



Driving Standards Agency

Five year carbon management plan 2011-2016

Date: 31 March 2011

Version number: 6

Owner: Sustainable development manager

Approval route: DSA chief executive officer

Approval status: approved

Contents

Foreword from DSA	3
Foreword from the Carbon Trust	3
Executive summary	4
1 Introduction	5
1.1 Our low carbon vision.....	5
1.2 Context and drivers for carbon management.....	5
2 Emissions baseline and projections	6
2.1 Scope.....	6
2.2 Baseline.....	6
2.3 Target.....	7
2.4 Projections and value at stake.....	8
3 Carbon management programme	8
4 Carbon management projects	9
4.1 Existing projects.....	9
4.2 Planned / funded projects.....	10
4.3 Near term projects.....	11
4.4 Medium to long term projects.....	11
4.5 Projected achievement towards target.....	11
5 Carbon management plan financing	12
5.1 Assumptions.....	12
5.2 Benefits / savings – quantified and un-quantified.....	12
5.3 Additional resources.....	12
5.4 Financial costs and sources of funding.....	12
6 Embedding carbon management	13
6.1 Corporate strategy.....	13
6.2 Responsibility.....	13
6.3 Monitoring and reporting.....	14
6.4 Communication and training.....	14
7 Programme management	16
7.1 The programme board – strategic ownership and oversight.....	17
7.2 The carbon management project team.....	17
7.3 Contingency planning.....	18
7.4 Annual progress review.....	19

Foreword from DSA

With the introduction of the Climate Change Act, the need to manage carbon emission moved from the concern of heavy industry into the boardroom of every large organisation. In addition to an ever more compelling legal framework, the government has built on the 10:10 commitment by publishing a new set of extremely challenging environmental targets.

It is clear that we will be expected to deliver a great deal over the coming years, often with fewer resources. We have shown excellent progress with cutting waste by a fifth, increasing recycling to over 80 per cent, reducing road miles and improving building energy ratings so I feel we are well placed. However, I recognise that some areas of performance are weaker and DSA in five years time will need to think and act differently if we are make the step-change required. This plan represents an exciting step which I am confident will help us coordinate our approach across the agency and ensure we implement those options which represent the best whole life cost and maximise our carbon savings.

I'm proud to introduce DSA's first five year carbon management plan. Government, our staff and customers expect a sea-change in the way we think about carbon emissions. I think this extremely challenging plan does just that.

Rosemary Thew

DSA chief executive

Foreword from the Carbon Trust

Cutting carbon emissions as part of the fight against climate change should be a key priority for central government organisations. Carbon management is about realising efficiency savings, transparency, accountability and leading by example. The UK government has identified the public sector as key to delivering carbon reduction across the UK in line with its Climate Change Act commitments, and the Central Government Carbon Management Service is designed in response to this. It helps organisations to save money on wasted energy and put it to better use in other areas, while making a positive contribution to the environment by lowering carbon emissions.

The Driving Standards Agency partnered with the Carbon Trust on this pilot programme in 2010 to help realise substantial carbon and cost savings. This carbon management plan commits DSA to a target of reducing CO₂ by 25 per cent by 2015-16 and underpins potential financial savings and cost avoidance to the organisation of around £2.2 million by that date.

Central government organisations can contribute significantly to reducing CO₂ emissions and improving efficiency. The Carbon Trust is therefore very proud to support DSA in their on-going implementation of carbon management.

Richard Rugg

Carbon Trust head of public sector

Executive summary

Vision

By 2016 DSA staff will operate energy efficient sites and travel using low carbon vehicles. Energy consumption and travel will be accurately monitored allowing real-time reporting which informs all decisions that shape our carbon performance.

Drivers

The Government has committed to reducing carbon emission from central government and the legislative framework has been strengthened by the Climate Change Act. In addition, many stakeholders including staff, customers and suppliers, expect us continually to improve carbon management. Lastly, this paper shows that there is a compelling financial case.

Baseline and target

The plan sets out how we arrived at our baseline of 5,856 tonnes of carbon dioxide for 2009-10. This covers all main carbon sources including electricity, gas, road travel and rail. We will work to add the remaining small scale carbon sources to this over the coming years. Our target for reduction against our baseline is 25 per cent by 2015-16. This will take us down to a total of 4,392 tonnes. We settled on this percentage as it would put us on course to deliver the Climate Change Act of 34 per cent reduction by 2020. We also believe the target to be both challenging and achievable. The combination of the baseline and target allowed us to define two costed trajectories, first a business as usual scenario where emissions stay consistent and the low emission scenario where we deliver the target reduction. The difference in expenditure is £2,229,638. This gives an indication of the costs we will avoid and informs the amount we should invest.

Carbon reduction projects

We engaged with our staff and suppliers to identify as many ways in which we could improve carbon performance as we could. After several rounds of assessments we finalised a list of projects which we believe will deliver reduction in a cost effective way. The projects vary from relatively simple measures such as insulation upgrades and improved boiler controls through to ambitious solar panel arrays. A complete list which delivers 83 per cent of our reduction target is included in section four. In addition we have an extensive list of projects which have not yet been developed for various reasons which we will look to implement as the plan matures.

Financial planning

The estimated total cost of the projects is £1,642,309. Many of the projects will pay back within the five year period. Those with longer paybacks are generally undertaken to take advantage of current incentives such as the feed in tariff. The overall net present value to the agency is £2.5 million. It is not anticipated that external funding will be available so all projects will be funded internally.

Communications

Launch and delivery of the plan will be supported by a detailed communications plan which is included in section six. This seeks engagement with all levels of the organisation as well as our customers and other stakeholders.

Governance

Delivery of the plan will be controlled through the sustainable development board which meets quarterly and is comprised of the senior managers responsible for the key functions including estates and facilities, procurement, ICT, finance and operations. This is a successful forum which was initiated in 2008 and we are confident that it will facilitate the successful delivery of this carbon reduction plan.

1 Introduction

The Driving Standards Agency (DSA) exists to contribute to road safety through improving driving standards and testing drivers, motorcyclists and driving instructors fairly and efficiently. In order to achieve this we run a mixed estate of over 400 sites spread across England, Scotland and Wales. Through administering the driving tests and other activities we seek to encourage road users to be safe, considerate and to minimise their effect on the environment.

