

**18 November 2016**

## **Carbon Management Plan-Update**

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### **Report of Ian Thompson, Corporate Director, Regeneration and Local Services**

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#### **Purpose of the Report**

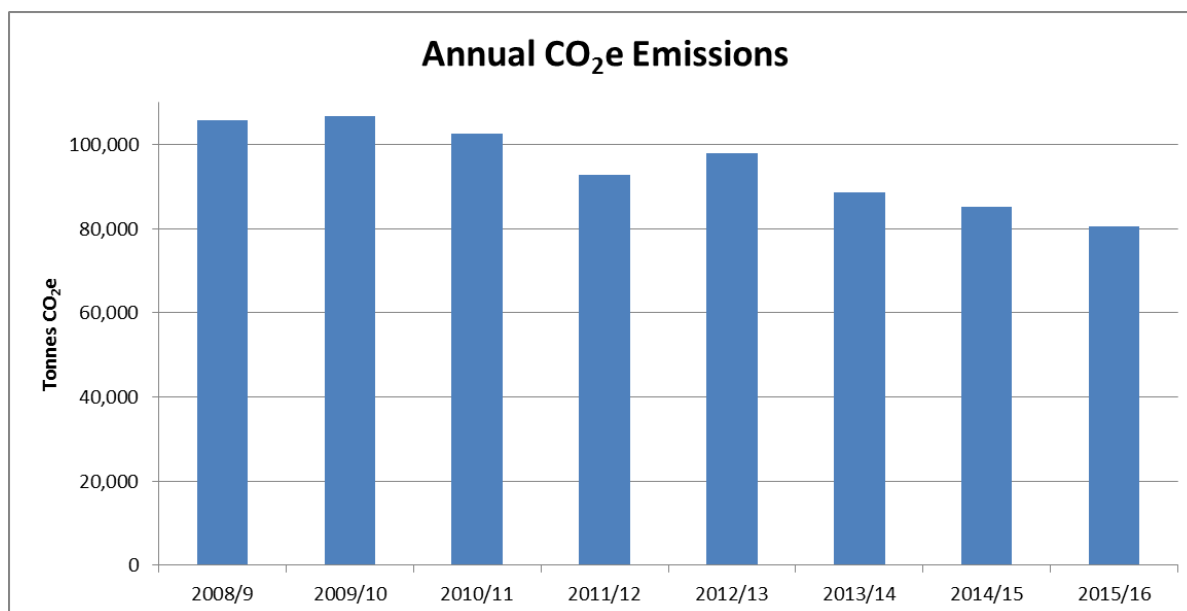
1. To provide Members of the Environment & Sustainable Communities Overview & Scrutiny Committee with an update on the Carbon Management Plan

