
Carbon Scrutiny Board

Annual Report 2011/12

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Introduction

1. In 2008/09, we produced 533 tonnes of carbon dioxide (CO₂). We set ourselves a target to in our Carbon Management Plan (CMP) to reduce this by 20 per cent in five years so that we would produce a maximum of 426 tonnes CO₂ in 2013/14. This report from the Carbon Scrutiny Board (CSB) outlines our progress towards this target during 2011/12.
2. Alongside the actions contained in our CPM Audit Scotland a number of other strategic developments are taking place within Audit Scotland that should have a positive impact in continuing to reduce our carbon emissions. We have a strategic commitment to reducing the overall size of the organisation by 14.4 per cent by 2014/15 and, through the application of our voluntary early retirement scheme (VERA), we are almost half way towards meeting that target. We are also committed to moving to a single Edinburgh office by 2014/15. We are also supporting our staff to work more efficiently through better use of technology and the introduction of electronic working papers (EWP) and ishare are making 'virtual working' much easier.
3. The CSB, formed in October 2011, leads our work to reduce our CO₂ emissions. It aims to build on the positive work previously carried out by Audit Scotland's environmental group and its remit is to:
 - monitor performance against Audit Scotland's carbon management plan and ensure that progress is reported internally and in public
 - ensure that appropriate new opportunities (those which require policy change) are developed, approved and implemented
 - consult with staff, or their representatives, on proposals which affect them directly or the way they work
 - consult with and seek approval from management team for decisions on policy issues
 - promote awareness among staff of our corporate carbon management work and the wider role Audit Scotland is playing in the climate change agenda
 - explore and pursue opportunities to embed carbon management into our corporate culture and become a mainstream management responsibility
 - report progress to Audit Scotland's Management Team twice a year, to the Audit Scotland Board annually and publicly in our annual report and on our website.
4. The focus of the CSB is on our internal processes and deliberately excludes our approach to the audit of environmental issues. The CSB will not be directly responsible for the delivery of specific carbon projects or audits. This responsibility will rest with appropriately identified staff within the organisation.
5. A broad range of business groups are represented on the CSB, with current members being:
 - Antony Clark, Assistant Director – BVS (Chair)
 - Carol Foster, Senior Auditor – ASG

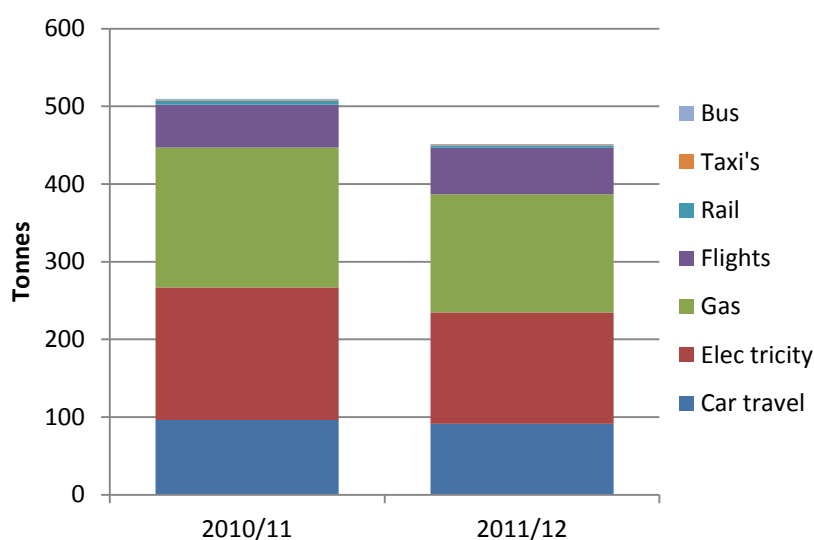
- David Hanlon, Finance Manager – Corporate Services
- Mark McCabe, Project Manager – BVS
- Mark Roberts, Portfolio Manager – PAG
- Esther Scoburgh, Senior Audit Manager – ASG.