The agency employs around 2,500 people and operates out of over 400 local sites as well as three large administrative centres. DSA is financed by revenue from fees paid by learners and turnover was £184m in 2008-09. Utility spend is in the region of £1m and travel costs significantly exceed this. There are two main drivers for developing a carbon reduction strategy. First, that the government has tasked itself with becoming a leader in this area. Secondly, with a fixed income, containing costs is a necessity. This plan is designed to bring a framework to the way in which DSA manages carbon performance through to March 2016. It sets out:

- a baseline against which we will judge progress
- a target carbon reduction for 2015-16
- known opportunities to reduce carbon and which year we intend to implement them
- the governance systems which will be used to oversee delivery and manage change

It is the first long term carbon reduction plan published by DSA and signals a change in approach. It is designed to align with current government targets, but has been tailored to DSA's dispersed estate of small sites.

1.1 Our low carbon vision

By 2016 DSA staff will operate energy efficient sites and travel using low carbon vehicles. Energy consumption and travel will be accurately monitored allowing real-time reporting which informs all decisions that shape our carbon performance.

1.2 Context and drivers for carbon management

The science of climate change is compelling. Although arguments persist about the proportion which is caused by human activity and the speed with which this will take effect, the body of evidence is such that governments and industry alike have accepted that a global response is necessary. However, this is not the only driver affecting DSA as explored below.

Governmental drivers	
Climate Change Act	Sets a legally binding carbon reduction of 80 per cent by 2050 and established a mainstream carbon cap and trade scheme
Green government commitments	In March 2011 the government published a challenging set of commitments including targeting carbon reduction
Real time reporting	All department headquarters sites publish real-time energy consumption
Corporate environmental responsibility	
Carbon reduction commitment	We will appear in a published league table showing our carbon performance as from 2011-12
Accounting for sustainability	All central government bodies will be required to publish environmental performance data and costs in annual reports from 2011-12
Customers and the public	We receive ever more numerous enquiries regarding our environmental performance from a variety of sources
Industry	Many companies expect carbon reduction from their supply chain partners which puts pressure on the public sector to lead rather than follow the private sector.

Financial	
Running costs	Failing to use a whole life costing approach may reduce acquisition costs but increases running costs to the agency
Rising prices	Energy and fuel prices are projected to rise so our spend will escalate each year even if the level of activity stays constant
Market measures	Levies and taxes such as the carbon reduction commitment which will cost DSA in the region of £40,000 per year

Figure 1: developments which bring a greater impetus to DSA carbon management

2 Emissions baseline and projections

2.1 Scope

We considered what sources are required for legislative compliance, the quality of the data available and the magnitude of emissions before defining what sources would be included. The following carbon emitting activities are within scope of this plan.

Sources Included		
Scope 1 Direct emissions	Gas use at all sites where we pay the supplier directly	Supplier invoices
	Owned cars and motorcycles	Mileage returns from staff assigned vehicles
	Owned training fleet vehicles	Monthly odometer readings
Scope 2 Indirect emissions	Electricity use at all sites where we pay the supplier directly	Supplier invoices, meter readings and half hourly data
Scope 3 Third party emissions	Hire cars	Supplier management information
	Rail travel	Supplier management information and government procurement card reports
	Private vehicles (greyfleet)	Travel claims

Figure 2: sources included within the baseline

2.2 Baseline

A baseline is required in order to judge our progress over the five year period. 2009-10 data is being used as this is the most recent year for which we have complete data. The conversion factors used are the October 2009 versions published by Department for the Environment, Food and Rural Affairs (DEFRA)¹. These are updated every year to take account of changes in key areas such as vehicles use and energy generation.

DSA's baseline is 5,856 tonnes of carbon dioxide.

The diagram below illustrates the proportion of carbon emitted by the various elements.

¹ Conversion factors available from the Defra website <http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm>

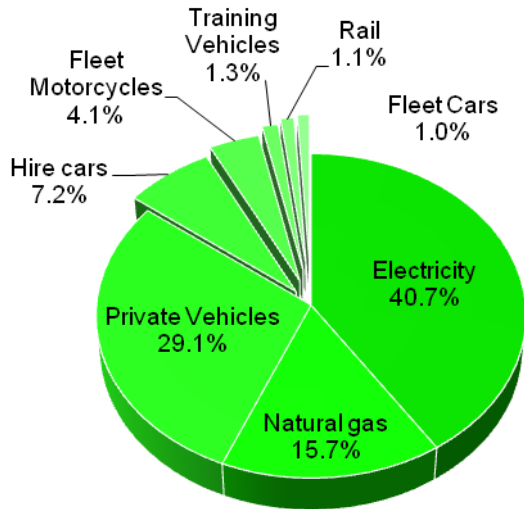


Figure 3: relative proportion of carbon emission sources within the baseline

2.3 Target

We will reduce our carbon emissions by 25 per cent against the 2009-10 baseline by 2015-16

In setting a target DSA considered the following factors:

- the Prime Minister's commitment to a 10 per cent reduction in carbon emissions
- the Climate Change Act requirement for a 34 per cent by 2020
- the average saving achieved by clients our have used the same Carbon Trust process
- limitations including our dispersed estate

By 2016-17 we need to be on track to deliver the 34 per cent reduction. Given the nature of our estate we may experience difficulty in reaching the average saving of 30 per cent achieved by other clients. These upper and lower limits led us to set a target of 25 per cent. The following graph illustrates how this will bring us back on track to delivering the Climate Change Act target.

