

## PEAK DISTRICT NATIONAL PARK AUTHORITY ENVIRONMENTAL MANAGEMENT ANNUAL PERFORMANCE REPORT 2013/2014

### 1. INTRODUCTION

Good environmental management has been central to how the Authority aims to conduct its operations for some time. A key element of this is that the Authority is transparent and accurate when describing the environmental impacts that are caused as a result of its activities, particularly when making statements concerning achievements and improvements we have made. This report establishes the data which will then be promoted and reported publically.

The scope and data contained within this document reflects the data contained within the Authority's Carbon Management Plan (CMP) 2010 – 2015<sup>1</sup>. This is in line with the Authority's corporate objectives which focus on the Carbon Management Plan and the implementation of the actions contained within. This report serves not only as a performance reporting tool but also allows an annual review of progress against the CMP performance objectives in very practical terms. Importantly, this report provides an update on progress on the Authority's target to reduce its carbon emissions.

Within the last year, the Authority approved an amendment to the timescales it has set to achieve a 30% reduction in emissions. The target date for achieving the reduction has been revised to the end of the 2016/17 year. A profile of the emissions if no action were taken (Business As Usual or BAU), anticipated reductions in emissions contained within the original and revised CMP and the reductions to date are shown in Figure 1, below.

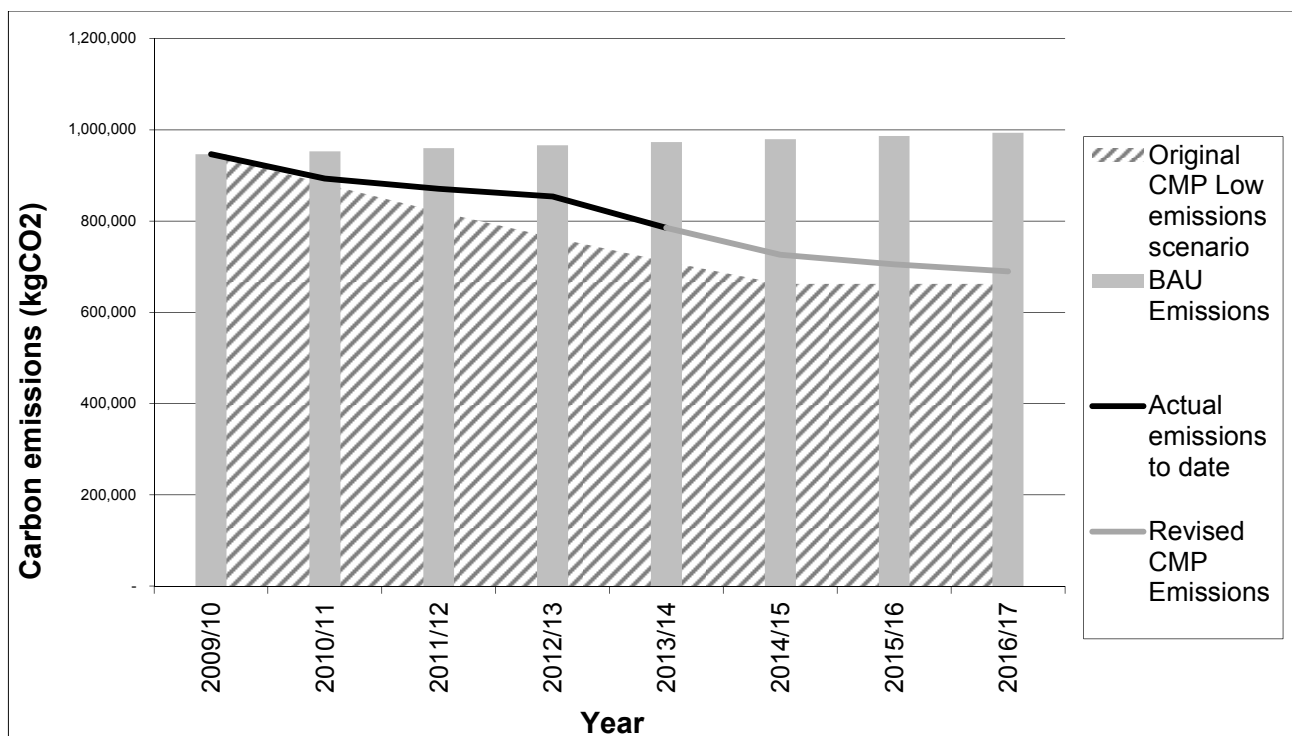


Figure 1. Emissions to date and forward predictions

<sup>1</sup> [http://www.peakdistrict.gov.uk/\\_data/assets/pdf\\_file/0011/133400/carbon-management-plan-2010-2015.pdf](http://www.peakdistrict.gov.uk/_data/assets/pdf_file/0011/133400/carbon-management-plan-2010-2015.pdf)

