

Scottish Natural Heritage

Environmental Management Programme 2009-10

Annual Report on SNH's Environmental Management Programme to improve the sustainability of our own operations

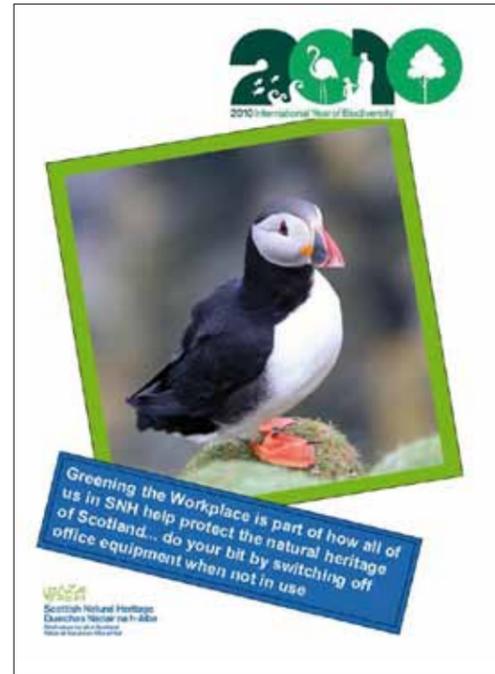


Environmental Management Programme 2009-10

Annual Report on SNH's Environmental Management Programme to improve the sustainability of our own operations

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1 Chief Executive's Statement

Our Greening programme has continually evolved since we started measuring energy use in 1998. It is now firmly embedded into our Climate Change work and fully recognised by senior management as an essential element in the very significant changes the public sector is facing due to economic and climate challenges.

We know that careful investment and wise management of assets can create financial savings and help us to make to deliver on our longer-term climate change responsibilities as well. We need to rationalise our property portfolio, taking every opportunity to share premises, and change how we travel and work with people. We can use these changes to deliver carbon reductions that will save us money in the longer term and make us more resilient in facing the uncertain impacts of climate change in Scotland.

Headlines from 2009-10

- Our overall CO2 emissions fell by nearly 6%, despite an extremely cold winter.
- We produced a Carbon Management Plan with commitments that will deliver 13% CO2 reductions over 3 years and are on track to achieve it.
- We installed more renewable energy systems, including a Battery Inverter for Creag Meagaidh National Nature Reserve (so reducing demand for diesel at this off-grid location) and put everything in place to fit biomass heating at Battleby early in April, installing two new heating systems.
- We collocated with other public bodies at four more locations to further reduce our CO2 emissions, energy use and costs in public sector buildings - moving out of two old offices in Aberdeen into a new 'green' office (built by SEPA); moving in with Scottish Government in Oban; welcoming the Crofters Commission into Great Glen House in Inverness; and closing our Dalkeith office when staff moved into the Edinburgh office of the Forestry Commission Scotland.
- We upgraded insulation and lighting controls at five more offices to reduce emissions and energy costs.
- We continue to reduce our pool fleet and to buy smaller, greener cars; and we installed Vehicle Admin Software in our pool fleet, for more efficient fleet management, higher driving standards, and better understanding of our travel costs.
- We have published Directors' Travel Carbon Footprints to encourage staff and partner bodies.
- We continue to work closely with Scottish Government and other public bodies to promote and develop good environmental management practice across the public sector, where SNH is seen as a leader in good practice.

I said last year that we are only in the foothills of the challenges ahead and we must plan to be ready for a future more defined by climate change. Our hike has begun - we have our Carbon Management Plan, and we have a Low Carbon Vision to inform and shape all that we do over the coming years.

Mitigating and adapting to Climate Change is now the most significant aspect of our Greening programme, with a strong focus on emissions from energy use at our properties and work-related travel. The most important challenge is for all of us to "think carbon", challenging ourselves to work and travel more sustainably each and every day.