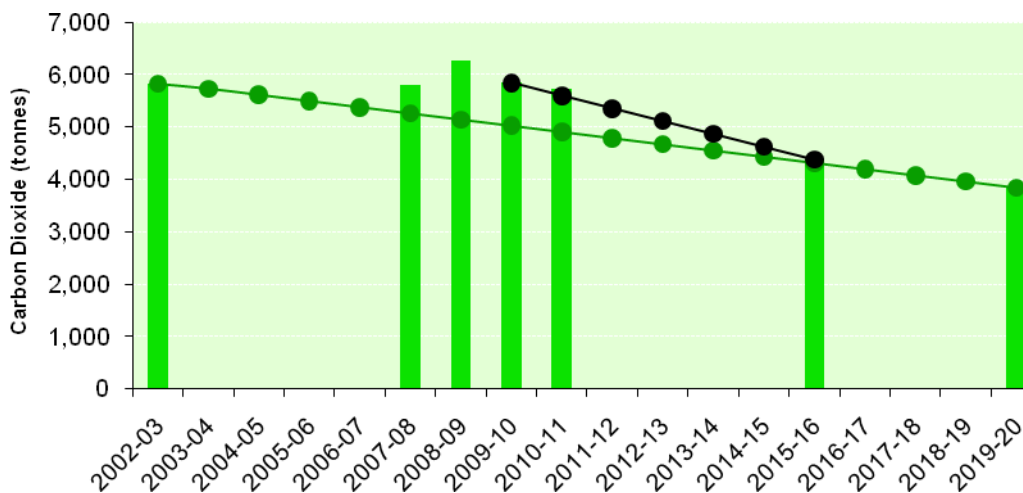


Figure 4: illustration of the 25 per cent target reduction in relation to the Climate Change Act

Given the challenging estate, it is unlikely that DSA will be able to contribute a complete 10 per cent reduction for the Department for Transport’s efforts in delivering the 10:10 pledge. However, we expect to deliver a reduction in the region of 5 per cent during 2010-11. This means that a 4 per cent reduction based on the 2009-10 baseline will be required in each of the five years within the period of this plan.

2.4 Projections and value at stake

By assigning costs to the various carbon sources within the baseline we have projected a business as usual cost profile and the target performance cost profile. The difference between the two profiles is termed our ‘value at stake’ and sets the maximum budget for achieving the target. As long as the cost of the carbon reduction initiatives is lower than the value at stake then we will have successfully reduced our costs over the five year period. In addition, we will have considerably lower running costs going forward.

A number of assumptions have to be made in order to calculate our value at stake:

- 5.3 per cent energy price increase has been applied to gas and electricity (excluding standing charges)
- 8.4 per cent increase in petrol and diesel has been applied to all business travel
- given that DSA is driven by test demand, which is not projected to rise considerably, no organic growth has been factored in

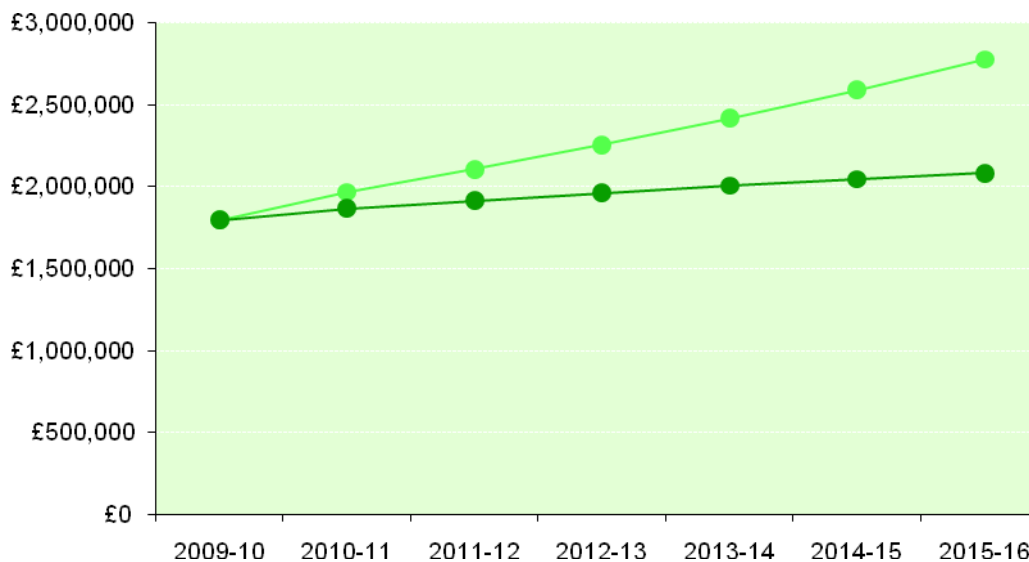


Figure 5: relative costs of the business as usual and reduced emission scenarios

DSA is primarily funded by fees collected from our statutory services. We do not expect to increase test fees in the foreseeable future which means that our income will reduce in real terms. Managing down reliance on energy and travel to offset the price increases will make a significant contribution to bridging this gap.

Continuing with emissions at 2009-10 levels our costs would increase, leading to a cumulative cost at the end of the period of £15,903,363. If we deliver the reduced emissions scenario, the cumulative costs to the agency will be £13,673,724.

The difference between the two scenarios points to a value at stake of £2,229,639.

3 Carbon management programme

In developing this plan we have employed the Carbon Trust’s five stage process. This was supported by a number of services provided by the trust. This ensured that DSA was able to draw on expert advice leading

to a plan which is based on solid projections and focussed on areas where real carbon savings can be achieved.



Figure 6: The Carbon Trust's five stage process for carbon management

4 Carbon management projects

In this section we have detailed each individual carbon reduction project we plan to undertake in the next two to three years. Also, we have given some indication of what activity will happen during the second half of the period, but this has been left intentionally flexible. These projects are in addition to the business as usual work to improve the performance of the estate through a plan of targeted refurbishments and relocations.

4.1 Existing projects

Ref	Project	Lead	Cost		Annual savings (Y1)		Pay back (Years)	Net present Cost (£)	% of Target
			(Imp)	(Rev Y1)	£ (Gross)	tCO2			
EPCR2	Boiler optimisation technology	Estates transformation manager	£8,812	£0	£3,665	22.48	2.4	£-33,405	1.5%
EPCR3	Optimise voltage	Estates transformation manager	£36,259	£0	£8,264	44.97	4.4	£-58,925	3.1%
EPCR4	Server room temp	Head of ICT	£0	£0	£200	1.09	0.0	£-3,296	0.1%
EPCR6	Re-lamping of lighting at the Axis	Estates contract manager	£0	£0	£1,347	7.33	0.0	£-22,206	0.5%
EPCR7	PC energy software	Head of ICT	£33,274	£6,164	£8,076	43.95	17.4	£1,761	3.0%
EPCR8	Condense cleaning hours	Estates contract manager	£0	£0	£390	2.18	0.0	£-6,428	0.1%
EPCR9	LED lighting at the Axis	Estates contract manager	£3,800	£0	£1,156	6.29	3.3	£-8,822	0.4%
EPCR1	AMR installation	Sustainable development manager	£0	£47,000	£17,623	99.00	does not payback	£132,639	6.8%
EPCR5	Removal of vending machines	Head of central operations	£0	£0	£4,551	24.77	0.0	£-75,007	1.7%

Figure 7: Projects already at implementation stage or recently completed

The financial savings from EPCR1 do not account for an estimated £36,000 worth of staff time which will be released for other tasks. Also, automatic meter reading (AMR) enables a multitude of other measures through the significant improvement in reporting quality.

