%

waste to landfill down

64%

electricity use down

13%

carbon footprint down

9%

carbon management plan

"We will become a low
carbon organisation"

car park LED lighting

I am pleased to be able to introduce the Scottish Parliamentary Corporate Body's third environmental annual report. 2009/10 has been a successful year for environmental management. We have continued to reduce our environmental impact and I am particularly glad to report that the scale of our carbon footprint continues to decrease.

Our carbon footprint has reduced by 9% or 394 tonnes compared to 2005/06. The majority of this reduction has been achieved through reducing the electricity consumed by the Parliament building. Increasingly we are looking to innovative technologies, such as LED lighting to help to reduce electricity use with the added benefit of reducing running and maintenance costs. We have recently installed these amazing lights in the car park and expect them to last at least 7 years.

This year I was pleased to be able to present our first Carbon Management Plan to the Scottish Parliamentary Corporate Body. This is an ambitious plan in which we set out how we intend to become a low carbon organisation and reduce our carbon dioxide emissions by 20% by 2015 with additional long-term and bold targets set for 2020 and 2050.

I am personally committed to ensuring we achieve our environmental and carbon management visions and targets. To help ensure this is achieved the implementation of the Carbon Management Plan will dovetail with the SPCB's Strategic Plan. My hope is that we will become a low carbon organisation and I have challenged my staff to work hard toward our vision and deliver further tangible progress in 2010/11.

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.



Paul Grice
Chief Executive

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.

The people making it happen...



David Fairhurst - Environmental Performance Manager

The big challenge for this year was to develop a Carbon Management Plan. Our plan is our first step towards our long term goal of reducing our carbon emissions by over 40% by 2020. I am sure that this will prove to be an incredibly challenging but exciting journey.



Lianne Robertson - FM Catering Manager

We recognised that waste produced by the wide range of catering services we offer forms a large part of the Parliament's general waste. Collecting all food waste for off-site food composting was just the latest in a long list of initiatives we have implemented to help to reduce the quantity of waste we send to landfill.



Stewart Gilfillan – Chair of the Environmental Management Steering

We have set a vision to become a sustainable and low carbon organisation which will only be achieved if the environment is considered at all levels of the organisation. With this vision in mind I was particularly pleased that this year we were able to increase our targets to reduce our carbon footprint and publish our first carbon management.



Colin Baird – Visitor Services Supervisor

It is my responsibility to encourage my immediate colleagues to do their bit. They have shown that they are keen to help. I have tried all sorts of things to get the messages across such as signs, emails and gentle encouragement.

Carbon management plan

Vision

“We will become a low carbon organisation”.

We will reduce carbon emissions by 20% by 2015, 42% by 2020 and 80% by 2050.

A low carbon organisation is one which is defined as:

- One which is making real efforts each year to reduce emissions
- Where emission reductions are evident and robust
- Where all decisions take account of our environmental impacts – big and small
- One which has exemplary environmental practices

In 2009/10 the Parliament developed its first carbon management plan in conjunction with the Carbon Trust. The plan will comprise the road map for reducing the Parliament’s carbon emissions. Projects to reduce the Parliament’s carbon emissions by at least 20% from the 2005/2006 total by March 2015 have been identified.

The plan has been developed around four strategic themes and projects have been identified under each of these themes:

- Building Emissions
- Sustainable Travel
- Decision Making
- The RACE: Real Action Carbon Emissions.

Delivering the plan is predicted to lead to savings of approximately £245,000 per annum by 2010 and a reduction in 1000 tonnes of carbon dioxide per annum.

Food composting



Food Composting - CORE

All food waste from the three on site kitchens is now collected for composting. The food is collected in fully biodegradable bags which is then transported to a farm where it is composted before finally being spread on the fields.

Composting food reduces landfill waste and emissions of methane. Methane is a potent green house gas which is generated when organic matter decomposes in the absence of oxygen. In addition compost is a valuable source of fertiliser for farmers reducing their reliance on chemical fertilisers.

Medium term target:

Reduce our carbon footprint by 20% from the 2005/2006 total **by March 2015**.

Interim target:

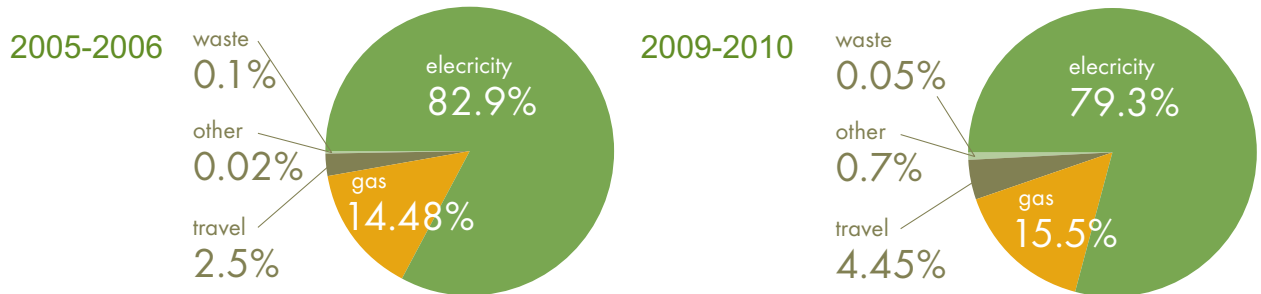
Reduce the carbon footprint by 8% from the 2005/2006 total **by March 2010**.