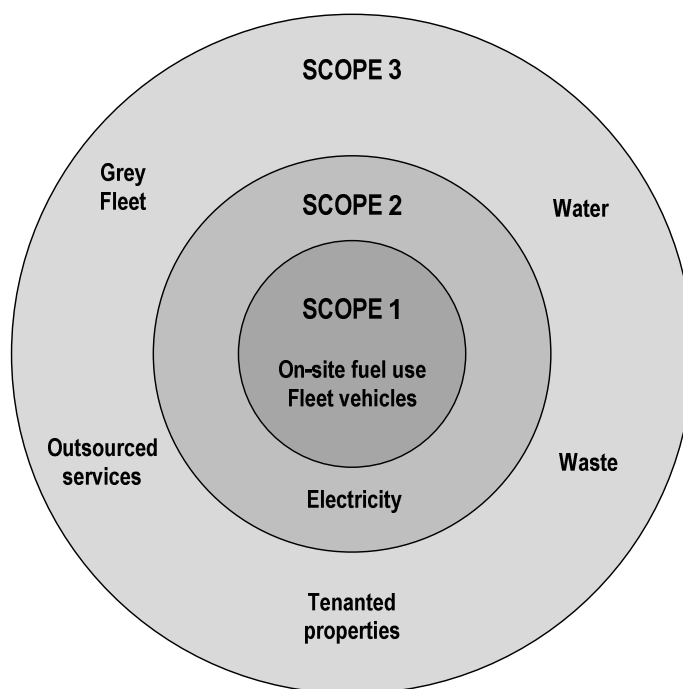
### 1.1. Scope and definitions

We must recognise that the actual scope of our environmental impacts is much wider than can ever be effectively monitored. However, by focusing our efforts on areas that can present opportunities for significant, demonstrable improvements, we will progress towards achieving our carbon management vision.

The scope of our performance reporting is now limited to those impacts recognised within our carbon management plan. Emissions are included where they fit into one of the following categories:

- Scope 1: directly resulting from our operations (on-site fuel use, fleet vehicles)
- Scope 2: caused as a result of our operations (the generation of electricity for use on our sites)
- Scope 3: caused as a result of our operations and where we can have some influence but over which we have no direct control (waste disposal, the use of water, business travel in non-authority vehicles and emissions resulting from energy use in Authority tenanted properties)

This represented in the figure below:



**Figure 2. Overview of Authority carbon footprint scope**

For more information and explanation of the scope of our reported emissions, please see the CMP.

## 1.2. Summary of Baseline

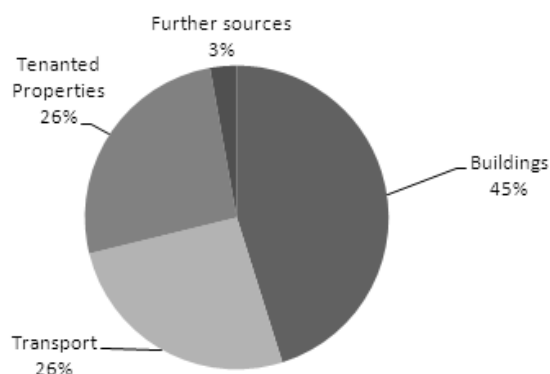
The data against which we now report is based on emissions resulting from our operations during the 2009/10 year as defined within the Carbon Management Plan<sup>2</sup>. Emissions are broadly split in to 4 categories:

- Buildings: emissions resulting from electricity and gas consumption
- Transport: emissions resulting from all vehicle use including fleet vehicles, pool cars, private cars used for Authority business, public transport and air travel.
- Tenanted properties: emissions resulting from energy use within Authority owned tenanted properties
- Further sources: emissions resulting from the disposal of waste and the use of water at Authority sites.