4.2 Planned / funded projects

The following table details the projects which have received funding for 2011-12 and will be implemented during the first year of this plan. Therefore the projects of cost and carbon savings are expected to be relatively accurate.

Ref	Project	Lead	Cost		Annual savings (Y1)		Pay back (Years)	Net present cost (£)	% of target
			(Imp)	(Rev Y1)	£ (Gross)	tCO2			
CR1	DTC water heaters	Estates transformation manager	£29,963	£0	£5,355	29.14	5.6	-£14,572	2.0%
CR11	Low carbon hire cars	Head of finance	£0	-£11,409	£0	27.00	0.0	-£188,038	1.8%
CR18	MFDs at Eastgate House	Head of ICT	£0	£0	£225	1.22	0.0	-£3,703	0.1%
CR25	Roof insulation at DTCs	Estates transformation manager	£23,500	£0	£8,270	50.71	2.8	-£71,748	3.5%
CR27	TRVs and tadpoles at DTCs	Estates transformation manager	£52,300	£0	£12,129	74.37	4.3	-£147,601	5.1%
CR28	Sensor lighting at DTCs	Estates transformation manager	£46,500	£3,750	£17,341	94.37	3.4	-£66,529	6.4%
CR32	Boiler controls at DTCs	Estates transformation manager	£57,600	£0	£29,771	182.55	1.9	-£285,282	12.5%
CR33	Photo voltaic solar panels	Estates transformation manager	£800,000	-£88,000	£34,200	186.11	6.5	-£1,214,041	12.7%
CR64	Power perfecter at the Axis	Estates transformation manager	£20,000	£0	£6,212	33.80	3.2	-£51,543	2.3%
CR65	LED lighting at training centre	Head of learning and development	£4,609	-£100	£685	3.73	5.9	-£3,968	0.3%
CR72	LED strip lighting (trial)	Estates transformation manager	£1,000	£0	£102	0.56	9.8	-£114	0.0%

Figure 8: projects planned for implementation during 2011-12

A pot of £1,000,000 has been allocated to these projects in the 2011-12 budget. However, each project will be subject to a business case to demonstrate the long term savings it will achieve.

4.3 Near term projects

The following projects are planned for implementation in year two of the plan. As implementation will not take place until 2012-13 the cost and carbon projections should be considered indicative.

Ref	Project	Lead	Cost		Annual savings (Y1)		Pay back (Years)	Net present cost (£)	% of target
			(Imp)	(Rev Y1)	£ (Gross)	tCO2			
CR4	Electric vehicle at training centre (trial)	Head of learning and development	£1,000	-£50	£0	0.45	20.0	£176	0.0%
CR10	More owned cars	Head of finance	£429,000	-£111,500	£0	80.00	3.8	-£74,428	5.5%
CR59	Eco modular build trial	Estates transformation manager	£17,000	£0	£1,205	6.94	14.1	-£2,860	0.5%
CR63	Leased training fleet	Head of learning and development	£0	-£7,736	£0	6.80	0.0	-£21,673	0.5%

Figure 9: projects planned for implementation during 2012-13

4.4 Medium to long term projects

Projects included in this section are planned for implementation in year three or later. They are often dependant on developments in legislation, industry advances or the completion of earlier projects. As such the any quantification included in only an estimate and may be subject to considerable revisions.

Ref	Project	Lead	Cost		Annual savings (Y1)		Pay back (Years)	Net present cost (£)	% of target
			(Imp)	(Rev Y1)	£ (Gross)	tCO2			
CR68	Voltage optimisation at DTCs	Estates transformation manager	£62,192	£0	£27,840	151.50	2.2	-£258,454	10.3%

Figure 10: Projects planned for implementation from 2013 onwards

4.5 Projected achievement towards target

The savings from the above projects points to an overall carbon reduction of 1213 tonnes in the final year against our 2009-10 baseline. This equates to 83 per cent of our target for the five year period. During the period we will learn from successes and build any legislative or technological developments into our plans in order to mobilise further projects to deliver the remaining 17 per cent.

A number of other projects are under development but have not reached the stage where we can project costs and savings. These include:

- multi functional devices for DTCs
- negotiation of 'green leases' with key landlords
- installation of a biomass fired boiler at the training centre
- upgrading external lighting (sensors and/or LED)
- magnetised gas supply to increase calorific value
- other forms of insulation including valve and pipe lagging, draft exclusion and cavity walls
- radiator reflective panels (post thermostatic radiator valve (TRV) installation)
- aerated tap heads

These projects will be developed over the coming months and years to allow them to be quantified and included in the programme of projects. In addition, depending on the results from the trials in the detailed in the tables we may choose to move to a larger scale rollout.

5 Carbon management plan financing

The total implementation cost of the planned projects is £1,626,809 over the five year period. The cost avoidance from lower running costs is £1,242,716 over the same period. A small number of projects, which represent around 70 per cent of the implementation costs, will not pay back within this period but will contribute to lower running costs for the next 25 years.

5.1 Assumptions

In developing a solution for each of the carbon reduction opportunities many assumptions have been made which are specific to each project. If a feasibility study has failed to account for a particular cost or if gas prices fail to rise as we expect then this could change our financial modelling. However, every case will be assessed on its individual merits based on the best data available at the time. In addition the governance system will provide change management as we progress.