Total reduction achieved – 9%

The Parliament’s carbon footprint has reduced by 9% from 2005/06 to 2009/10.

The Parliament’s Carbon Management Plan resulted in the setting of more ambitious carbon footprint targets. The target for 2015 has been increased by 8% to 20%. Removing a fifth of the Parliament’s carbon footprint will help towards our vision to become a low carbon organisation.

We are currently almost halfway towards our 2015 target with some 394 tonnes removed from the footprint.



	Electricity	Gas	Travel	Waste	Other	Total
2005-2006	3548	620	108	4.20	1.44	4281
2009-2010	3082	602	173	1.34	28	3887

Figures are measured in tonnes of CO₂

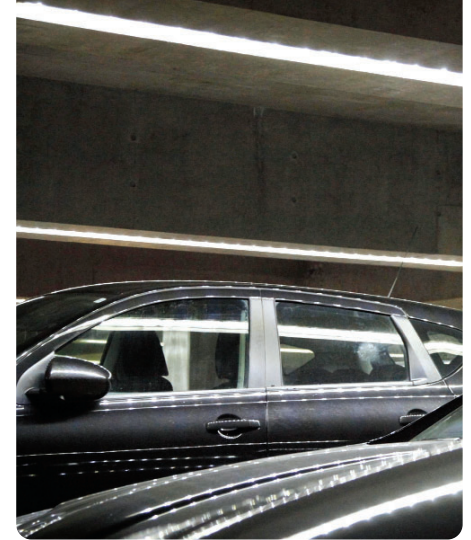
Medium term target:

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.**

Total reduction achieved – 13%

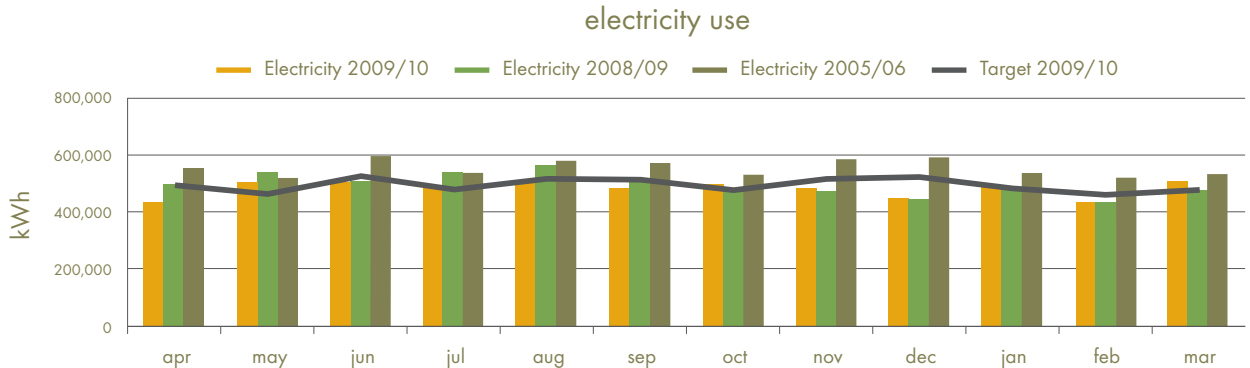


LED car park lighting

Initiatives that have contributed towards reducing electricity use include:

- The replacement of lighting in the underground car park with state of the art LED lighting. This project alone should reduce electricity costs by approximately £7,000 per year and the lights should not need to be replaced for seven years.
- LED lighting has been installed in some areas of the Debating Chamber and in the lobby outside the MSPs restaurant. These lights are 80% more efficient than the ones they replace and due to their longevity maintenance costs are also reduced.

Year	Electricity (kWh)	% Reduction
Baseline year 2005/06	6,606,490	
2008/09	5,911,420	-10%
2009/10	5,738,410	-13%



Medium term target:

Reduce gas consumption per degree¹ day by 5% from the 2008/2009² average degree day consumption by **March 2015**.

