

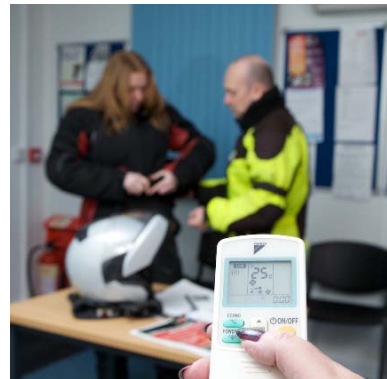


Driving  
Standards  
Agency

# Driving Standards Agency

## Five year carbon management plan

Progress update November 2012



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## Foreword

When I endorsed our original carbon management plan 18 months ago I did so knowing that our journey would be challenging, but worthwhile. We are now half way along the path to cutting out a quarter of our carbon emissions by 2015 and the figures clearly show that we have achieved an impressive reduction.

Over the past three or four years I have seen carbon management in DSA travel from a specialist consideration to a fully integrated business objective supported by strong governance and accurate information. We cannot always know how the Agency will need to change, but with the systems we now have in place, every important decision is taken knowing what the impact will be on our carbon bottom line.

Challenges remain, but we have overcome much and I have every confidence that we will continue to successfully decouple our operations from carbon emissions. Two years ago a 15 per cent reduction seemed like a mountain to climb. Having scaled this mountain we look to 2013 and beyond knowing we are equal to the task.

**Rosemary Thew**

DSA chief executive

## About DSA

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 spread across England, Scotland and Wales. Through delivering 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 2,400 people and operates out of over 400 driving test centres as well as three administrative centres. DSA is financed by revenue from fees paid by customers and turnover was £193m in 2011-12. Utility spend is in the region of £700,000 and travel costs in excess of £4m.

Cumulative figures for the first half of 2012-13 show that we are 15.8 per cent down against our baseline. This puts us on track to deliver our overall goal of a 25 per cent reduction by 2015

## Context

We published our first five year carbon management plan (CMP) in March 2011. This report is a brief update so that interested parties can see how we have progressed with our plan.

Since publishing the original plan there have been a number of developments which are worth noting:

→ The Greening Government Commitments<sup>1</sup> were published shortly after the DSA CMP. Baselines were subsequently set across government. As a result, it was necessary to expand the original CMP baseline to include additional carbon emitting sources such as liquid petroleum gas, taxi journeys and domestic flights.

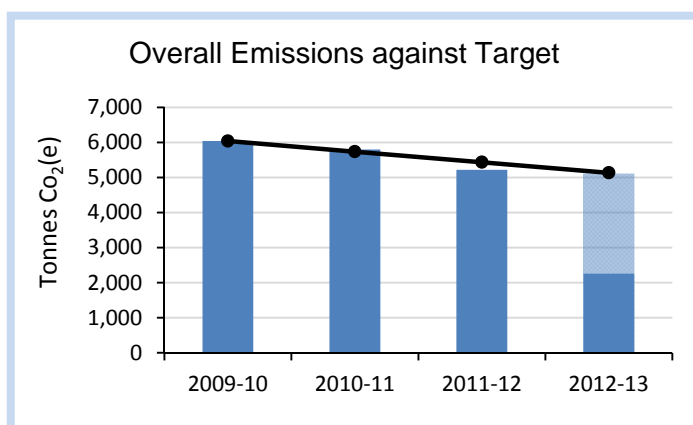


Figure 1: Actual emissions from 2009 to 2012 with projected emissions for 2012-13 based on the first two quarters of actual data

See *Appendix 1: Revised Baseline* for further details.

→ Traditionally, candidates visit a static driving test centre in order to take their test. However, the Agency is exploring options around how testing can be delivered more locally. This means partnering with businesses and delivering services from flexible locations. We have undertaken a lot of work to understand the impact this will have on carbon emissions and what we can do to mitigate this.

→ The Economic environment has been difficult since the publication of the plan. Test fees are our main income and have been frozen for an extended period. If anything, this has added more urgency to delivering carbon savings due to the clear financial benefits.

## Performance

As *Figure 1* shows we have reduced emissions year on year since publishing the plan. At the close of 2011-12 we had achieved a reduction of 13.6 per cent.

Cumulative figures for the first half of 2012-13 show that we are 15.8 per cent down against our baseline. This puts us on track to deliver our overall goal of a 25 per cent reduction by 2015.