Ian Jardine, Chief Executive
Scottish Natural Heritage



2 Environmental Management Programme

Our Environmental Management Programme (EMP) has three key policy aims:

- To manage our resources more sustainably
- To reduce the CO2 emissions from our own operations
- To make our corporate processes and programmes more sustainable

We deliver these aims through five corporate targets to reduce all of our significant environmental impacts and embed sustainability into our corporate processes and local actions:

- To reduce the CO2 emissions from energy use and work-related travel by 4% each year
- To reduce our paper use by 4% each year
- To reduce our solid waste production by 4% each year
- To increase our recycling rate by 4% each year
- Each SNH office to have a Biodiversity Action Plan

This Report shows our progress towards these five targets – especially the CO2 reduction which is by far the most important aspect. Our Environmental Management programme is in effect now our Carbon Management programme.



3 Progress during 2009-10

Target 1 - To reduce our CO2 emissions from energy use and work travel by 4% each year

This annual reduction trajectory will bring about an 80% reduction by 2050, in line with internationally-agreed targets. We know that we cannot do this on our own – there needs to be good low carbon transport for our staff to use, available properties need to have high energy standards, and we need to share offices and other services much more – but we also know that we must do all we can by our own hand and we must make best use of any new opportunities that come our way.

Climate Change Action Plan

Our **Climate Change Action Plan**, launched in July 2009, describes how we will deliver the challenges of mitigating (reducing) the effects of climate change and adapting to the climate changes likely to affect the natural heritage of Scotland. This includes what we do in our corporate working as well as our work on land management, coastal habitats, enjoying the outdoors etc.

Mitigating and adapting to Climate Change, with a strong focus on reducing CO2 emissions, is now the most significant aspect of our Greening programme, with increasing focus onto energy at properties, work-related travel and behavioural changes by staff across SNH.

Carbon Management Plan

We completed our **Carbon Management Plan** using the Carbon Trust 'Carbon Lite' process. Approved by our Chief Executive in December 2009, this sets out an agreed programme of investments and other actions to deliver 13% emissions savings over three years. This senior approval led directly to key projects getting funded and delivered.

Our Carbon Management Plan is part of how we deliver the Climate Change Action Plan targets and other Carbon Management outcomes. Governance will continue to be by our Chief Executive and Director of Corporate Services, demonstrating the importance we place on delivering these goals.

Low Carbon Vision

A Low Carbon Vision for SNH is now in place to shape how we ensure that all we do helps us work towards becoming a low Carbon organisation.

Our combined CO2 emissions fell by 5.7%

This is an excellent outcome, despite the worst Scottish winter for 40 years and one of our largest properties being flooded with consequent need for relocations, drying-out and repairs etc. The biggest saving was in operational activities across National Nature Reserves.

Emissions per SNH employee fell by 15%. This number is higher than the total fall because the total reflects more sharing of offices with other organisations.

Energy CO2 emissions fell by 6.3%.

- Electricity - down by 6%
- Mains Gas - down by 2%
- Office Oil - up by 1.2%
- Biomass - up by 331%
- Fuel for operational activities - down by 7.5%

How did we achieve this?

- Sharing offices with other public bodies at Oban, Edinburgh, Golspie and Inverness - so moving out of three offices, with two more at the end of March as we moved into the new SEPA building in Aberdeen.
- Local action works – staff at our Lerwick office cut their electricity use by 40% over eight years by working together to make lots of small changes.
- IT upgrades and replacements – removing 30 of the 40 servers at SNH offices and new more energy-efficient desktop PCs.
- Biomass - The Golspie heating accounts for most of this increase; and we installed new biomass heating systems at Battleby replacing oil and kerosene.
- Operational activities – we fitted a battery inverter at Creag Meagaidh National Nature Reserve to reduce diesel use.
- Greening input to our new Planned Property Maintenance programme delivered more improvements in insulation, lighting and control systems.
- We completed energy audits (by Energy Saving Trust) for Stornoway, Stilligarry (South Uist), Stirling and Dingwall offices to help prioritise efforts.
- Our emissions are falling faster than our energy use because wherever possible, we're replacing fossil fuel with renewables.