An overview of the baseline emissions is given below. For more detail concerning the baseline emissions, see the Carbon Management Plan.

**Table 1. Data for 2009/10 baseline year**

	<b>CO<sub>2</sub> (tonnes)</b>	<b>%</b>
<b>Buildings</b>	427	45%
<b>Transport</b>	246	26%
<b>Tenanted Properties</b>	246	26%
<b>Further sources</b>	27	3%
	<b>946</b>	<b>100%</b>



<sup>2</sup> The baseline emissions been amended since the publication of the carbon management plan to reflect the availability of more accurate base data.

## 2. PERFORMANCE REPORT

Our overall performance has shown a significant level of improvement over the 5 year period since the baseline was established. Our corporate objectives refer to the overall target within the CMP of a 30% reduction over the 7 year period of the plan rather than establishing specific targets for each year.

The total reduction in emissions has fallen from 946 tonnes CO<sub>2</sub> in the 2009/10 baseline year to 794 in this reporting period, representing a 16% reduction against baseline (19% reduction against BAU). This is a significant improvement on previous years and represents a 6% reduction in this year alone. A summary of the sources of emissions each year is shown in Figure 2, below:

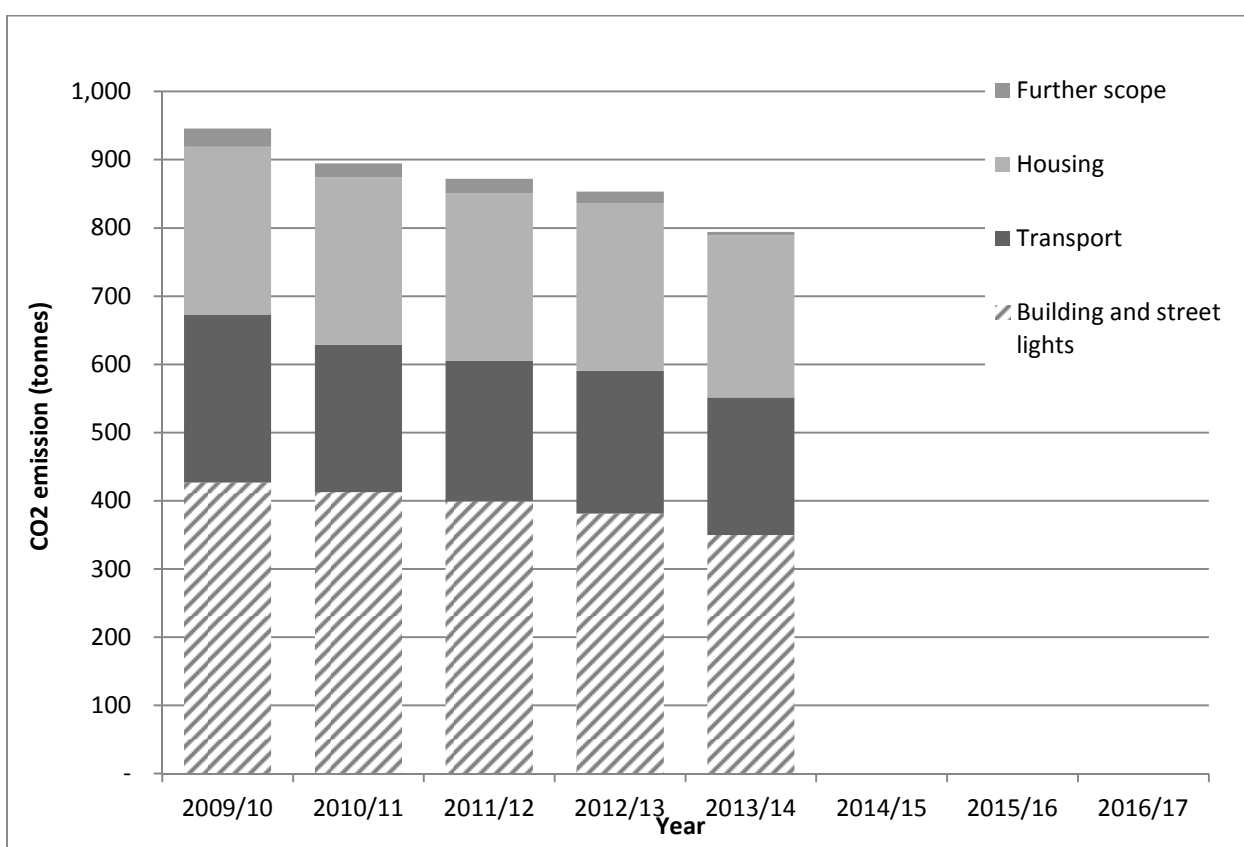


Figure 3. Graph showing total CO<sub>2</sub> emissions from all sources.

A more detailed breakdown of the sources of the emissions is given in the table below:

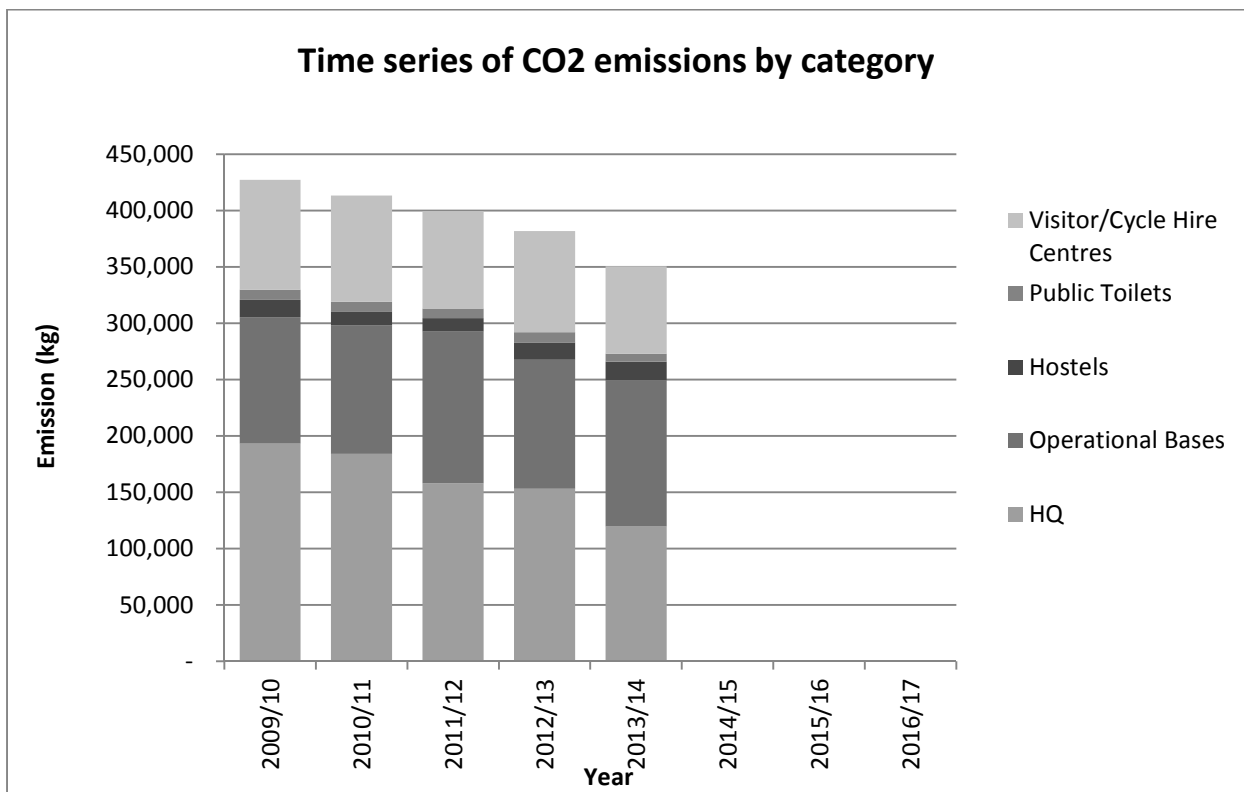
Category		tCO2 2009/10	tCO2 2010/11	tCO2 2011/12	tCO2 2012/13	tCO2 2013/14
Buildings and Street Lights	HQ	193	184	158	120	119
	Operational Bases	112	114	135	130	130
	Hostels	15	12	12	17	16
	Public Toilets	9	9	9	7	7
	Visitor/Cycle Hire Centres	97	94	86	77	77
Transport	Fleet	183	159	161	149	149
	Business	63	56	45	53	53
Further Sources	Waste	18	15	16	1	2
	Water	8	5	5	3	3
Housing	Tenanted	246	246	246	238	238
<b>TOTAL</b>		<b>946</b>	<b>895</b>	<b>873</b>	<b>854</b>	<b>794</b>