Interim target:

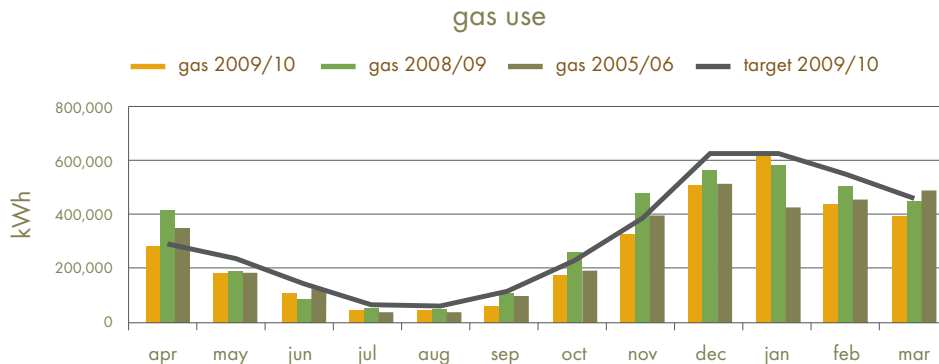
Reduce gas consumption per degree day by 1% from the 2008/2009 average degree day consumption by March 2010.

Total reduction achieved - 16% per degree day



The Parliament used less gas in 2009/10 than in 2008/09 even though 2009/10 was a colder year. To take account of changing temperatures in different years a measure of weather conditions called degree days is used. This allows energy use in different years to be compared accurately. Against this measure and in absolute terms gas use decreased in the Parliament. This is primarily due to careful management of the building.

Year	Gas (kWh) absolute	Degree days	kWh per degree day	% reduction
2008/09	3,772,127	2544	1482	
2009/10	3,255,087	2615	1245	-16%



¹Degree 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.

²2008/2009 has been set as the baseline year as this is the first year that the combined heat and power plant has worked consistently.

Medium term target:

Reduce landfill waste³ 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.

**Total reduction achieved –
64% reduction achieved**

In 2009-10, 56 tonnes of waste were sent to landfill - 98 tonnes less than in 2005-06.



Waste has been reduced by...

- Collecting food waste for offsite composting
- Setting up a Stationery Store to allow unused stationery collected from staff to be reused.

Recycling waste has been reduced by...

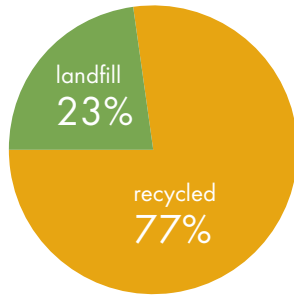
- Using jugs of water to replace bottles of water in the Debating Chamber and Committee Offices

Recycling rates have increased by 2% to 77% from the previous year.

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

³Waste includes all waste from offices and from catering. It does not include waste generated by contractors during works.

Disposal rates 2009-10



Year	Annual target (landfill waste tonnes)	Actual landfill waste (tonnes)	% Reduction
Baseline year 2005/06		154	
2008/09	69	62	59%
2009/10	54	56	64%

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.



Medium term target:

Reduce office paper consumption by 40% from the Session 2⁴ total during Session 4 (2011-2015).

Interim target:

Reduce office paper consumption by 35% from the Session 2 total during Session 3 (2007-2011).

Paper use in the building is not on course to achieve the target set for the session. Paper is very dependant on type and quantity of Parliamentary business.

Paper use has been reduced by:

- Encouraging building users to reduce printing and print double-sided wherever possible.
- Reducing the number of Committee Reports which are printed.

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

100% recycled paper is used for nearly all purposes.

⁴Paper use for the whole of session 2 is unavailable; this is based on 2005-2007 information.



Year	Annual target (tonnes of paper)	Consumed (tonnes)	Sheets (thousands)	% Reduction
Baseline - average per year of session 2 (2005-2007)		25.9	5169	
First year of session 3 (2008/09)	16.8	20.3	4060	23%
Second year of session 3 (2009/10)	16.8	21.8	4367	16%



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

The following targets have been agreed for 2010-11 and March 2015:

Carbon footprint targets

Reduce the carbon footprint **by 20%** from the 2005/2006 total by March 2015.

Interim target: Reduce the carbon footprint by 12% from the 2005/2006 total by March 2011.

Electricity

Reduce incoming electricity consumption **by 24%** from the 2005/2006 total by March 2015.

Interim target: Reduce incoming electricity use by 15% from the 2005/2006 total by March 2011.

Gas

Gas use not to exceed 330,000 kWh (611 CO₂ tonnes equivalent).

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 2011.

Paper

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

Interim target: Reduce office paper consumption by 35% from the Session 2 total during Session 3 (2007-2011).

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. We welcome written correspondence in any language.

-  **Address** Public Information
The Scottish Parliament
Edinburgh
EH99 1SP
-  **Telephone** 0800 092 7500
or 0131 348 5000
- Fòn** 0131 348 5395 (Gàidhlig)

Textphone users can contact us in 0800 092 7100. We also welcome calls using the RNID Typetalk service.

-  **Text** 07786 209888
-  **Email** sp.info@scottish.parliament.uk
-  **Website** www.scottish.parliament.uk