

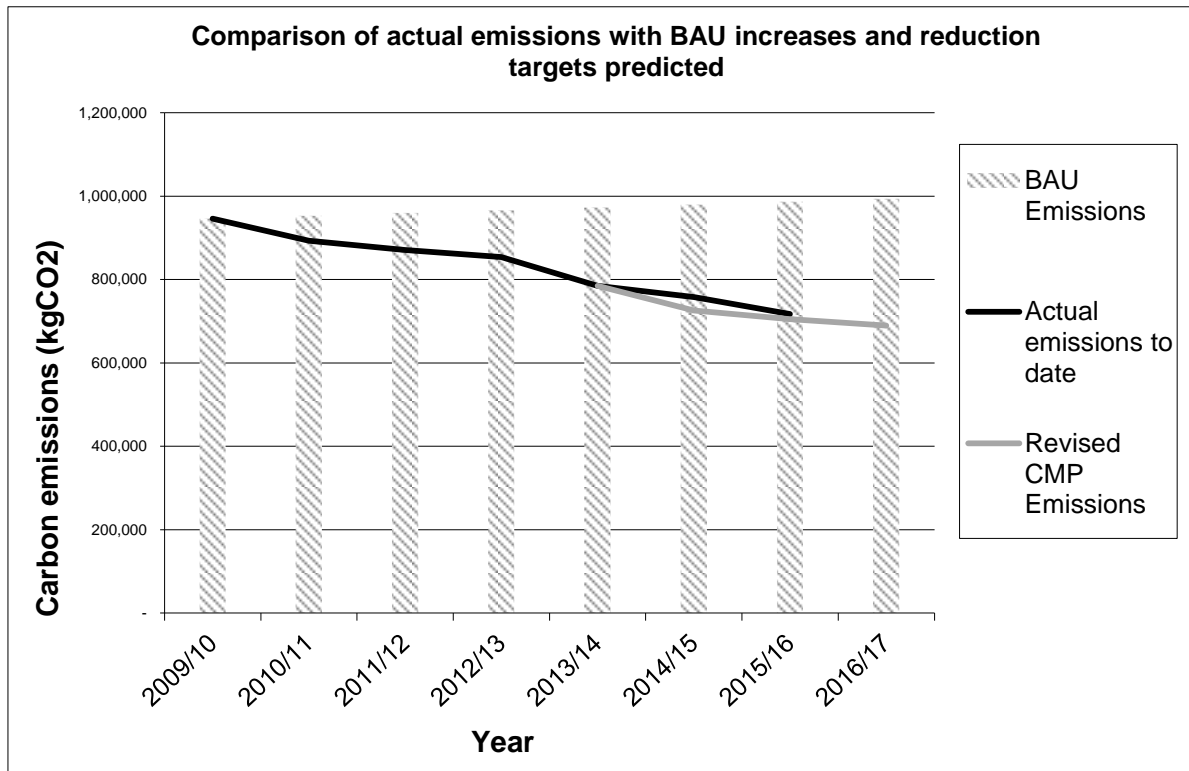
PEAK DISTRICT NATIONAL PARK AUTHORITY ENVIRONMENTAL MANAGEMENT ANNUAL PERFORMANCE REPORT 2015/2016

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 that within the Authority's Carbon Management Plan (CMP) 2010 – 2015¹. 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.

The Authority's aim is to reduce its carbon emission by 30% against baseline levels by 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 the CMP and the reductions to date are shown in Figure 1, below.



¹ http://www.peakdistrict.gov.uk/__data/assets/pdf_file/0011/133400/carbon-management-plan-2010-2015.pdf

Figure 1. Emissions to date and forward predictions

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 is represented in the figure below:

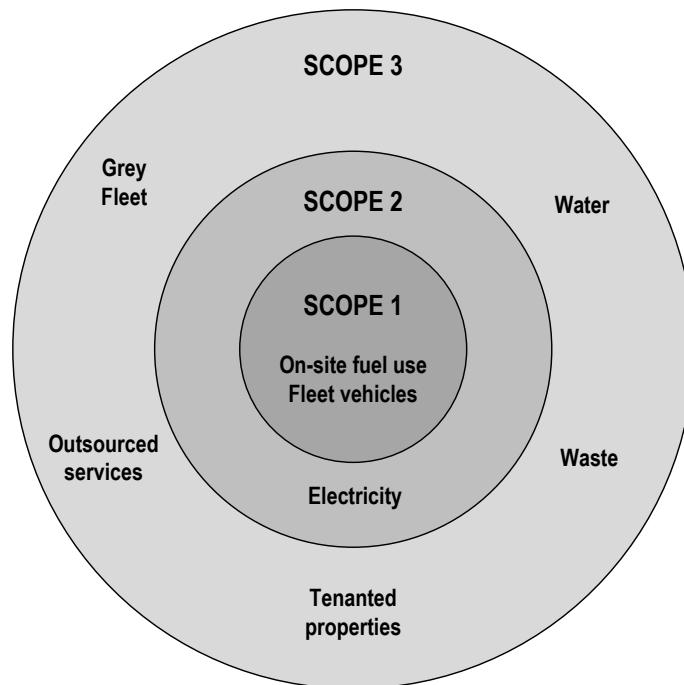


Figure 2. Overview of Authority carbon footprint scope

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

1.2. Summary of Baseline

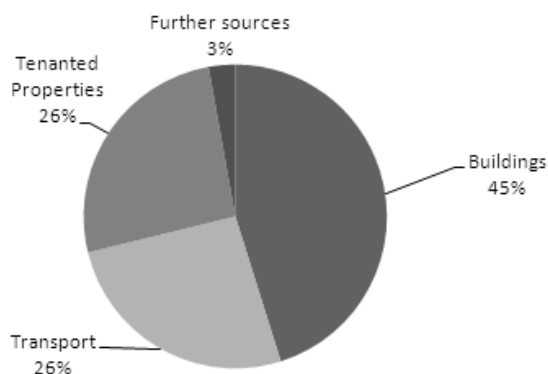
The data against which we now report is based on emissions resulting from our operations during the 2009/10 year as defined within the Carbon Management Plan². Emissions are broadly split in to 4 categories:

- 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.

Table 1. Data for 2009/10 baseline year

	CO₂ (tonnes)	%
Buildings	427	45%
Transport	246	26%
Tenanted Properties	246	26%
Further sources	27	3%
	946	100%



² The baseline emissions have 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 6 years 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 with a target of a 25% reduction by the end of the 2015/16 year.

The total reduction in emissions has fallen from 946 tonnes CO₂ in the 2009/10 baseline year to 717 in this reporting period, representing a **24.3%** reduction against baseline and **27%** against the expected levels under a business as usual scenario accounting for a total reduction in emissions of 228 tonnes, 40 tonnes of which have been achieved in the 2015/16 year.

A summary of the sources of emissions each year is shown in Figure 2, below:

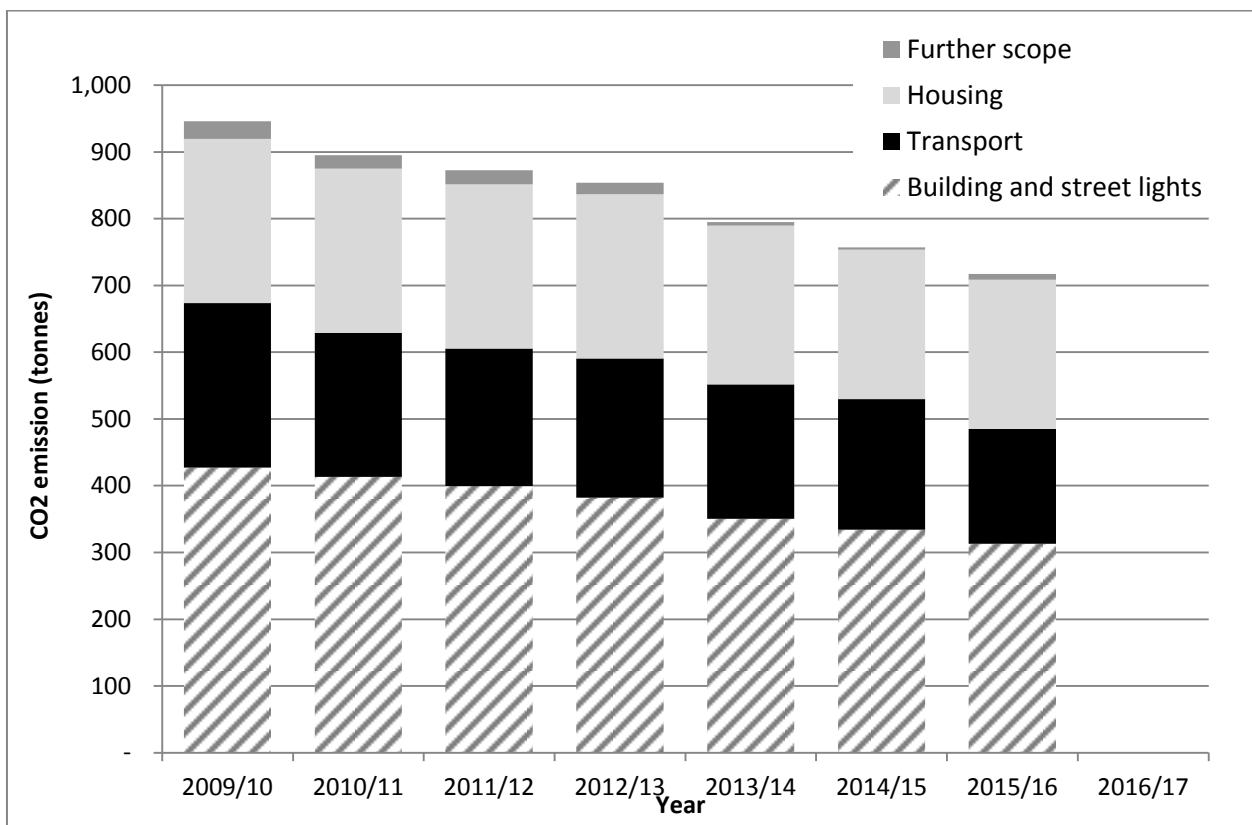


Figure 3. Graph showing total CO₂ emissions from all sources.

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 2012/13	tCO2 2014/15	tCO2 2015/16
Buildings and Street Lights	HQ	193	184	158	153	120	109	101
	Operational Bases	112	114	135	115	130	125	106
	Hostels	15	12	12	15	17	15	19
	Public Toilets	9	9	9	9	7	9	9
	Visitor/Cycle Hire Centres	97	94	86	90	77	76	78
Transport	Fleet	183	159	161	157	149	139	124
	Business	63	56	45	52	53	57	48
Further Sources	Waste	18	15	16	13	1	1	5
	Water	8	5	5	3	3	3	4
Housing	Tenanted properties	246	246	246	246	238	224	224
		946	895	873	854	794	758	717

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 a **27%** reduction from baseline levels with **6.2%** being achieved in the reporting year. A summary of the key sources of emissions each year is provided in figure 3 below:

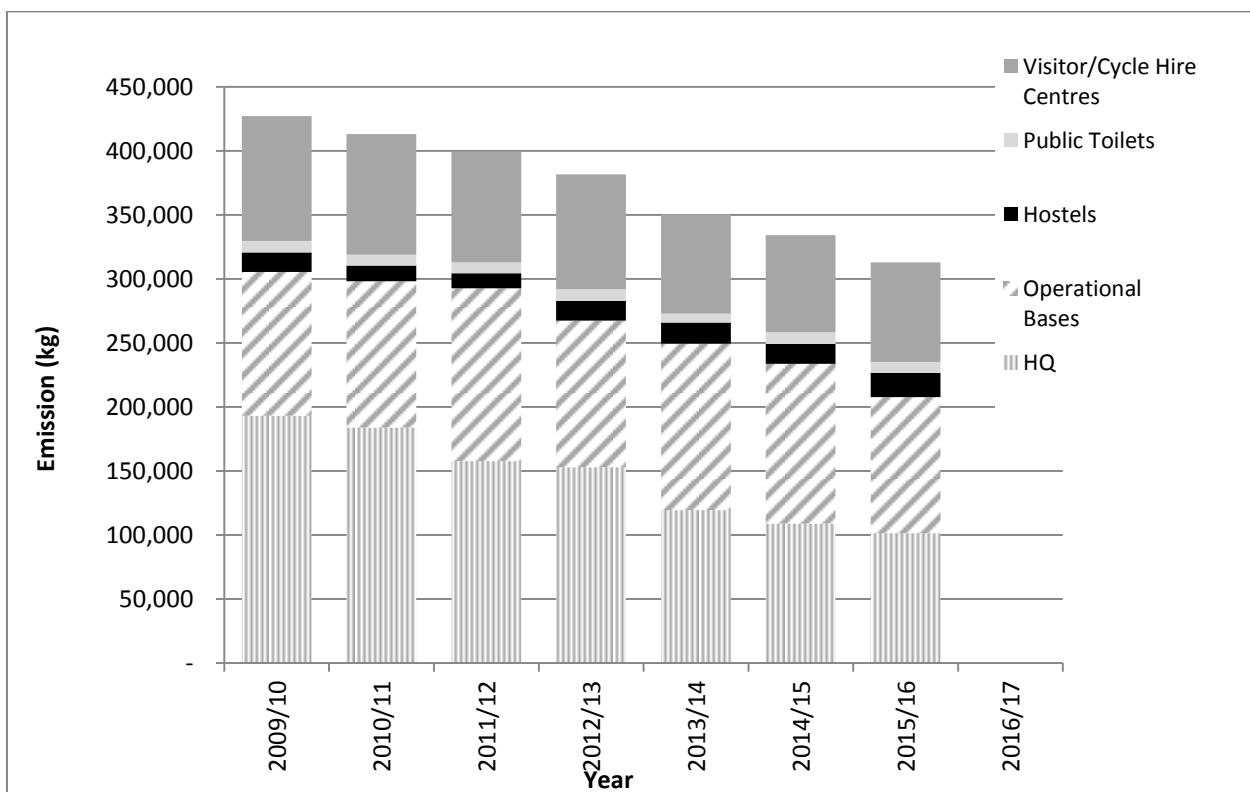


Figure 4. Graph showing building related CO₂ emissions

Gains have again been made across the property portfolio with the most significant reduction in emissions during the reporting period coming from improvements at operational bases. This is partly down to the disposal of Losehill Hall Bungalow but also due to reductions in energy use at other bases. The most significant overall reduction in building energy against baseline comes at Aldern House which shows a 47.5% reduction since 2009/10.

Work continues to progress on making improvements to our operational buildings and work is currently underway to integrate some of the remaining Carbon Management Plan projects within the wider schemes at Castleton, Edale and Millersdale.

The operation of the biomass boiler at Aldern House continues to be successful and work has progressed during the reporting period on reducing the electricity use through widespread installation of high efficiency lighting and the installation of solar panels to the roof of the property. Aldern House is now an excellent example of an efficiently managed building which utilises the latest technologies to reduce emissions while not impacting on the character of the building or surrounding landscape. This is reflected in the building’s Display Energy Certificate ‘B’ rating which is an excellent position for what is traditionally seen as a difficult to improve building type.

2.2. Transport

During the 2015/16 period we have achieved some of the largest reductions in travel related emissions for some years. The overall reduction against baseline levels is just over **30%** with a **12%** reduction over the last year.