The Anticipated reduction in emissions is in line with the 19% recognised within the implementation programme of the (revised) CMP.

A description of each key area of impact and further analysis of the data is provided in sections 2.1 to 2.3 below.

### 2.1. Buildings

Emissions from Authority buildings arise as a result of the consumption of energy in the form of fossil fuels and electricity. This category is limited to operational properties and does not include tenanted properties which are dealt with in the housing section below. Emissions resulting from buildings continue to show positive progress with an 18% reduction from baseline levels. A summary of the key sources of emissions each year is provided in figure 3 below:



**Figure 4. Graph showing building related CO<sub>2</sub> emissions**

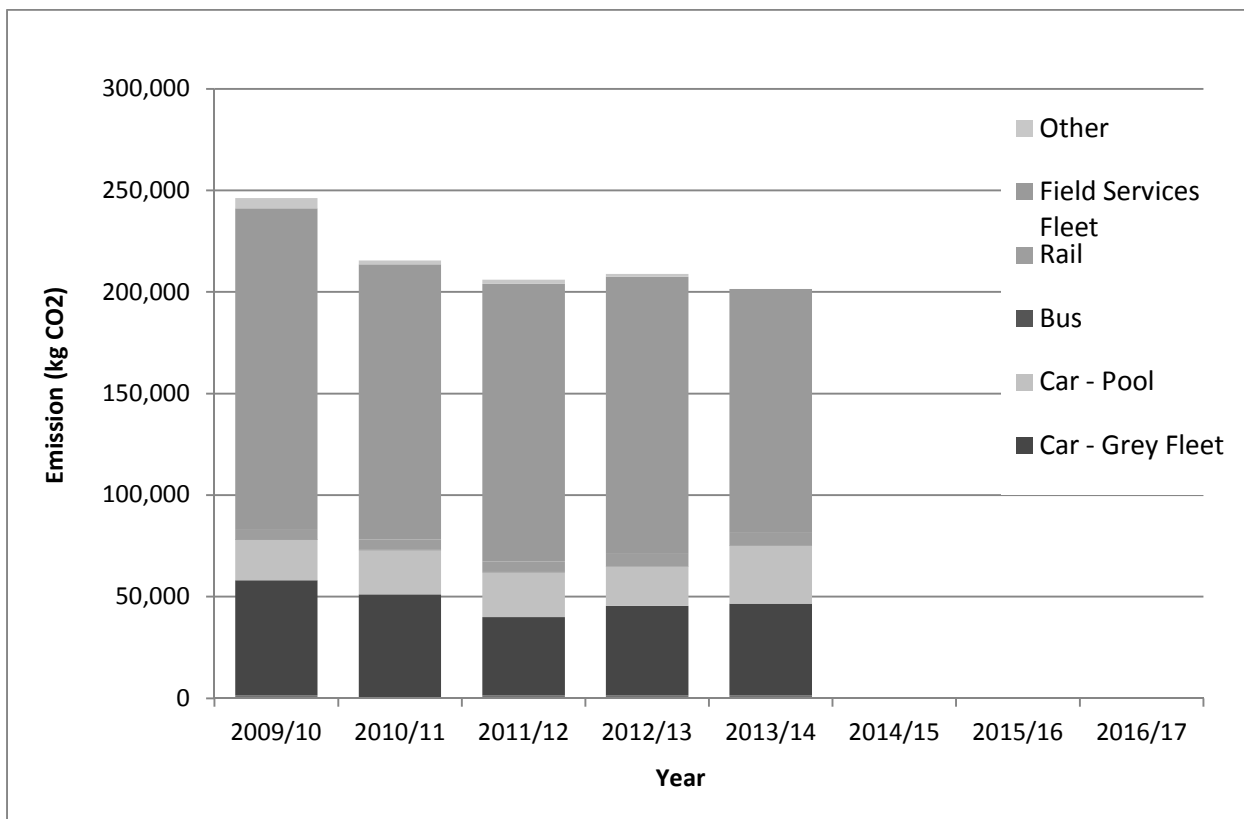
While in the past, progress in this area has been slower than expected due to the opening of the Monsal trail and severe winters (notably in 2012/13). The relatively mild winter during the 2013/14 year and the full impact of the biomass boiler operation have resulted in significant gains over the period. However, officers remain confident that, over the longer term, progress will continue to be made in this area.