<sup>11</sup> <http://sd.defra.gov.uk/gov/green-government/commitments/>

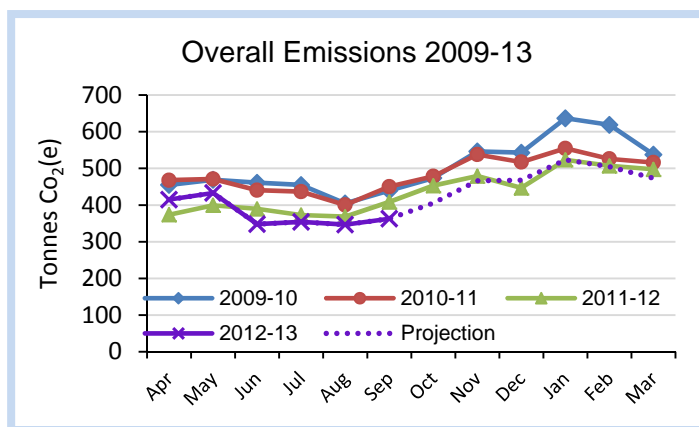


Figure 2: Carbon emissions broken down by month since the baseline with a protection to year end

As the infrastructure we use, such as the national grid, becomes less carbon intensive this gives us a reduction in our footprint.

→ The way we report fleet emissions has been improved. We used the 2010 averages for engine size and fuel type<sup>4</sup> to form our baseline. However, we now have access to the individual carbon intensity for our owned and hired vehicles. These are now used in preference to the averages. In order to account for ‘real world’ driving conditions we add a 15 per cent uplift which is in line with the way Defra calculate the averages we used previously.

There are a number of factors that need to be noted in considering our performance:

→ In 2009-10 the Agency employed approximately 2,500 staff<sup>2</sup>. This has varied over the period, but the Agency now employs around 2,400 staff. In general, there has been a contraction in the numbers of administrative staff while we have maintained examiner numbers.

→ National electricity and gas prices have increased by approximately 14 per cent since 2009-10<sup>3</sup>. Petrol prices have risen by around 15 per cent over the same period. These rises are broadly in line with those assumed in our CMP. This means the estimated saving of £2,229,639 that the Agency will realise over five years through delivering the carbon targets is validated.

We now have access to the individual carbon intensity for our owned and hired vehicles. These are now used in preference to the averages.

→ 2011 was the second warmest on record which saw us record very low gas consumption. This can be seen in the 2011-12 bar in *Figure 1* which considerably exceeded the target.

→ For each year of reporting we use the new carbon conversion factors published by Defra.

## Carbon Reduction Projects

The table below shows the projects which we have completed since 2010-11.

Ref	Project	Estimated Percentage of Target
EPCR3	Large site voltage optimisation	3.1%
EPCR7	PC energy management software	3.0%
EPCR5	Vending machines removal	1.7%
EPCR2	Large site boiler optimisation	1.5%
EPCR6	Re-lamping of Axis lighting	0.5%
EPCR9	LED spot lights at the Axis	0.4%
EPCR8	Condense cleaning hours	0.1%
EPCR4	Server room temperatures	0.1%
CR77	Eastgate lighting upgrade	3.0%
CR11	Low carbon hire cars	1.8%
CR78	Wednesbury heating system	0.4%
CR65	LED lighting at Training Centre	0.3%
CR79	Tadpoles trial	0.2%
CR18	MFDs at Eastgate House	0.1%
CR72	LED strip lighting (trial)	0.0%

Figure 3: Projects completed since the baseline and estimated contribution to the 25 per cent reduction target

A small number of projects have been added and some of the original projects have been split down. For example, we had expected to deliver the installation of Tadpole devices in tandem with

<sup>2</sup> Full time equivalents.

<sup>3</sup> [http://www.decc.gov.uk/en/content/cms/statistics/energy\\_stats/prices/prices.aspx](http://www.decc.gov.uk/en/content/cms/statistics/energy_stats/prices/prices.aspx)

<sup>4</sup> <http://archive.defra.gov.uk/environment/business/reporting/older-ghg-conversion-factors.htm>

thermostatic radiator valves. However, after further investigation we wanted to pilot the Tadpole technology first. As a result we created project CR79 to enable us to pilot four devices before a larger rollout. After a weather corrected analysis of the half hourly data we found that they achieved

an impressive 19 per cent saving of gas consumption. As a result we are planning to install 90 more Tadpoles as detailed in the current projects table.

The below table shows our current projects.