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

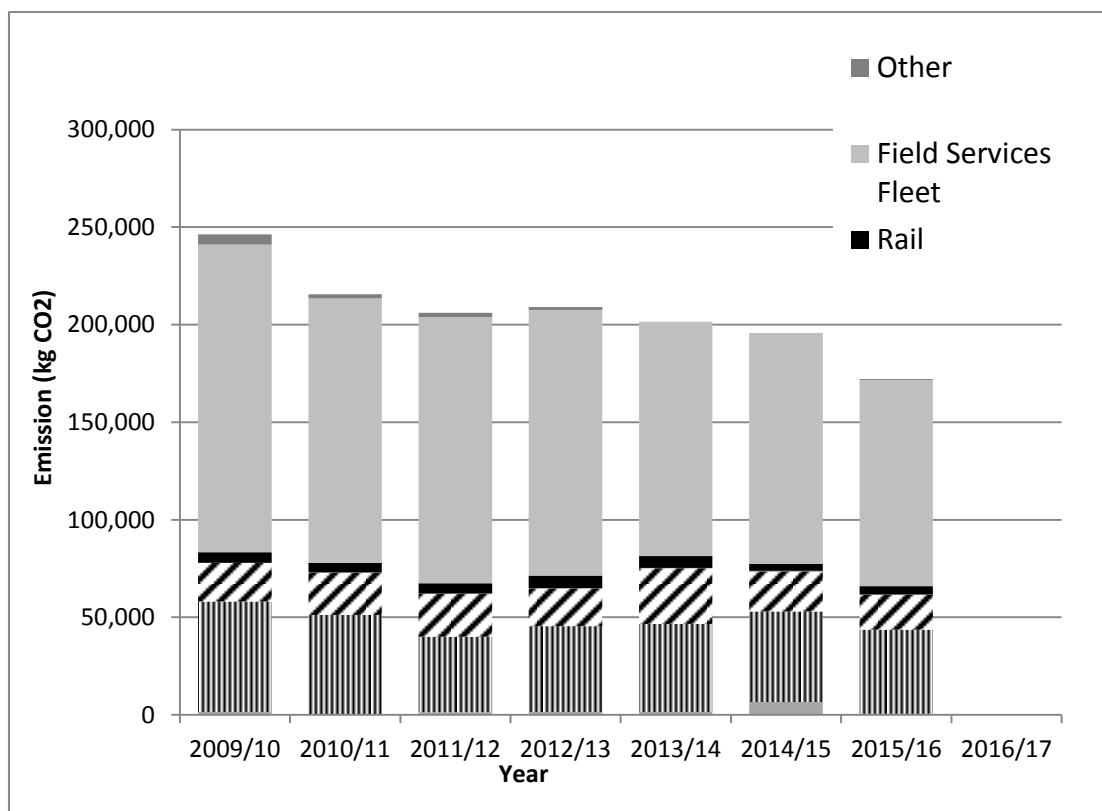


Figure 5. Graph showing travel related CO₂ emissions

Improvements in this area have been achieved across all elements of Authority travel during the period with the largest gains being made in field services fleet reductions and air travel. The reduction in field service fleet emissions reflects the reduced levels of activity in this area. Air travel is erratic from year to year and significant reductions reflect small changes in the number of flights undertaken; with less than 5 flights undertaken in any one year, 2 or 3 less can make a significant difference.

2.3. Housing and further sources

Emissions resulting from housing (Authority tenanted properties) are calculated using benchmarks provided by the Carbon Trust. The number of properties and their method of heating has largely remained constant with the exception of improvements made to a number of properties resulting in fossil fuel systems (both oil fired) being replaced with renewable energy systems. However, no improvements have been made over the reporting period and therefore the emissions remain constant.