The full year's operation of the biomass boiler at Aldern House has achieved a 30tonne reduction in emissions and it is hoped this will be increased over the coming year.

## 2.2. Transport

Following a small increase in transport emissions during the 2012/13 year, we again appear to be making progress in this area. Overall transport emissions are now 18% below baseline levels. We have seen some increases in pool car and grey fleet car use over the period but this has been offset by a significant decrease in Field Services fleet mileage, representing a 16 tonne reduction, the largest since the new fleet was purchased in the 2010/11 year. This reduction is thought to be a result of greater coordination between staff to minimise travel and share cars wherever possible. Member mileage related emissions have dropped back to levels in line with other years at just under 8 tonnes per annum compared to 11 tonnes in the preceding year, although still above previous lows of 5 tonnes.

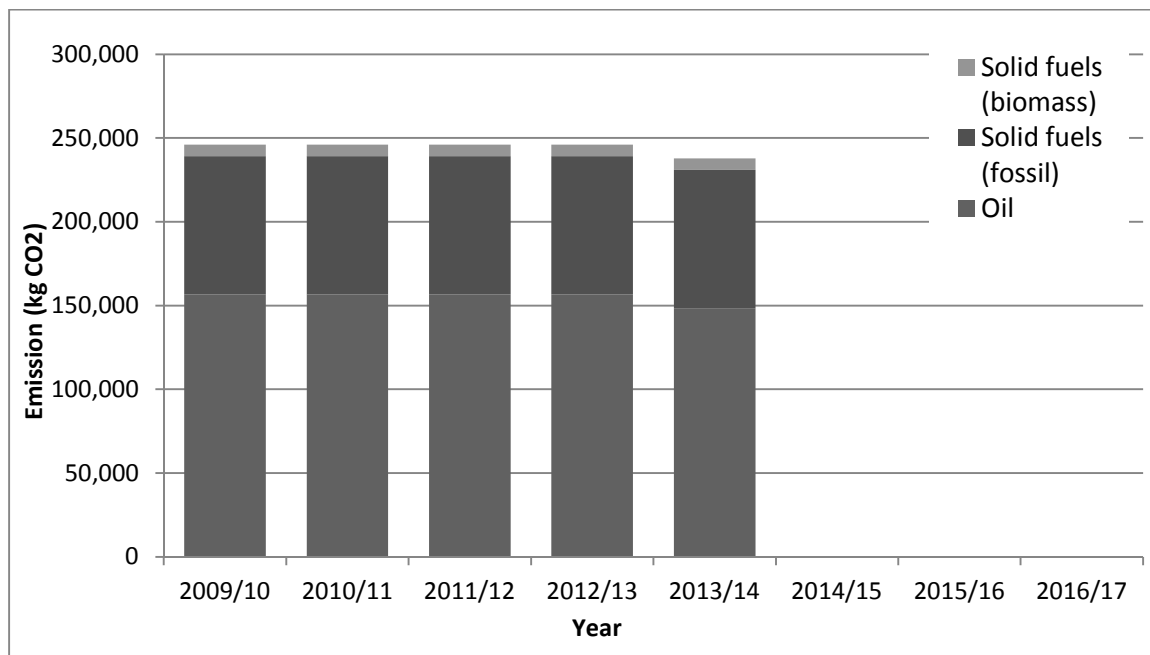
The key sources of emissions in this area are shown in figure 5 below.