See the Carbon Trust's "In The Bricks" report on what it's like to work in a low Carbon building, featuring Great Glen House.

Our Battleby Centre is one of SNH's biggest offices and the site for much training and external conferences. We burn oil and kerosene to heat the two buildings and for many years we've wanted the chance to resolve this.

Unseasonal weather caused massive flooding of our smaller building, requiring substantial renovations. Staff squeezed into the larger building and then the coldest Scottish winter for 40 years put great pressures on the heating systems. Our oil use trebled, impacting hard on achieving our carbon target.

The renovations needed in the flooded office gave us the chance to fit underfloor heating and a biomass boiler to replace the kerosene. We decided we would also install a bigger biomass at the larger office to replace the oil. We've seen the price of oil shoot up in recent years, but the price of wood chips and pellets has become increasingly competitive and so we found the business case for the investment easier to make.

We're pleased to have been able to turn a short-term crisis into a creative long-term solution that will bring us financial savings, significantly less emissions and a stable heating system using local fuel supplies.

We hope that our example will encourage others and we're pleased to help firm up demand for biomass fuel in Scotland. As a training venue, we're aware of the opportunities to show this off to others.



Travel CO2 emissions fell by 3.5%

- Pool fleet emissions fell by 10%
- Emissions from private vehicles also fell by 2%, and train travel rose by 11%, showing staff are switching to public transport rather than their own cars
- Air travel emissions fell by 17%
- Directors' travel accounts for less than 1% of this total (see annex)

We did this by

- Using our **Carbon Management Plan** to prioritise efforts onto fleet reduction, greener fleet vehicles, purchasing Vehicle Admin Software.
- **Fitting bike storage** at Stirling and Dingwall offices.
- **We cut our fleet** of pool cars by another 4 vehicles, with all replacement cars being small or medium cars with lower emissions, including three Prius Hybrid Generation 3 cars for our city locations.
- **We relaunched our Cycle to Work Purchase Scheme** following a pilot in 2008-09, with another 24 staff taking advantage (making 63 to date).
- **Video-conference use** continues to be very well used throughout SNH. We now have 43 kits at 29 offices. Analysis of VC use at our Inverness office shows increased use every year since installation.
- **We held more 'Bike Breakfast' events** at several offices – around 45 people had breakfast if they cycled to work, many for the first time.

Target 2 - To reduce our paper use by 4% each year

We have not set an endpoint for this – the focus is to maintain pressure on continuous improvement and savings across all of SNH, especially as paper still makes over 65% of the waste we produce.

Paper use per person is down by 10%

- As we buy paper for other organisations we share offices, the quantity bought is up (by 6%), but we're each using less.
- All standard A4 and A3 papers are made of post-consumer recycled waste.
- Our new iBuy online purchasing system means the end of routine purchasing paperwork, filing and forms.
- All PCs are set up to print double-sided as standard.
- Local Managers encourage all staff to print less – eg two pages/sheet, only relevant pages etc – as part of their local Green Office Plan.

Target 3 - To reduce our solid waste production by 4% each year

We have not set an endpoint for this – the focus is to maintain pressure for continuous improvements across all of SNH.

Total waste increased by 5%

This is entirely due to there being more staff in our offices because of collocations with other bodies; and relocation-related clearouts at three offices. Without these, the total is the same as last year.

Per person waste is down by 14% to 906 litres/person/year.

- “No Waste Printing” from our purchase of a new type of Multi Function Devices at the Inverness office which does away with the need for toner cartridges, the waste packaging and the need for recycling – so saving money and staff time too.
- Our new Sustainable Procurement criteria ask contractors to reduce packaging waste and avoid hard-copy publishing.
- More online publishing of SNH leaflets etc means fewer surplus copies going to waste – all our publications ask people to pass on or recycle the item.