Key messages

- In 2011/12, we produced 451 tonnes of CO₂ emissions, a decrease of 11.4 per cent on the previous year.
- Our CO₂ emissions are 58.2 tonnes less than in 2010/11.
- Our reduction in CO₂ emissions during 2011/12 is more than half of our total five-year targeted reduction of 107 tonnes.

Exhibit 1

Audit Scotland's total CO₂ emissions



Source: Audit Scotland

6. Our comparative performance with 2010/11 shows positive progress in reducing our CO₂ emissions. Our energy use has decreased significantly due to improvements in ICT and our office rationalisation. Our reduction in CO₂ emissions from business travel is also more than double our intended target in our carbon management plan. Our fleet of leased cars is now much greener than when we set our target for reducing business mileage CO₂ emissions, and we are also now able to more accurately calculate its CO₂ emissions. On this basis, comparisons with our original baseline are no longer valid and we recommend recalculating a more appropriate baseline against which to judge future performance.
7. Data availability and reliability continues to be a challenge facing the CSB. We are encouraged that Management Team has approved the introduction of a new electronic expenses claim system. However, much more needs to be done to improve the capture of energy and waste data. This, and building energy efficiency, should be an important consideration in any future office move.
8. Our carbon management plan estimates a potential £35,900 of savings over five years from reducing CO₂ emissions. Despite significant reductions in CO₂ emissions in 2011/12, our

relevant expenditure has actually increased this year by almost £24,000. This has been heavily influenced by increased car and air travel in the past year, but also by increased energy prices offsetting some of our savings from reduced energy use. The phasing of the audit appointments has had an obvious effect on travel in 2011/12 and we expect that we are likely to make financial savings as well as reducing CO₂ emissions further in future years.

9. In our carbon management plan we committed to seven projects, five of which are expected to deliver long-term savings and carbon reductions. In this report, we highlight performance against these seven projects during 2011/12.

Energy use

Property

Carbon management plan: project 1

Project lead: David Hanlon

Target:

- Reduce the amount of energy we use by rationalising our property portfolio.

2011/12 performance:

- ✓ CO₂ emissions from energy consumption fell by over 55 tonnes compared with the previous year (27.4 less tonnes from electricity and 27.9 less tonnes from gas consumption).
 - ✓ We consumed 204,000 KWh less gas and electricity, with both falling by 16 per cent in 2011/12.
10. Our decrease in energy use is heavily influenced by three main factors. Firstly, the winter of 2011/12 was noticeably milder than previous ones, reducing our heating demands. Secondly, we have been reducing the energy consumption of our ICT (as explained in Project 2 below). Thirdly, our property rationalisation began in 2011/12 and is beginning to have a positive impact on our energy use.
 11. The three-to-two office move took place during 2011/12, although the full extent of its energy savings will not be realised until 2012/13. We hoped our office rationalisation would reduce energy use by 62 tonnes of CO₂ (up to 12 per cent of our overall target). Based on 2011/12 performance, it looks as though this should be achievable.
 12. In addition, closing our Aberdeen office in June 2012 is estimated to potentially further reduce CO₂ emissions by a further three tonnes. Longer term, we anticipate that moving our staff from East Kilbride to a smaller office in Glasgow in 2012/13 will bring further emission reductions in energy use. Travel to Glasgow is also likely to be easier using public transport, which therefore offers further potential savings in car travel emissions.
 13. We find it extremely difficult to get accurate energy consumption information, with much of our energy use data, particularly for 18 George Street (18 GS), based on estimates from our landlord. As part of our plans for moving to a single Edinburgh office by 2014/15, the CSB would wish to see environmental issues being considered, both in terms of building energy performance and location. We would also wish to see the availability of much more accurate energy use information from energy meters to aid our assessment as to how well we are meeting our carbon reduction objectives.

Information Communications Technology

Carbon management plan: project 2

Project lead: Allan Davie

Target:

- Reduce the amount of energy used by ICT.

2011/12 performance:

- ✓ Energy use reduced, with estimated savings of around 33 tonnes of CO₂ contributing to our overall total energy savings.¹
- ✓ Saved an estimated 14 tonnes of CO₂ in 2011/12 from rationalising servers.
- ✓ Ongoing energy savings from turning-up the temperature in the server room in 18 GS (completed in 2010).
- ✓ Saved an estimated five tonnes CO₂ through automatic turn-off arrangements for all 47 office printers.