#### **Background**

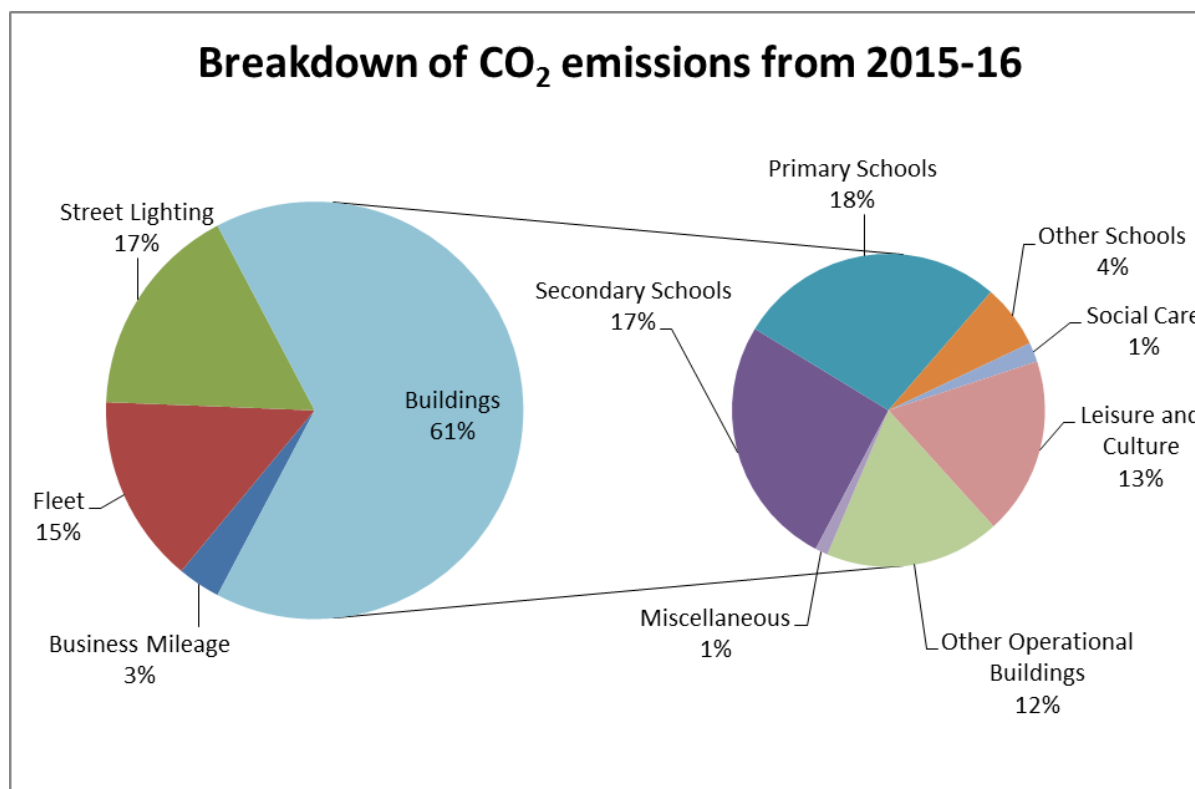
2. The County Council's first Carbon Management Plan covered 2010-15 and it has been succeeded by a second plan covering the years to 2020. It is aspiring to a 40% saving by 2020, based on a 2008/9 baseline.

#### **Overview**

3. Members of the Committee will receive a short presentation from the Senior Carbon Management Officer regarding the CMP and projects and progress made, covering progress to date and information on campaigns and projects that have taken place since the last report.
4. The Carbon Management Plan covers emissions from the operations of the Authority and includes carbon emissions from electricity and heating from buildings and from fuel used in transporting staff as part of their duties.
5. The Carbon Programme Board has continued to direct carbon reduction activities, supported by the Revenue and Capital Boards which lead on project activities.
6. The Council is continuing to make carbon savings across its portfolio with reductions coming from behavioural changes, building improvements and a rationalising of the estate. The following charts show progress to date and a breakdown by source.



## Breakdown of CO<sub>2</sub> emissions from 2015-16



### On-going projects

7. Schools Carbon Reduction Programme. Ongoing work with schools buying into the energy management SLA. This year the programme has been successful in targeting schools that have not previously engaged
8. The third phase of the Building Energy Efficiency Retrofit (BEER) project was completed in March 2016. The works, at Chilton, Hackwork, Meadowfield and Morrison Busty depots, involved LED lighting replacements, lighting controls and heating controls. The project has cut depot electricity consumption by approximately a third.
9. We are now working on phase of four of the project with Honeywell. Buildings in the initial portfolio are Aycliffe Secure Unit, Woodhouse Close Leisure Centre, Teesdale Leisure Centre, Education Development Centre, Spectrum 8 and Gala Theatre. The installations are expected to commence May 2017.
10. Eco-champions and Big Switch Off. A review of the eco-champions is currently being undertaken, looking at how the eco champions can contribute to corporate aspirations. It is also looking at broader environmental reporting. Changes to DCC structures and reporting are being factored in. As new Service structures develop we will seek to maintain good eco champion representation across the authority.
11. Street Lighting. To date we have retrofitted over 34,000 street lights with new energy efficient LED street lights as part of the Street Lighting Energy Reduction Project. We are ahead of programme and generally the change has been very well received. We continue to receive a small number of complaints as residents get used to the reduced light spillage but on the whole residents are supportive of the move to LEDs.