5.2 Benefits / savings – quantified and un-quantified

Carbon Dioxide	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Annual CO2 saving	0	128	936	1030	1181	1181
% of target achieved	0%	9%	64%	70%	81%	81%

Figure 11: Projection of benefits and savings based on the projects list

During the life of the plan we will seek to implement further initiatives as outlined in section 4 to allow us to reach our goal of 25 per cent reduction. The financial benefits are laid out in section 5.4 but DSA expects to realise a number of other benefits:

- a reduced level of payment and higher placement in the carbon reduction commitment (CRC) league tables
- an improved perception of the agency by stakeholders
- delivery of the government carbon reduction targets

5.3 Additional resources

Working with the challenging economic backdrop and the freeze on non-frontline recruitment, it is clear the agency is not in a position to allocate new staff. However, early actions such as AMR will allow existing resource to be directed at improvements which generate savings rather than the process or reporting itself. In addition, the current government is clearly setting carbon management as the priority within the wider sustainable development field which allows us to focus the sustainable development team more on delivering this plan than other related fields.

5.4 Financial costs and sources of funding

Cash flow	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Implementation cost	£82,145	£1,035,472	£447,000	£62,192	£0	£0
Operational cost	£0	£6,164	£-42,595	£-161,881	£-161,881	£-161,881
Energy cost	£0	£-23,099	£-159,562	£-160,767	£-188,607	£-188,607
CRC cost	£0	£-1,540	£-11,227	£-12,358	£-14,176	£-14,176
Total cost	£82,145	£1,020,077	£256,071	£-248,098	£-336,312	£-336,312

Figure 12: costs and savings over the life of the plan

It's worth noting that some of the larger scale projects are not expected to payback before 2015-16. However, the net present value of the combined projects is £2.5 million which represents an attractive investment for the agency. We are not planning for any external funding due to the difficult economic times. As a result, all funding will be internally sourced.

All future projects will be subject to DSA's standard business case process but we have allocated up to £1,000,000 in principle for 2011-12, in addition to the standard budgets for business as usual activities.

Beyond this period funding will be allocated during business planning in line with the projected requirements detailed in Figure 12.

6 Embedding carbon management

At the start of the central government carbon management service pilot we used the Carbon Trust tool to assess our 'carbon maturity'. Although this was a self assessment it is an interesting way of highlighting where our focus should be. The results showed that we had the team in place, data was not a pressing issue and carbon was generally considered in our daily business. However, we felt help was needed to improve the following areas:

- identify and prioritise carbon reduction actions
- having a robust carbon reduction plan

The results weren't surprising considering we opted to join the pilot. However, this plan demonstrates that we have come a long way to improving these areas.

The following section shows how we have embedded carbon management in our culture and what we will do to further this during the life of this plan.

6.1 Corporate strategy

Throughout the development of this plan staff, suppliers and senior management have been involved, either through suggesting opportunities, fleshing out options or approving outputs. The process started with our CEO suggesting we should join the pilot and has now affected almost everyone in the agency and many of the organisations that supply us with goods or services. In March 2011 the DSA board signed up to this plan committing the agency to achieving our goal of 25 per cent reduction. The bulk of this plan is concerned with the physical projects which bring quantifiable reductions. However, no matter how efficient the infrastructure, if the users are not knowledgeable and aware, we could find that many projects do not deliver the benefits we expect.

The DSA business plan is a visible document that sets out what the agency will deliver each year. The 2011-12 plan includes references to our strategic carbon reduction and sets a four per cent carbon reduction for this year ensuring that everyone with the agency is aware of what needs to be achieved. The work we have done around reporting, ownership and communication will ensure that awareness evolves into changing behaviour.

Another key area we will be looking at is the way in which we match supply and demand. There are opportunities around targeted recruitment, incentivisation and better use of lower wait test centres which we will be exploring over the life of this plan.

6.2 Responsibility

Traditional measures often do not work at DSA because our workforce is spread over Great Britain. In many instances we have to adapt our approach accordingly. Initiatives such as 'green champions' have been successful elsewhere but we often only have a couple of people at a site and would end up with hundreds of champions. Instead, we run a facilities management group called the SD (sustainable development) network which allows us to work effectively with a small group.

We are looking at the key decisions which affect carbon emissions and many of the relevant processes now take account of carbon. The latest change was the estates decision sheet that is used to determine the future of an individual property.

Reporting is already widespread with administrative staff able to access the performance of their building and senior managers receiving monthly agency level reports. However, as data improves through projects such as the ARM rollout, we will consider how to use this information.

Another key point of influence is procurement. However, this is such a complex area that we have developed a separate plan to ensure that this area is managed. The goal is to reach the top level in all areas of the flexible framework by 2015. This will mean that the principles of sustainable development are fully embedded in our procurement.

6.3 Monitoring and reporting

There will be two strands of reporting:

- progress against each project will be monitored by the owner as named in section four. Updates will be provided to the project leader who will submit a summary to the quarterly SD board
- carbon performance will be compiled by the project leader using the sources as detailed in section 2.1 and reported monthly. After being reviewed by the performance management group (who check progress against all DSA targets) it will be included in the monthly executive board performance reports

Earlier in the plan we acknowledged that there were areas of data which we will look to improve. The main development will be the installation of AMR being introduced over the next 12 months. This will greatly improve the robustness of monthly energy data reporting. We are also seeking to increase the scope of included data sources by record the level of fugitive gas releases from air conditioning units. We have started recording gas loss at our large sites and will work with our new facilities management supplier (due to be appointed in mid 2011) to extend this to all air conditioning units. Lastly, as travel contracts come up for re-let we will ensure that carbon management information improvements are included, starting with the hire car contract in the first half of 2011.

6.4 Communication and training

The following communications plan is broken into sections based on the objectives.