**Figure 5. Graph showing travel related CO<sub>2</sub> emissions**

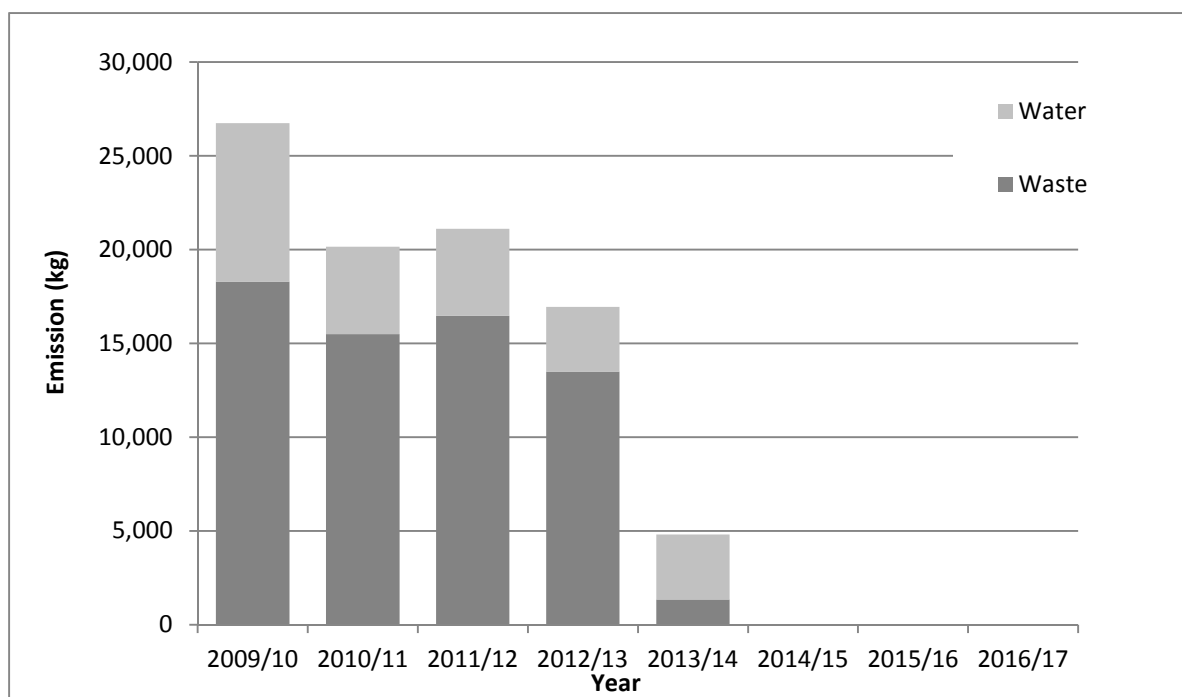
### 2.3. Housing and further sources

Emissions resulting from housing (Authority tenanted properties) are calculated using benchmarks provided by the Carbon Trust. As the number of properties and heating system within them has not altered since the baseline period, the emissions remain largely constant. The conversion of Big Fernyford Farm from oil heating to renewable energy has resulted in an 8 tonne reduction due to a significant decrease in heating energy. The installation of a renewable heating system at North Lees Farmhouse has had no impact on the figures as this property has not been occupied until this year and therefore was responsible for no emissions in the past. This is illustrated in the graph below:



**Figure 6. Emissions resulting from Authority tenanted properties**

Also included within this category are emissions resulting from ‘further sources’ which includes water use and the production of waste. Waste that is recycled is considered to avoid the production of emissions and therefore offsets some of the emissions from the waste that is sent to landfill. The Authority has achieved a significant increase in the amount of waste collected for recycling over the previous year which has largely offset the emissions created from the disposal of waste to landfill. The total volume of landfilled waste has remained largely static but the amount recycled has increased from 25 to 39 tonnes. This has resulted in a reduction in emissions of 12 tonnes. A breakdown of the emissions from these sources is provided in figure 7 below:



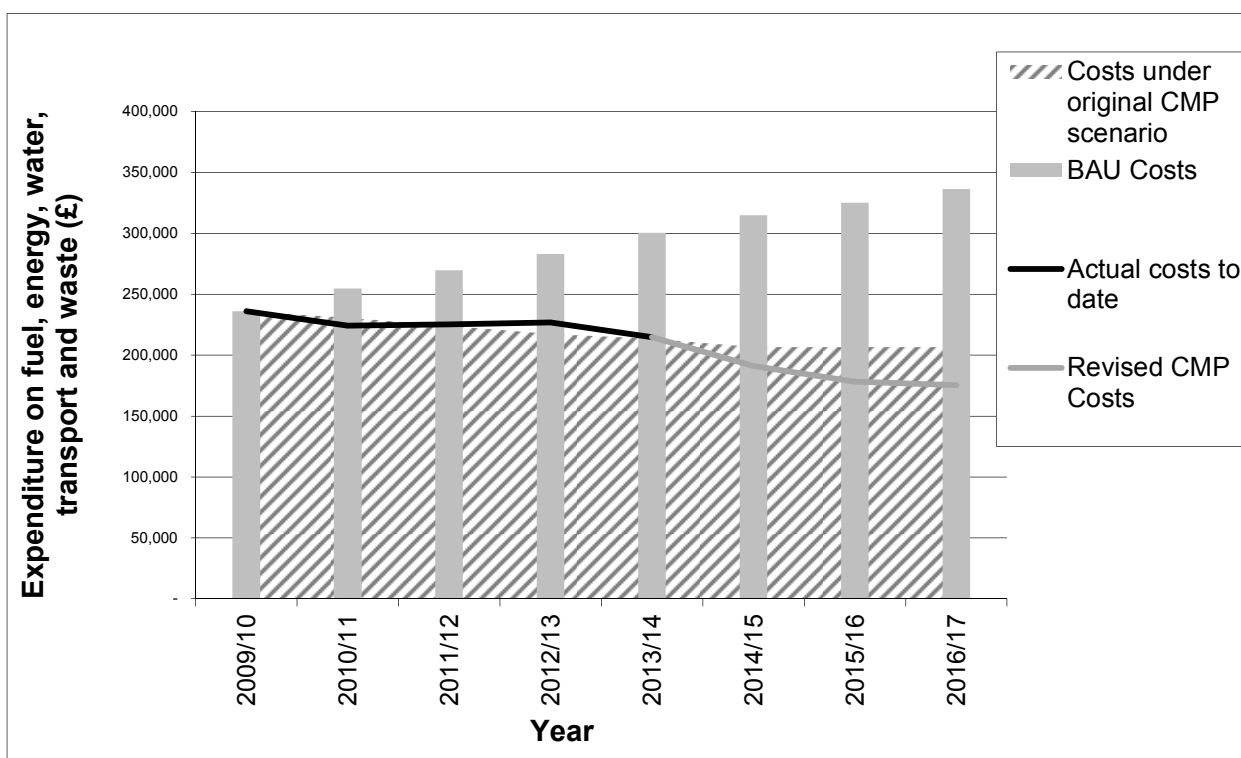
**Figure 7. Emissions resulting from water use and waste production**



#### 2.4. Financial performance

An important element of the Authority's CMP are the savings that will be made from the measures within the plan. Over the course of the revised plan, a total of £160,000 savings have been recognised all of which are associated with the measures recognised within the plan.

'Actual costs' have been calculated using the data within this report and all available information concerning energy and fuel unit prices; this has been compared against actual costs from the Authority financial system and is thought to be broadly accurate. Target costs are the predicted costs using target figures from the CMP and energy and fuel unit prices as above, the Business As Usual (BAU) cost predictions use Department for Energy and Climate Change predictions for energy price and fossil fuel retail price increases<sup>3</sup> and assumptions made by the Carbon Trust relating to waste and water price increases. BAU figures have been updated with the most recent figures hence the slightly different cost predictions in figure 7 below to those within the CMP.



**Figure 8. Comparison of Actual, target and BAU costs for expenditure related to the CMP scope.**

The Authority has achieved savings as were expected within the original CMP and it is anticipated that the Authority will go on to benefit from further savings over the course of the coming 3 year period.

Financial savings form an important element of this area of work and robust business cases will continue to be provided to support the implementation of new projects.

<sup>3</sup> [http://www.decc.gov.uk/en/content/cms/meeting\\_energy/Renewable\\_ener/incentive/incentive.aspx](http://www.decc.gov.uk/en/content/cms/meeting_energy/Renewable_ener/incentive/incentive.aspx)