14. Reductions in energy use and emissions from ICT make a valuable contribution to our overall organisational reductions in energy use. The most significant impact of ICT has been through a reduction in our number of servers by seven in recent years – this was four short of our original target as additional servers were needed to provide our extranet.
15. We are working on four new projects and one trial that could potentially reduce power consumption further:
 - Replacing seven switches in the computer room with two switches.
 - Replacing the phone system with OCS, but this is at an early stage.
 - Upgrading the thin clients to increase use in ASG, reducing laptop use and saving power.
 - Trailing timer switches in six banks of desks in 18 GS to assess the impact of powering down all desks out of office hours.
 - Network rationalisation to eliminate eight routers from the computer room.
16. It is not clear at this stage what level of energy savings these new projects may provide.

¹ We are not able to calculate the savings from all ICT projects. In addition, we have no means of measuring actual energy consumption in the computer rooms as consumption based on estimates and we often work from manufacturers' power ratings rather than actual consumption data, which could potentially cause errors in calculations.

Car travel and emissions

Carbon management plan: project 3

Project lead: directors

Target:

- Reduce Audit Scotland's business car mileage by ten per cent (between 2009 and 2014).

2011/12 performance:

- ✗ Car travel increased by 19,151 business miles in 2011/12, an increase of 4.7 per cent.
 - ✓ Despite increased car mileage, CO₂ emissions from car travel decreased by five tonnes, due to our car fleet having lower emissions levels.
 - ✓ Car business mileage is still 15 per cent below our baseline.
 - ✓ CO₂ emissions from car travel are still below our baseline and on target.
17. As predicted last year, car business mileage has increased in 2011/12, primarily due to the effect of changing audit appointments ([Exhibit 2](#)). Car travel increased in virtually all parts of Audit Scotland, with the greatest actual increase in car travel being from ASG, associated with the change in audit appointments during the year. This may be a short term increase in travel associated with additional stakeholder management required in year one of the new audit appointments or a longer term impact of the change. We will continue to monitor this to determine how we can minimise our environmental impact from future changes to audit appointments.
18. In 2008/09, Audit Scotland's total car business mileage of 499,368 miles formed a baseline for our carbon management plan. We calculated that this mileage generated 172 tonnes of CO₂ with our aim being to reduce this by ten per cent or 17 tonnes.² Despite increased business car mileage in 2011/12 relative to 2010/11, it was still 75,652 miles or 15 per cent lower than in 2008/09. Corresponding CO₂ emissions are calculated at 135 tonnes, a fall of 37 tonnes (or 21 per cent); more than double our intended target.

² CO₂ calculation based on Carbon Trust conversion rate.

Exhibit 2**Car business mileage**

Business Group	2008/09	2010/11	2011/12	% of Audit Scotland's business mileage	Annual change	% change
Accounts Commission, Board & AGS	2,846	6,706	6,033	1%	-673	-10.0%
ASG	438,717	362,690	370,048	87%	7,358	2.0%
Audit Strategy	8,748	5,136	8,744	2%	3,608	70.2%
PRG	45,958					
PAG		7,327	7,241	2%	-86	-1.2%
BVSI		20,519	25,370	6%	4,851	23.6%
CSG	3,099	2,187	6,280	2%	4,093	187.2%
Total	499,368	404,565	423,716	100%	19,151	4.7%

Source: Audit Scotland

19. Since 2010, we have information on the specific emission levels of Audit Scotland lease cars and have been able to use this to more accurately calculate car business mileage emissions. Based on this information, our estimated emission levels in 2011/12 decreased from 96.3 to 91.5 tonnes CO₂ (a decrease of five per cent). Therefore, although our business mileage increased in 2011/12, its impact on the environment has continued to fall, primarily as a result of our fleet becoming more environmentally friendly, as outlined below.

Future action:

- Based on our more accurate information on CO₂ emissions from our leased cars, we should revise our original carbon management target in this area.