Objectives				
Audience	Channel	Frequency	Purpose	Ownership*
All staff have a basic understanding of environmental impacts and in particular the role of carbon emissions and climate change. All staff are aware of the progress we make and feel they can contribute positively to the carbon reduction process.				
All staff	Weekly update	Articles as required by specific initiatives	To update staff on progress and invite engagement including the submission of carbon reduction ideas	Corporate communications
	The Standard	Bi monthly articles starting in January 2011	Focussing on educating staff about a particular sustainability issue (travel management, utility monitoring, AMR and so on)	Corporate communications
	Dashboard (intranet)	Monthly	Keeping staff aware of the overall DSA performance and encouraging them to track the performance of their site (where AMR exist)	Digital communications
Operational staff	Direct email	As required by developments	Give operational staff a clear understanding of what is required and how carbon management fits with operational delivery	Corporate communications
	Sector manager meetings	Monthly	For sector managers to stress the importance of energy management and ensure TCMs are implementing the actions initiated by direct emails	Operational delivery managers
HQ staff	HQ update email	As required	Prepare headquarters staff for specific initiatives	Corporate communications
	Physical displays	At launch event in March 2011	Engage with headquarters staff and provide a focus for carbon management	Corporate communications
High mileage staff	Direct email	Quarterly	To highlight high levels of carbon intensive travel and help create a culture where carbon is considered	Sustainable development team

New staff	Induction	Review in early 2011	Ensure that the staff induction educates and informs new starters about DSA's work and gives guidance as to how they can contribute	Learning and development
-----------	-----------	----------------------	---	--------------------------

Objective	Senior management are fully engaged and provide visible leadership (leading by example)			
Audience	Channel	Frequency	Purpose	Ownership
SD board	Physical meeting	Quarterly	Provide strategic direction for the CMP including reviewing progress and sanctioning actions when tolerance is exceeded	Sustainable development team
Performance management group	Performance report	Bi-monthly	Ensure carbon performance is considered along with all other Agency targets	Sustainable development team
Executive board	Performance report	Monthly	Ensure that the DSA board are aware of performance and view carbon management as a standard business performance indicator	Sustainable development team
	Pledges	January 2011	To demonstrate that senior managers not only sanction carbon reduction but champion it	Corporate communications
	Physical meeting	Annually	Update the DSA board on annual progress mapped against the projected four per cent per year reduction. Where a tolerance is exceeded, to seek approval for significant corrective actions	Sustainable development team

Objective	Key suppliers and critical internal teams use their knowledge to capture all feasible carbon reduction opportunities (inform, educate and listen to suppliers)			
Audience	Channel	Frequency	Purpose	Ownership
Contract managers	Contract manager forum meetings	Annually	Identify areas in DSA main contracts where our carbon emissions can be reduced	Procurement
Individual contract teams	Contract management meetings	As required	Investigate further where a supplier has the potential to reduce DSA's carbon emissions	Various contract managers
Primary Suppliers	Carbon disclosure project	Ongoing	To signal to our major suppliers that DSA rates carbon management as a significant factor in choice of supplier	Procurement

Objective	Customers and other affected groups view DSA as an organisation which is actively managing and reducing its environmental impact (inform customers)			
Audience	Channel	Frequency	Purpose	Ownership
Approved driving instructors	Despatch magazine	As required but usually annually	Where specific carbon reduction work affects the relationship with ADIs. Also to educate ADIs and encourage them to	Corporate communications

(ADIs)			support DSA in carbon reduction	
Customers and the wider public	Press releases	As required by specific events	To visibly announce success or the launch of particular high profile initiatives thereby building a perception that DSA is an environmentally progressive organisation	Corporate communications
	DSA corporate website	As required by specific events	Update external stakeholders as to DSA progress and report specific carbon related data to evidence this	Digital communications
	Annual report and accounts	Annually	To comply with the Accounting for Sustainability requirement prior to mandatory introduction and help to embed carbon management in standard accounting processes	Corporate reporting

Figure 13: communication planned to underpin delivery of the plan

Present conditions mean that we are limited in terms of marketing and certain communication routes but we will revisit this plan once the economic conditions improve and restrictions are lifted.

Currently the staff survey is defined at a government wide level so there is not an opportunity for DSA to ask specific questions. However, should the opportunity arise we will use this survey to track staff awareness and opinions.

7 Programme management

Overall governance of the carbon management plan will be provided by the sustainable development board. The project team, drawn from various areas, will provide updates to the project leader who will ensure the SD board are supplied with the necessary information to allow them to provide strategic direction and sanction corrective action where performance is inadequate.

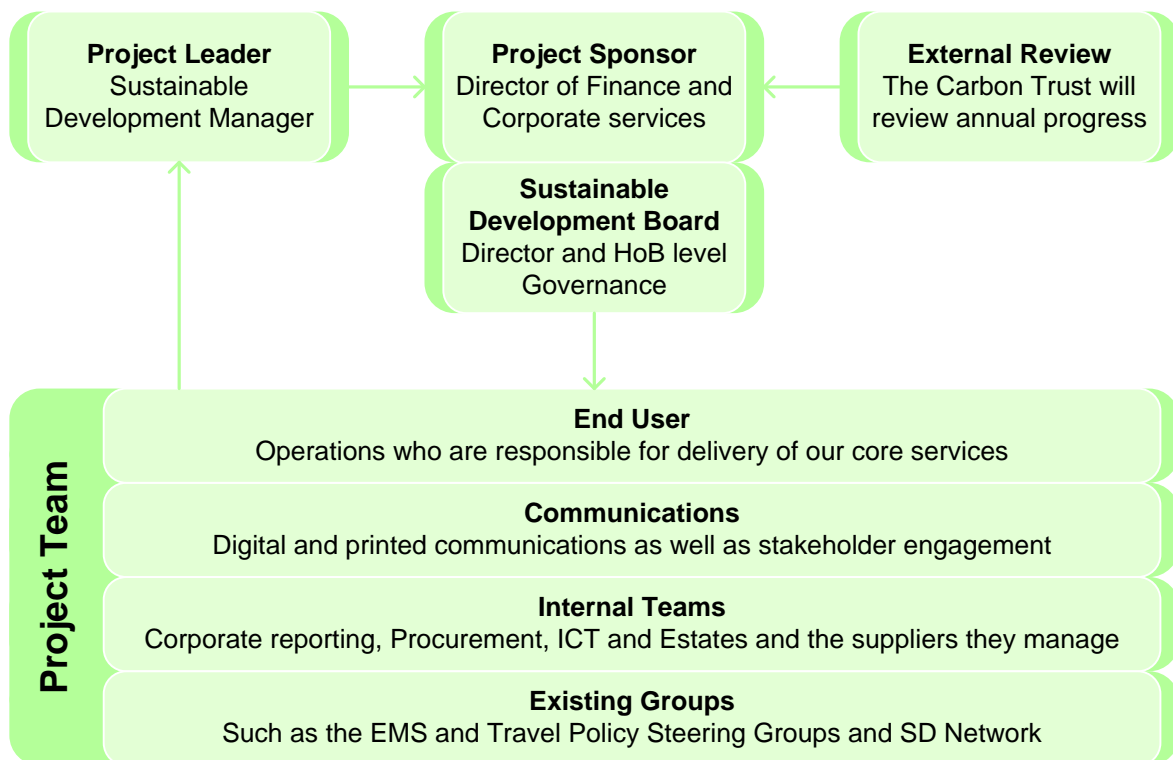


Figure 14: Overview of governance and reporting lines

The following section explains the roles and duties in more detail.