Target 4 - To increase our recycling rate by 4% each year

We have set an average target recycling rate across SNH of 80%, recognising that our success is dependent on the availability of commercial and Local Authority waste management services, but we expect staff at all our offices to maximise whatever local opportunities are available.

Our recycling went up from 60% to 64%

- Staff at 14 offices achieved the 80% recycling target or better, with 22 improving on previous year’s performance.
- We doubled the amount of Card and ‘other’ materials (glass, metal, plastic etc) recycled – more offices put more sophisticated recycling systems in place to collect more materials.
- We disposed of 334 IT items as part of a major PC replacement programme, plus quantities of defunct keyboards, mice and cabling. All met our own sustainable standards and went for reuse, remanufacture or recycling.
- We refreshed our recycling messages with staff at our offices.

Target 5 - Each SNH office to have a Biodiversity Action Plan in place

As part of our response to the statutory duty on public bodies in Scotland to conserve biodiversity under the Nature Conservation (Scotland) Act 2004, we want to be able to demonstrate what we are doing to enhance biodiversity at our office properties, so as to encourage other public bodies, businesses and individuals.

As a first step, we are carrying out assessments of existing biodiversity at all offices, followed by actions to enhance and/or promote biodiversity. For larger properties – like Inverness and Battleby, the biodiversity plans are quite complex, with ground management regimes, detailed species counts (eg moths, birds, plants) etc. Many of our properties have no grounds and so action is limited.

All offices with grounds have carried out surveys and have complete or draft biodiversity action plans.

Supporting Delivery of these targets

Our Climate Change Action Plan has five Corporate Working Objectives:

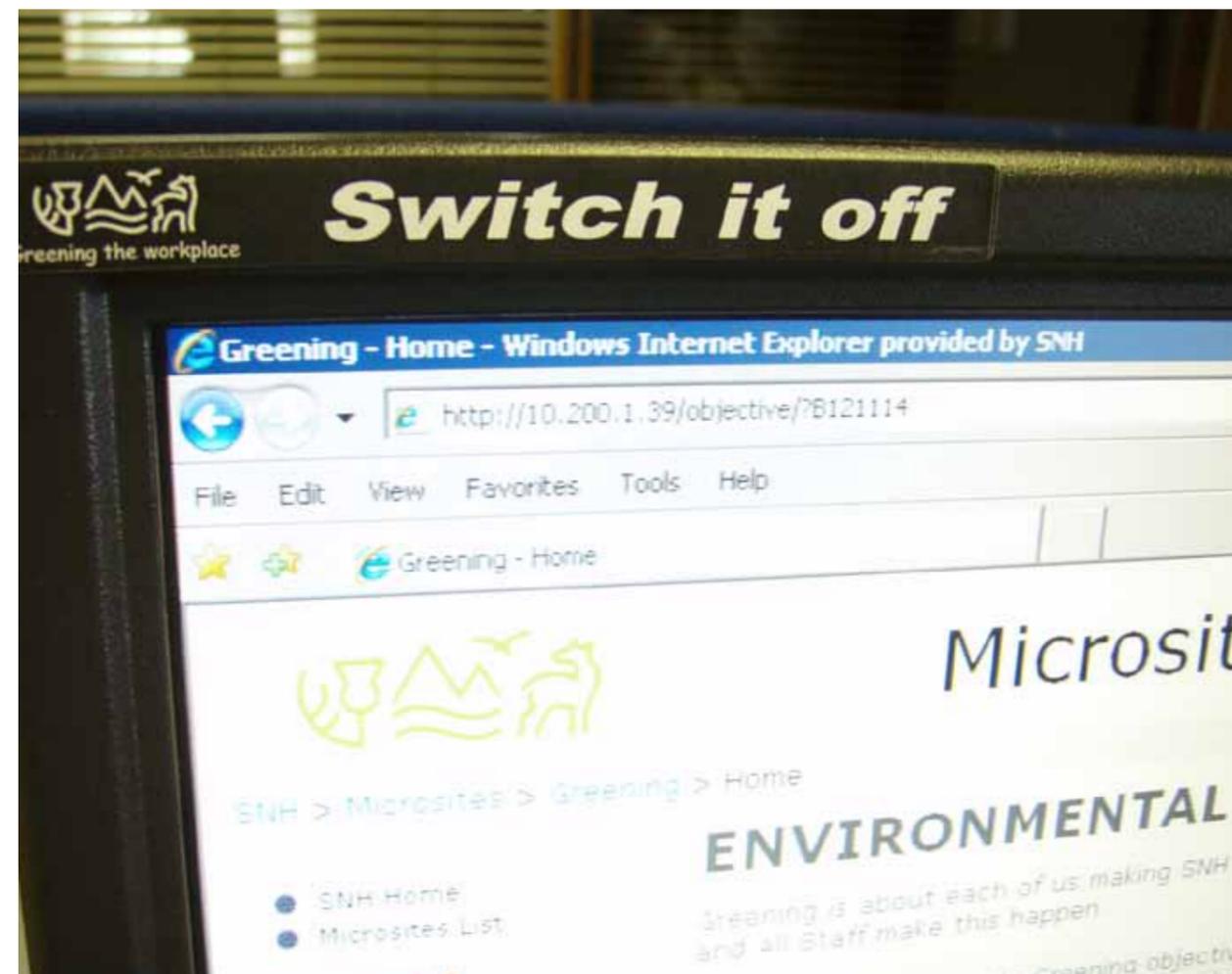
- Raised awareness and understanding of the impacts of climate change on SNH business operations, properties and NNRs.
- Reduced energy use in SNH and the installation of renewable energy technologies where appropriate.
- Reduced fossil fuel use and reduced SNH energy emissions.
- Reduction in others’ greenhouse gas emissions, with our persuasion and support.
- SNH’s operations are prepared for the effects of climate change.