Ref	Project	Estimated Percentage of Target	Status
EPCR1	Smart meter Installation	6.8%	Green
CR32	Boiler controls at DTCs	12.5%	Amber
CR28	Sensor lighting at DTCs	6.4%	Red
CR10	Low carbon fleet cars	5.5%	Green
CR27	Tadpoles at DTCs	5.1%	Amber
CR25	Roof insulation at DTCs	3.5%	Amber
CR1	DTC water heaters	2.0%	Amber
CR74	Gas magnetisation trial	TBC	Amber
CR73	LED DTC replacements	TBC	Red
CR68	Voltage optimisation trial	TBC	Red
CR76	Examiner Modernisation	13.4%	Green

Figure 4: Projects currently in delivery with estimated contributions. A red status indicates significant risks to delivery, while amber indicates moderate risks and green projects are without any significant risks

We are always looking for new cost effective opportunities to reduce emissions. There are several promising avenues we are exploring, including improvements to the building management system at our headquarters and LED road lighting at the Training Centre. If further investigations indicate that these would compare well to the current projects we will add them into our plans.

## Further Information

We include a detailed report on our environmental impact in the Annual Report every year. This includes carbon emission but also covers water, waste, procurement and our internal management systems. We also report performance against government targets which forms part of the Department for Transport performance.

This report focuses on the performance of our operations. However, we acknowledge that we have an influence over the driving tests and driver training industry. Plans and progress in this area are covered in our Business Plan and Annual Report.

If you would like further information about our environmental management, please contact [sustainabledevelopment@dsa.gsi.gov.uk](mailto:sustainabledevelopment@dsa.gsi.gov.uk).

## Appendix 1: Revised Baseline

Fuel/Vehicle Type	Category	Units	2009-10 Quantity	2009 Conversion Factor	Percentage of Baseline	CO2e Emissions (tonnes)
Electricity		KWhs	4,438,217	0.54418	40.0%	2,415.189
Natural gas		KWhs	4,997,571	0.18396	15.2%	919.353
Liquid Petroleum Gas		Litres	22,681	1.49680	0.6%	33.949
Average car (unknown fuel)	Private vehicles	km	8,311,046	0.20487	28.2%	1,702.684
Smallpetrolcar, upto1.4litreengine	Hire cars	km	55,904	0.18200	0.2%	10.175
Mediumpetrolcar, from1.4-2.0litres	Hire cars	km	855,357	0.21493	3.0%	183.842
Largepetrolcar, over2.0litre	Hire cars	km	906	0.29762	0.0%	0.270
Averagepetrolcar, over2.0litre	Hire cars	km	282,880	0.20781	1.0%	58.785
Smalldieselcar, upto1.7litreorunder	Hire cars	km	89,831	0.15277	0.2%	13.724
Mediumdieselcar, from1.7to2.0litre	Hire cars	km	349,268	0.18939	1.1%	66.148
Largedieselcar, over2.0litre	Hire cars	km	28,197	0.25762	0.1%	7.264
Average diesel car	Hire cars	km	152,130	0.19835	0.5%	30.175
Medium petrol hybrid car	Hire cars	km	40,229	0.12821	0.1%	5.158
Average car (unknown fuel)	Hire cars	km	213,248	0.20487	0.7%	43.688
Large petrol motorbike (over500cc)	Fleet motorcycles	km	1,699,376	0.13977	3.9%	237.522
Smallpetrolcar, upto1.4litreengine	Training vehicles	km	37,049	0.18200	0.1%	6.743
Mediumpetrolcar, from1.4-2.0litres	Training vehicles	km	26,055	0.21493	0.1%	5.600
Smalldieselcar, upto1.7litreorunder	Training vehicles	km	49,761	0.15277	0.1%	7.602
Mediumdieselcar, from1.7to2.0litre	Training vehicles	km	34,360	0.18939	0.1%	6.507
Small petrol motorbike (upto125cc)	Training vehicles	km	7,359	0.08740	0.0%	0.643
Large petrol motorbike (over500cc)	Training vehicles	km	59,628	0.13977	0.1%	8.334
All HGV UK average	Training vehicles	km	50,389	0.86776	0.7%	43.725
Rail-national rail	Rail	km	1,034,917	0.06113	1.0%	63.264
Smalldieselcar, upto1.7litreorunder	Fleet cars	km	68,056	0.15277	0.2%	10.397
Mediumdieselcar, from1.7to2.0litre	Fleet cars	km	249,701	0.18939	0.8%	47.291
Large petrol hybrid car	Fleet cars	km	100	0.22601	0.0%	0.023
Plane	Domestic flight	km	568,322	0.18838	1.8%	107.063
Taxi	Vehicle km	km	14,985	0.25762	0.1%	3.861
<b>Carbon from Estate Total</b>					<b>Co2e</b>	<b>3,368</b>
<b>Business Travel Total</b>					<b>Co2e</b>	<b>2,670</b>
<b>Total Carbon Footprint</b>					<b>Co2e</b>	<b>6,039</b>