Carbon management plan: project 4

Project lead: Diane McGiffen

Target:

- Place a 140 gCO₂/km cap on lease cars.

2011/12 performance

- ✗ A decision on introducing an emissions cap on leased cars has been deferred to be considered as part of a wider review of business travel.
 - ✓ The average emissions for Audit Scotland's leased car fleet decreased from 148gCO₂/km to 135gCO₂/km compared with 2010/11.
 - ✓ The proportion of the leased car fleet exceeding 140gCO₂/km has fallen from 64 per cent in 2010/11 to 36 per cent in 2011/12.
20. One of our carbon management objectives was to impose a cap of 140gCO₂/km on any new car leased by Audit Scotland. In 2008/09, 70 per cent of business miles were travelled in leased cars, 65 per cent of which had emissions of over 140gCO₂/km. Placing an upper limit on emissions of 140gCO₂/km was identified as having the potential to save 6.9 tonnes of CO₂ per year (assuming no change in business mileage).
21. To date, Audit Scotland's management team have been clear that any decision as to whether an emissions cap continues to be necessary in meeting our environmental goals should be considered as part of a wider travel review. Even in the absence of an upper limit being imposed, there are obvious tax and fuel cost incentives to lease more environmentally friendly cars. This is reflected in the fact that our fleet is becoming more environmentally friendly, with the proportion of leased cars with CO₂ emissions over our proposed limit having decreased by nearly half over the past year.
22. The strategic travel review which be reporting later in 2012 will consider the need for an emissions cap. Prior to any proposals on this issue, the review will take into account progress made in our fleet to date, broader context changes, such as the EU now working towards a limit of 95gCO₂/km for new cars by 2020, and the views of staff through consultation and engagement with staff representatives.

Future action:

- Further consider any need to introduce an appropriate emissions cap as part of our wider corporate review of business travel and through consultation and engagement with staff representatives. .

Waste

Carbon management plan: project 5 Project lead: Carbon Scrutiny Group

Objective:

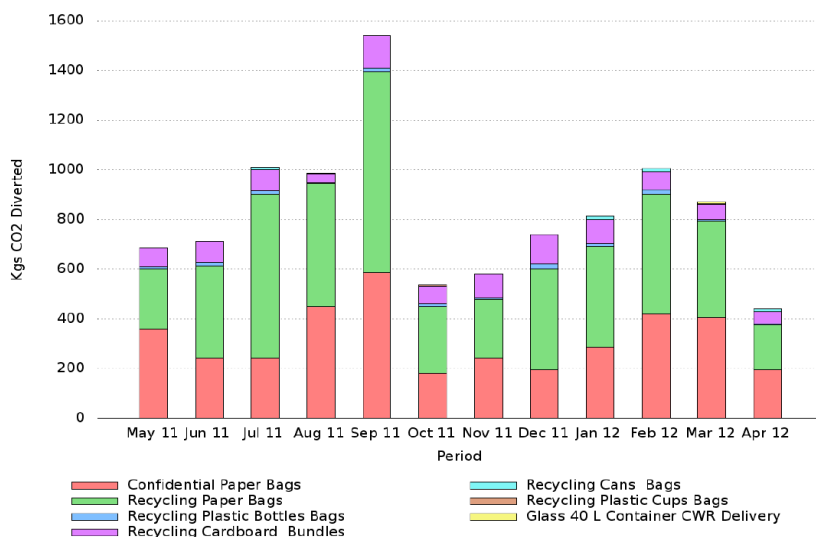
- Reduce the amount of waste we produce.

2011/12 performance:

- ✓ We diverted around ten tonnes of CO₂ through recycling our waste from our Edinburgh offices.
 - ✓ We recycled around 6.6 tonnes of waste from our Edinburgh offices.
23. Waste accounts for less than two per cent of our total CO₂ emissions. The previous environment group had already introduced several initiatives to reduce waste, notably recycling facilities and double-sided printing and copying. Although further reductions may not have a significant effect on our overall emission target, reducing waste is relatively simple and cheap to do and is a powerful agent of culture change.
24. We have no reliable information on the amount of waste we produce but we now receive useful recycling data from our recycling contractor in Edinburgh. The monthly chart below shows that for our Edinburgh offices we recycled around 6.6 tonnes of waste in 2011/12, of which around 89 per cent was from paper (confidential and non-confidential). The peak in our recycling was in September and was due to a significant increase in paper recycling that coincides with the move out of Osborne House. As a result of our recycling in Edinburgh, we diverted almost ten tonnes of CO₂.