Green Office Plans

Every SNH office has a Green Office Plan, where local Managers identify and agree to do the most meaningful local actions. Plans and annual targets are refreshed each year, depending on known local priorities and how quickly the local targets are achieved. They are also part of our local induction for new staff and are a reminder of the key Greening behaviours we expect all staff to model in their work.

Greening Reps Network

Our network of volunteer Green champions in every office is there to promote good practice and to help local Managers achieve their targets. This year, we focused on revitalising the network to clarify the key responsibilities and the support that Reps need to support the Managers to make change happen.





Sustainable Procurement

Scottish government launched the Sustainable Procurement Action Plan in October 2009. We had already committed to refreshing our sustainability criteria as part of our new online purchasing system (iBuy). By the end of 2009-10, we had revised and strengthened our **Sustainable Procurement criteria** and developed a timeline for delivering our own Sustainable Procurement Action Plan.

Merger with Deer Commission for Scotland

As part of preparing for this merger in 2010, Greening targets, measures and activities have been aligned to ensure a smooth transition.

Working with other public bodies

SNH receives many requests for help from other public bodies at an earlier stage in their Greening/Carbon Management process. We have regular liaison with SEPA and Scottish Government as part of a Leading By Example group, and we provided ad hoc support for bodies such as the two National Park Authorities and Northern Constabulary. We also continue to host visits and tours to our Inverness headquarters, for other public bodies keen to deliver Green buildings and green ways of managing them.

4 Our Priorities for 2010-2013

Our priority remains to further embed sustainability – especially good carbon management - into our ways of working, so as to deliver environmental and financial savings, make our share of Scottish reductions, and retain our leading by example role within the public sector.

We know that economic circumstances will mean a smaller, smarter and more effective SNH, with changes likely to organisational structures and priorities. This will affect where our staff work and who with.