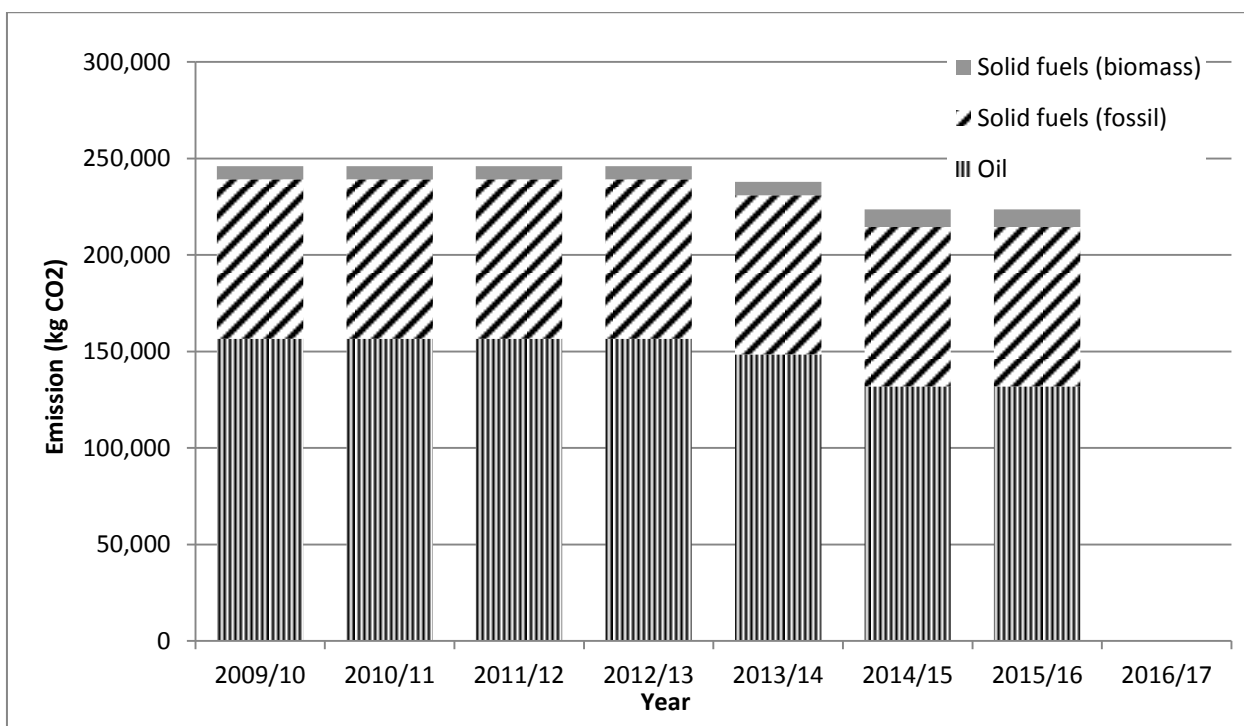


Figure 6. Emissions resulting from Authority tenanted properties

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 previous years which has offset the emissions created from the disposal of waste to landfill. There has been a significant increase in the volume of waste sent to landfill over the reporting period largely due to the accommodation changes at Aldern House which has produced 13 skips of waste materials removed from offices. This is a one off activity and should not continue into future years. A breakdown of the emissions from these sources is provided in figure 7 below:

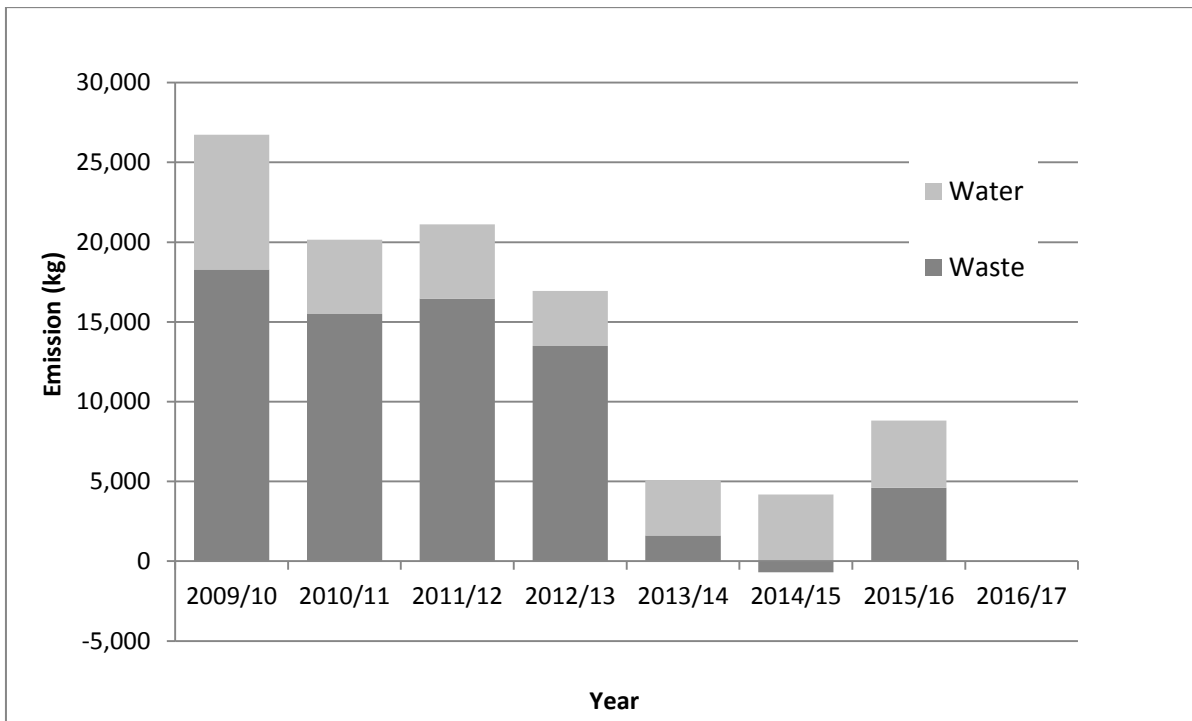


Figure 7. Emissions resulting from water use and waste production

2.4. Financial performance

An important element of the Authority's Carbon Management Plan are the savings that will be made from the measures within it. Over the course of the revised plan, a total of £160,000 savings have been recognised all of which are associated with the measures 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 increases³ 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.