Exhibit 4

Recycling rates



Source: Audit Scotland

- 25. Our recycling figures provide a conservative estimate of our overall impact, as they do not take into account our offices outside of Edinburgh. On the assumption that Audit Scotland staff will recycle about the same amount of waste, it is estimated that our total recycling may potentially be around ten tonnes and that as an organisation we have potentially diverted up to 15 tonnes of CO₂ during 2011/12.³
- 26. At present, we have no data to show how much our recycling has changed year on year, but the CSB will continue to promote greater recycling and monitor the impact over time.

Future actions:

- 27. The CSB will continue to raise awareness of the importance of reducing waste, particularly at source and through reusing and recycling.
- 28. We are currently working to improve signage in our offices (particularly 18 GS) about what can and cannot be recycled and to try and get a more consistent approach to recycling within our offices.
- 29. We will monitor our recycling levels and CO₂ diversion levels over time.

³ This estimate is based on extrapolating recycling levels in our Edinburgh offices across the whole organisation based on the proportion of our staff working in Edinburgh offices.

Carbon impact assessments for policies

Carbon management plan: project 6

Project lead: Diane McGiffen

30. The aim of this project is to ensure that new and existing policies include a carbon impact assessment to determine the impact of the policy on our carbon emissions. An initial review has identified the following policies which are likely to have an impact on carbon emissions and should be subject to a review:
- travel policy
 - home-working policy
 - international policy
 - office opening hours.
31. As highlighted in the previous chapter, we will be consulting with HR on its annual review of HR policies to ensure that they take account of the impact on our carbon footprint in an appropriate and proportionate way.

Future action:

32. Develop a straightforward impact assessment methodology for new and existing policies during 2012/13.

Data monitoring and reporting

Carbon management plan: project 7 Project lead: Carbon Scrutiny Group

33. We recognise the need for better monitoring data about the cost of energy and travel and a consistent methodology to help us to calculate our emissions. We recognise the limitations which we are currently working within, particularly around the energy and water use of our offices, and that estimated or proxy information often has to be used. However, the introduction of our new, electronic expenses claim system will provide a significant improvement in data capture and monitoring relating to business travel.

Future action:

34. Continue to look at opportunities for improving carbon-related data capture and monitoring, particularly in relation to improving the availability of energy data from future office moves.

Carbon Scrutiny Board future actions

35. Audit Scotland, like all public bodies, has climate change duties through the Climate Change (Scotland) Act 2009. Ensuring that we are able to perform those duties and report on our performance will be a key task for the CSB in 2012/13. Outlined below is a list of those actions that the CSB will strive to progress over the next year in supporting our organisational goals:

General

- Make proposals for a new carbon emissions baseline and future target based on more accurate emissions information we now hold on our leased cars.

Business travel

- Consult with HR on its annual review of HR policies to ensure that relevant policies take account of the impact on our carbon footprint in an appropriate and proportionate way.
- As part of our wider corporate review of business travel, support HR in considering any need to introduce an appropriate emissions cap on leased cars.
- Encourage staff and managers to consider using the most appropriate means of transport to minimise costs and our environmental impact.

Waste

- Continue to raise awareness of the importance of reducing waste, particularly at source and through reusing and recycling.
- Improve signage in our offices (particularly 18 GS) about what can and cannot be recycled and to try and get a more consistent approach to recycling within our offices.
- Monitor our recycling levels and CO₂ diversion levels over time.

Carbon impact assessment for policies

- Develop a straightforward impact assessment methodology for new and existing policies.

Data monitoring and reporting

- Continue to look at opportunities for improving carbon-related data capture and monitoring, particularly in relation to improving the availability of energy data from future office moves.

Carbon Scrutiny Board

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