We await and are planning for the forthcoming Climate Change Duties on Public Bodies and know that climate change will impact on how and where SNH operates.

These priorities help us shape a future with an emphasis on efficiency and resilience.

Key actions:

Embed our Low Carbon Vision - to ensure we manage changes in coming decades in ways that reduce our emissions

Reduce the CO2 emissions per staff member

Embed the duties on public bodies arising from the Climate Change Act

Deliver our Carbon Management Programme - through capital investments, maintenance programmes and behavioural changes

Deliver the Corporate Working actions in our Climate Change Action Plan –research into Extreme Weather Events to help us adapt our buildings and operations to Climate Change

Develop a new Property Strategy - to deliver emissions reductions and adapts to climate change alongside economic drivers, including minimum Carbon standards that we aspire to.

Any new shared offices meet high sustainability standards

Install Renewable Energy systems at our offices & NNR properties - where value is demonstrated

Reduce fossil fuel use at our properties.

Develop a Greening Database - better quality Management Information.

Work with Government and other public bodies – benchmarking and promoting good practice in Environmental and Carbon Management in the public sector.

Biodiversity is improved at our offices.

Deliver our Sustainable Procurement Action Plan – with strengthened sustainability criteria for all SNH purchasing.

Our National Nature Reserves promote sustainability for visitors.

All SNH staff are active players - in delivering emissions reductions and model best greening practices.



5 Technical Data

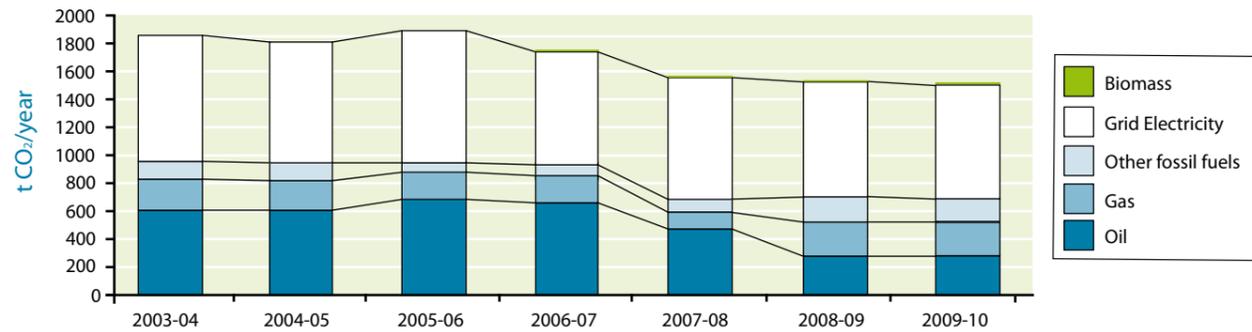
1 - CO2 Emissions (Energy and Travel-related)

Total CO2 emissions

CO2 emissions (tonnes)	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Emissions (energy)*	2,013.7	1,978.3	2,046.8	1,926.5	1,735.6	1707.9	1600.1
Emissions (transport)	516.6	542.7	526.2	563.1	542.9	511.9	493.8
Emissions (all)	2530.3	2521.0	2573.0	2489.6	2278.5	2219.8	2093.9
% change (cumulative)	0	-0.4%	+1.7%	-1.6%	-10.0%	-12.3%	-17.3%

* These data have been recalculated to take account of better information

Energy CO2 emissions



Energy CO2 emissions	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Oil	392.5	393.6	389.9	386.3	306.9	409.6	417.2
Gas	592.4	587.1	662.8	639.9	455.7	263.2	258.0
Other Fossil Fuels	139.8	133.0	64.2	77.4	80.5	176.1	113.5
Grid Electricity	889.1	864.6	928.8	820.8	888.2	857.2	805.4
Biomass				1.8	1.8	1.8	6.0
Total (tonnes)	2013.7	1978.3	2046.8	1926.5	1735.6	1707.9	1600.1
% change (cumulative)	0	-1.8%	+1.6%	-4.3%	-13.8%	-15.2%	-20.5
CO2 per person (tonnes)	2.68	2.61	2.75	2.45	2.20	2.24	1.86
% change (cumulative)	0	-0.4%	+1.7%	-1.6%	-10.0%	-12.3%	-17.3%