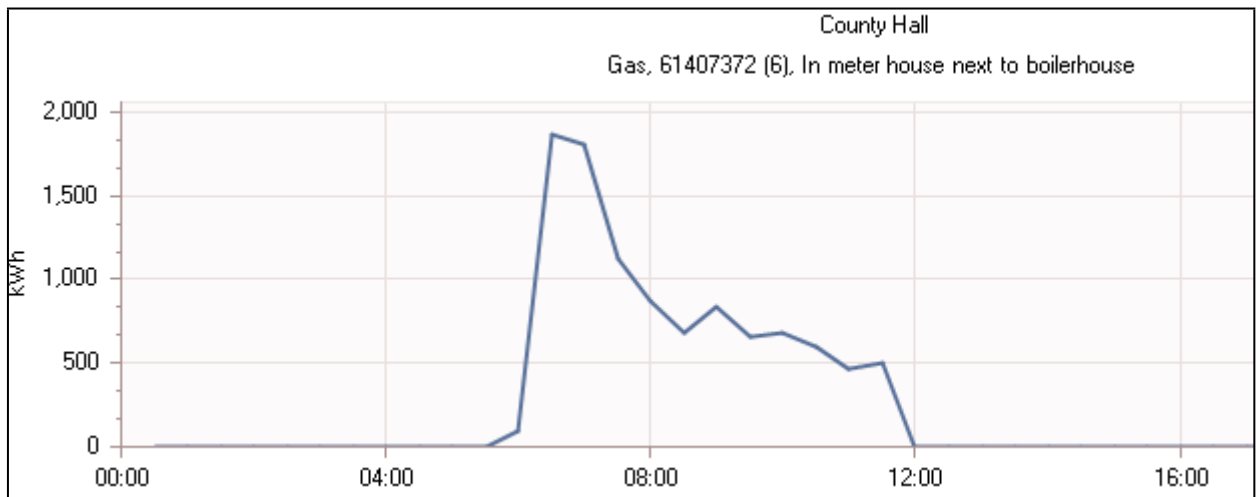
LED retrofit numbers to date are:

- Year 1 to 31st March 2014 - total 8,138 units converted
- Year 2 to 31st March 2015 – in year total 12,004 conversions so that's a grand total of 20,142 to end of Year 2
- Year 3 to 31st March 2016 – a total of 12,183 conversions were completed meaning that we are ahead of the original programme of 8000 per annum
- Year 4 target is 12,000 to 31st March 2017 and we are well on the way to achieving this with over 4,500 achieved to date.

We continue to carry out compliance tests to demonstrate to residents that the new lights meet current standards.

We also continue to remove street lighting where it is safe to do so and to date have removed over 450 street lights as well as de-illuminating over 500 traffic signs. We operate a thorough road safety risk assessment and consultation exercise process prior to any street lights being removed. We have also entered into a number of service level agreements with Parish and Town Councils whereby they take on responsibility for the cost of maintaining the lighting including the energy costs for a period of 10 years.

12. Improved data and monitoring. We continue to use modern metering and reporting technology to track building consumption. Most sites have half hourly reporting which allows identification of peak and out of hours usage. An example of gas use from a typical day at County Hall is shown below.



### Future work

13. The programme has included a number of actions that were speculative in nature and not all proposed projects have progressed. We investigated the possibility of developing a solar farm adjacent to the data centre at Tanfield, however the cost of connecting to the National Grid was prohibitive. The project is currently on hold but will be periodically reviewed as prices/incentives change.

14. We are reaching a point where most of our larger buildings suitable for full retrofits have been investigated and improved. The programme is likely to move onto smaller buildings or look at thematic improvements (e.g. lighting upgrades across a number of smaller units) to continue making savings but these are likely to have longer payback periods.
15. Work programmes will also include engaging with the Inspire programme, investigating battery storage to offset peak energy costs, and working to embed energy efficiency into proposals for the new HQ and refits of core office buildings.

### **Financial Savings**

16. Work from the CMP and other associated projects are forecasted to have saved the authority almost £750,000 by the end of 2016/17.

### **Recommendations**

17. The Environment and Sustainable Communities Overview and Scrutiny Committee is asked to :
  - a. Note the content of the report
  - b. Offer views as to the direction of travel
  - c. Receive further reports if requested.

### **Background Papers**

Presentation to be issued.

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## **Appendix 1: Implications**

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**Finance – The Carbon Reduction Programme has made significant financial savings for the authority**

**Staffing –None**

**Risk – None**

**Equality and Diversity / Public Sector Equality Duty - None**

**Accommodation - None**

**Crime and Disorder – None**

**Human Rights - None**

**Consultation - None**

**Procurement - None**

**Disability Issues - None**

**Legal Implications – None**