7.1 The programme board – strategic ownership and oversight

The sustainable development board has prime responsibility for the development and monitoring of overall sustainable development strategic direction within the agency. In discharging these duties the board is responsible for overseeing the delivery of:

- carbon management five year plan
- sustainable procurement plans
- environmental management system
- travel plans
- statutory compliance with environmental legislation

The board is comprised of the following members or their nominated deputies. This ensures that the teams and directorates which have influence over our environmental sustainability are represented at senior level:

- deputy finance director (chair)
- director of operations (deputy chair)
- director of human resources
- chief driving examiner
- head of ICT
- estates transformation manager
- head of procurement
- sustainable development manager (project leader)

The board meets quarterly and is chaired by the deputy finance director who reports directly to the project sponsor. This ensures that the sponsor is aware of performance and can intervene as necessary. The other members are senior representatives responsible for the teams who are tasked with delivering the individual measures.

7.2 The carbon management project team

The project team are drawn from all the teams which exert an influence over the agency's carbon performance. We have used a number of existing groups and several of the members are responsible for managing key suppliers.

<p>End User Responsible for most of travel and energy use</p>	<p>Central Operations – Operational Support Manager and EDAS Customer Relations Manager Operational Delivery – Operational Delivery Manager (South)</p>
<p>Communications Reaching stakeholders and message content</p>	<p>Corporate and Digital Communications – Corporate Communications Manager Stakeholder Engagement – Corporate Communications Manager</p>
<p>Internal Teams DSA teams who influence carbon performance</p>	<p>ICT – Head of ICT Procurement – Procurement Manager Corporate Reporting – Head of Corporate Reporting Capital Investment – Head of Corporate Reporting</p>
<p>Existing Groups Groups already focussed on carbon reduction</p>	<p>SD FM Network – Sustainable Development Manager EMS Group – SD Manager Travel Policy Group – Head of Finance</p>

Figure 15: project team members and responsibilities

Some members represent more than one strand while other strands have multiple representatives. This reflects how core the area or activity is to the plan and helps keep the group to a manageable size.

Given the diverse range of projects within the plan, it would not be advantageous to have regular meetings comprising the complete project team. Although such meetings were held during the development of this plan, an ongoing regular meeting would not allow adequate time to cover each project. In addition, there would be a significant probability that other members would have little or no opinion on another project. Having said this, there is clearly a need to capture progress, barriers and success for each project. There is also a need to communicate across the group and create an atmosphere where members can share experience and knowledge.

Therefore the governance for live projects will take the following form:

- written update submitted three weeks prior to each SD board followed by clarification with the project leader
- email summary of performance and SD board decisions from the project leader to the project team
- ad hoc meetings with the project leader at key milestones throughout the project
- annual round table of entire project team for overall performance update and lessons learned. This will be planned for the start of the planning round for the following year

Consultation with further parties including health and safety, equality and diversity and the trade union will take place as necessary during the planning for projects to ensure consistency with other agendas.

7.3 Contingency planning

If the financial director were to become unavailable for the role of programme sponsor the deputy finance director would undertake this role. For the project leader we would externally source an interim manager to cover the role while a recruitment exercise for a permanent replacement was undertaken. This would specify membership of an environmental body such as IEMA to a knowledge based level therefore ensuring the necessary expertise to undertake the CMP project leader role. Where a member of the project team leaves the appropriate head of branch will be responsible for nominating a capable replacement.

7.4 Annual progress review

At the end of each financial year we will take stock, learn from any areas of underperformance and celebrate any successes. A report will be compiled by the project leader and presented to the first SD board following the receipt of all the data regarding the year's performance. It will include:

- a list of projects concluded so far in the programme. For those with enough subsequent data the results of the benefits realisation exercise will be included
- a traffic light status and explanation for each live project
- details of the projects planned for implementation during the current financial year and whether funding has been awarded
- overall performance against planned carbon projections.

Once approved by the SD board a summary will be published in the DSA annual report and accounts in line with the accounting for sustainability guidelines. In order to provide external assurance the Carbon Trust will also evaluate the report. This will ensure that any carbon reduction is based on clear evidence.

8 Appendix a: definition of projects

This appendix contains a project sheet providing further detail about each major project in this plan. A major project is defined as either comprising more than 10 per cent of our target carbon reduction, or representing in excess of £100k investment.

Project:	Photo voltaic solar panels
Reference:	CR33
Owner (person)	Estates transformation manager
Department	Finance and corporate services
Description	Installation of multiple photo voltaic (PV) solar panel arrays which qualify for the feed in tariff (FiT) at the DSA training centre.
Benefits	<ul style="list-style-type: none"> · financial savings: £114,200 annually · payback period: 6.5 years · annual CO₂ emissions reduction: 186 tonnes of CO₂ · 13 per cent of target reduction · the calculations are based on studies commissioned by another part of the Department for Transport for comparable sites. A study of the DSA training centre has taken place but findings are not yet available
Funding	<ul style="list-style-type: none"> · project capital cost £800,000 · operational costs will be offset by the feed in tariff payments. · funding will be supplied internally and allow DSA to recoup investment through the feed in tariff enabled under the Energy Act 2008. It is projected that the project will fall into the largest PV bracket leading to a 29.3ppkWh rate · funding will be subject to a business case and exact costs will only be defined after a competitive tender
Resources	The capital and revenue team within estates will deliver the project as part of the 2011-12 programme with assistance from the sustainable development team
Ensuring Success	<ul style="list-style-type: none"> · the project will be subject to the EU procurement directive and the necessary timescales and requirements for clear and transparent competition will need to be observed · this is a highly technical project where we will need to utilise the knowledge and expertise of our total facilities management contractor
Measuring Success	<ul style="list-style-type: none"> · the credit meter will monitor the money earned through the FiT arrangement and the energy bureau service will monitor the utility invoices to ensure correct charging · the performance of the asset will be monitored annually
Timing	<ul style="list-style-type: none"> · training centre feasibility study: April 2011 · definition of requirement and internal approval to go to market: June 2011 · award of work to successful bidder and start of works: February 2012
Notes	