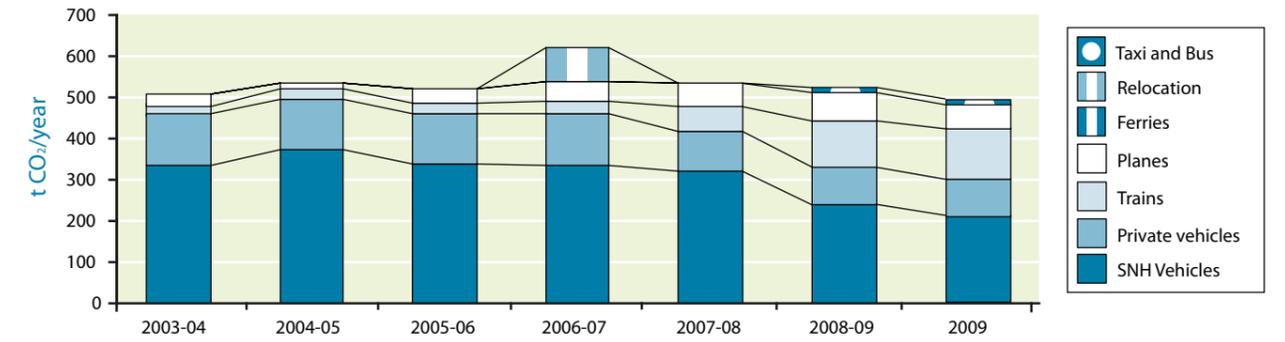
Notes:

CO2 is shown in tonnes

CO2 per person includes non-SNH staff working in SNH offices

These data have been recalibrated to take account of better information on energy use in SNH

Work Travel CO2 emissions



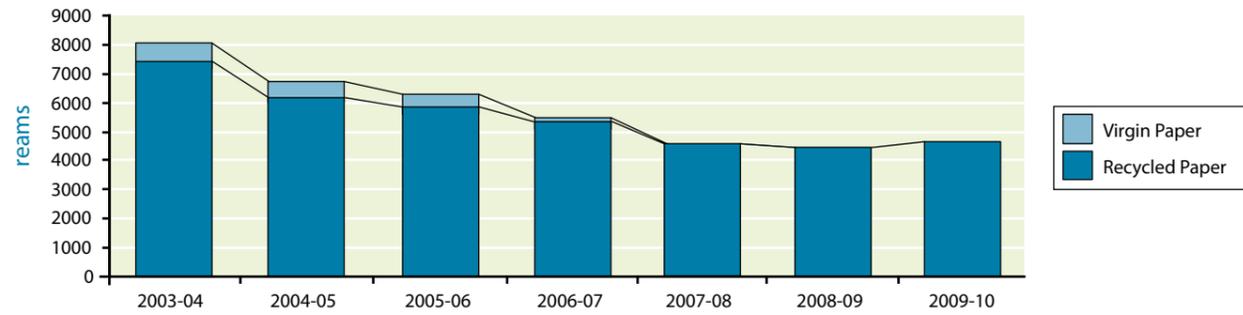
CO2 emissions	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
SNH Vehicles	335.1	372.2	336.6	362.4	322.2	244.0	219.8
Personal Vehicles	125.0	125.0	125.6	125.6	95.6	87.3	85.0
Trains	18.6	22.9	23.0	32.0	60.2	109.5	121.8
Planes	31.1	15.8	34.2	46.0	57.0	71.0	58.8
Ferries	0.24	0.16	0.20	0.45	1.3	1.4	2.5
Taxi and Bus	6.6	6.6	6.6	6.6	6.6	6.6	5.9
Total (tonnes)	516.6	542.7	526.2	563.1	542.9	511.9	493.8
SNH staff	751	758	743	741	747	732	789
CO2 per person (tonnes)	0.68	0.71	0.70	0.75	0.72	0.70	0.65

CO2 per person includes SNH staff (FTE at 31 March 2010) only as non-SNH staff don't use SNH vehicles.
Data in blue text are estimates.