It is estimated that approximately £125,000 has been saved to date against the business as usual cost scenario from measure that result in emissions reductions. It should be noted that in some instances, the main driver behind improvements has been cost savings and that emissions reductions are a secondary consequence.

It is also worth noting that the performance of the biomass boiler at Aldern House has over the previous year overachieved against the predicted cost benefit set out in the business case with a total cost benefit (before debt repayment) of £22,000 compared to the £18,500 contained within the business plan.

³ <https://www.gov.uk/government/collections/energy-and-emissions-projections>

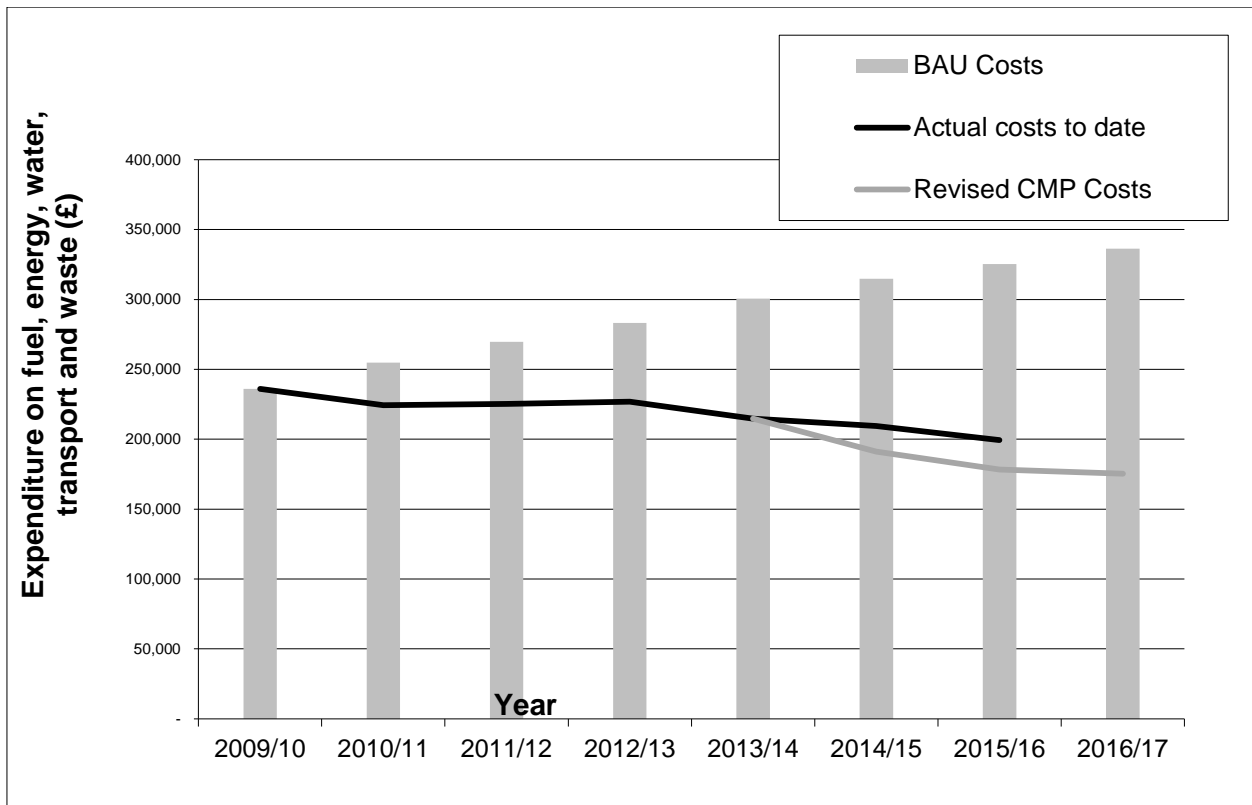


Figure 8. Comparison of Actual, target and BAU costs for expenditure related to the CMP scope.

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 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.