Project: reference:	More owned cars CR10
Owner (person)	Head of finance
Department	Finance and corporate services
Description	To achieve a shift from employees using their carbon intensive private vehicles for business journeys to the use of low carbon fleet vehicles.
Benefits	<ul style="list-style-type: none"> • financial savings: £111,500 annually • payback period: 3.8 years • annual CO₂ emissions reduction: 80 tonnes of CO₂ • 6 per cent of target reduction • private mileage is declared at 204gCO₂/km in line with DEFRA guidance whereas the fleet vehicles purchased during 2009-10 by DSA averaged 105gCo₂/km. The carbon reduction assumes that any new fleet vehicles would achieve the same carbon intensity which is reasonable given industry improvements. For example a Ford Focus Duratorq TDCi 1.6 diesel is 104gCo₂/km. • the calculations are based on the 33 staff who travel in excess of 12,000 miles per year switching to a fleet vehicle which costs £13,000 through the buying solutions framework
Funding	<ul style="list-style-type: none"> • project capital cost £429,000 • claims worth £181,500 will be avoided in favour of 70,000 maintenance and fuel costs • funding will be supplied internally • each vehicle purchase will require a business case taking into account the individual circumstances. If there are similar needs (such as several sector managers) the requirement will be aggregated
Resources	The finance control and governance team will seek to encourage high mileage staff to adopt fleet vehicles and support them through the business case process.
Ensuring Success	Work has already begun to make the fleet vehicles option more attractive including collecting testimonials from existing staff. The travel group will oversee this process.
Measuring Success	The sustainable development team report carbon from road vehicles quarterly into the sustainable development board. The report will distinguish between the carbon intensity of private vehicles and the fleet vehicles.
Timing	This project is not planned for implementation until 2012-13 and no milestones have been defined as yet.
Notes	In order to streamline the process DSA may seek to establish a basic set of criteria which need to be satisfied (annual mileage, cost of vehicle, number of days used, and so on) before a fleet vehicle can be purchased. This would allow staff to self assess and make switching to a fleet vehicle relatively fast and simple.

Project:	Voltage optimisation at DTCs
Reference:	CR68
Owner (person)	Estates transformation manager
Department	Finance and corporate services
Description	Installation of small scale voltage optimisation equipment at driving test centres to reduce the electricity used.
Benefits	<ul style="list-style-type: none"> · financial savings: £27,840 annually · payback period: 2.2 years · annual CO₂ emissions reduction: 152 tonnes of CO₂ · 10.3 per cent of target reduction · the calculations are based on installation at all 208 DTCs that have an active electricity account
Funding	<ul style="list-style-type: none"> · project capital cost £62,192 · operational costs will be reduced by £27,840 · funding will be supplied internally · funding will be subject to an overall business case. Costs are based on equipment produced by V-Phase at £299 per unit including installation. No bulk discount has been applied but it may be possible to achieve a reduction in the region of 10 per cent
Resources	The project would be implemented by the capital and revenue estates team as part of the 2013-14 programme.
Ensuring Success	Small scale voltage optimisation is a young technology and has not yet been proven. However DSA has installed larger scale power perfecter technology which has produced results. As a result, this project has been scheduled for 2013-14 to allow the technology to mature
Measuring Success	<ul style="list-style-type: none"> · during 2011-12 DSA will install automatic meter reading (AMR) on all electricity and gas accounts which will allow us to estimate the reduction attached to any project · energy consumption is monitored monthly and will be reported to the sustainable development board quarterly
Timing	This project is not planned for implementation until 2013-14 and no milestones have been defined as yet.
Notes	DSA will monitor the development of small scale voltage optimisation over the next two years in order to establish when the optimum time will be to install such devices.

Project:	Boiler controls at DTCs
Reference:	CR32
Owner (person)	Estates transformation manager
Department	Finance and corporate services
Description	The installation of seven day timers on any boiler where they are not already present. This includes the engineer educating the test centre manager in the operation of the controls and setting them to the optimum temperature and timings.
Benefits	<ul style="list-style-type: none"> • financial savings: £29,771 annually • payback period: 1.9 years • annual CO₂ emissions reduction: 183 tonnes of CO₂ • 12.5 per cent of target reduction • the calculations are based on a survey completed by test centre managers which indicated the 59 sites would benefit from an upgrade in boiler controls either because none were present or they did not allow for a seven day programme. The reduction assumes a 15% drop in gas consumption based on the RAP tool estimate
Funding	<ul style="list-style-type: none"> • project installation cost £57,600 • maintenance will not be material so operational costs are expected to drop due to the energy saved • funding will be supplied internally • a business case will be developed based on a proposal from our facilities contractor. It is very likely that we will aggregate this together with other similar projects of lower carbon reduction
Resources	The capital and revenue team within estates will deliver the project as part of the 2011-12 programme with assistance from the sustainable development team.
Ensuring Success	<ul style="list-style-type: none"> • The procurement stage will be overseen by DSA's procurement function who will provide timescales and ensure requirements for clear and transparent competition are observed • considering that this project is likely to be aggregated with other similar upgrades, we will make use of our facilities contractor to provide project management
Measuring Success	<ul style="list-style-type: none"> • regular reporting by the facilities contractor will be built into the specification so that DSA can track progress and key performance indicators such as numbers of abortive visits • the installation of automatic meter readers is planned just prior to the commencement of this project which will allow a benefits realisation to take place
Timing	<ul style="list-style-type: none"> • milestones: <ul style="list-style-type: none"> ○ proposal from facilities contractor: April 2011 ○ surveys undertaken and programme formulated: July 2011 ○ award of contract and commencement of works: October 2011
Notes	There are a number of other projects which involve common upgrades at a variety of DTCs. It is necessary to survey the test centres in order to establish which upgrades are required at each site. Boiler controls will be included in the targeted programme of works which will take place based on the survey results.