Director's Travel Carbon Footprints

Director	Totals/post (kg)	Mainland Air	Island Air	Foreign Air	Rail	Bus	Taxi	Car	Ferry	Pool Cars
Chief Executive	3406	192	240	1326	1164	8	76	400		
Director - Corporate Services	1392	192	180		564	1	120	153		182
Director - North Operations	2481	288	660		636		110	314	8	465
Director - Strategy & Communications					1092	14	58	588	4	33
Director - South Operations	2391		192		708	1	22	1464	4	
Director - Policy & Advice	2465			204	72	1	6	33		2149
Total for Management Team	13923	672	1272	1530	4236	25	392	2952	16	2829

2 - Reduce Paper Use



Notes:
'Recycled' means 100% post-consumer recycled waste

ALL standard A4 and A3 printing uses 100% recycled materials.

This total figure includes paper bought by SNH and used by other organisations we share offices with.

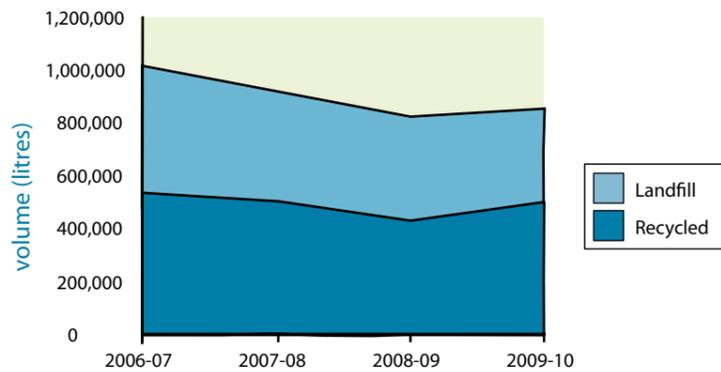
3 - Waste and 4 - Recycling

Waste Production (volume)

From April 2006, monthly estimates of volumes of waste (in litres) have been gathered from each SNH office.

Waste endpoint	2006-07	2007-08	2008-09	2009-10
Recycled	565,308 Lt	546,751 Lt	430,969 Lt	540,305 Lt
Landfilled	460,108 Lt	375,638 Lt	374,987 Lt	306,745 Lt
% Recycled	55%	59%	53%	64%
Total	1,025,416 Lt	922,111 Lt	805,956 Lt	847,050 Lt

Waste Disposal



Summary of IT disposals 2009-10

Laptops	11
Monitors	37
PCs	257
Printers	20
Workstations	7
Servers	2
Total	334
(plus boxes of keyboards, mice and cabling)	

5 - Biodiversity Action Plans

Permanently occupied SNH offices and visitor centres	38
Those with grounds of any kind	29
Of which, with completed Biodiversity Action Plans	10
Of which, with partially-completed BAPs.	19



Scottish Natural Heritage

All of nature for all of Scotland

SNH commitment to customers

- We will ask customers for their views
- We will put things right if they go wrong
- We will give high standards of customer care
- We will publish our customer care performance

www.snh.gov.uk

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Photography: SNH

CO2 emission conversion factors are taken from DEFRA's 'Revised Guidelines for Company Reporting on Greenhouse Gas Emissions'. SNH will use the revised factors (issued in 2009) in Reports beginning with 2010-11.

Further Information - please contact our Greening the Workplace team.

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Find out more on the **Greening page** of the SNH website.

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