

# Environment and Economy Overview and Scrutiny Panel

Agenda  
Item:  
**A.6**

Meeting Date: 16th January 2014  
Portfolio: Finance, Governance and Resources  
Key Decision: No  
Within Policy and Budget Framework NO  
Public / Private Public

Title: ENVIRONMENTAL PERFORMANCE OF THE COUNCIL  
Report of: The Director of Governance  
Report Number: GD 08/14

## **Purpose / Summary:**

This document provides the Environment and Economy Overview and Scrutiny Panel with a progress report on the environmental performance of Carlisle City Council. The report includes updates on the environmental performance indicators, current energy use within directly controlled City Council buildings and CO<sub>2</sub> reduction from local authority operations. It also provides an update on work that has taken place within the Council to reduce our energy use.

## **Recommendations:**

The Environment and Economy Overview and Scrutiny Panel consider and comment on the content of the report.

## **Tracking**

Executive:	
Overview and Scrutiny:	
Council:	

## 1.0 BACKGROUND INFORMATION

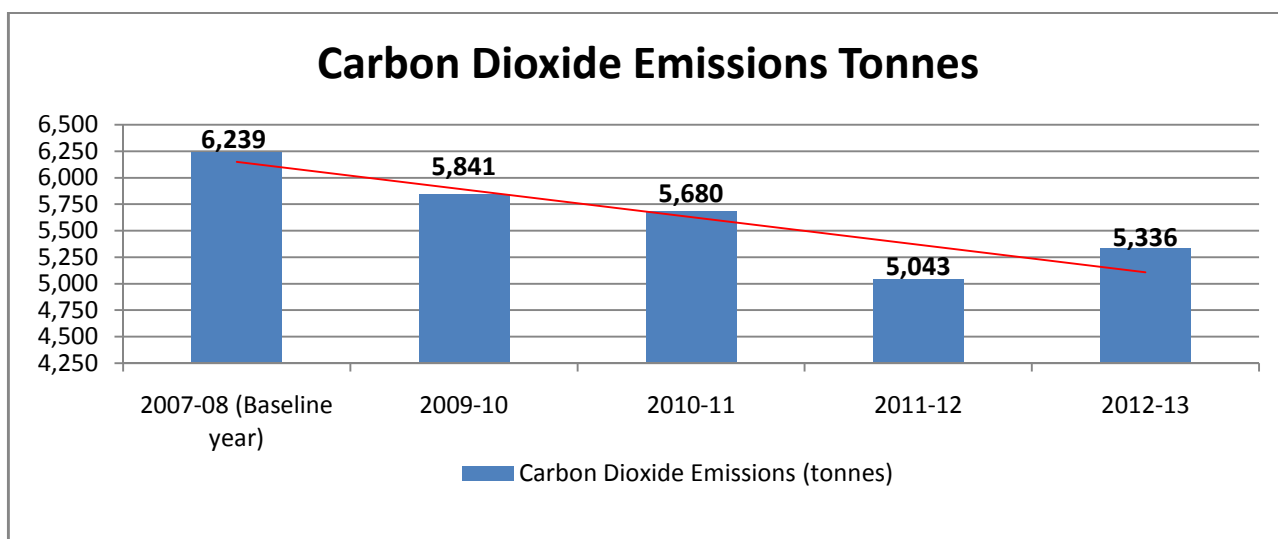
- 1.1 In line with the latest Council protocol the Environmental Policy Statement was reviewed and updated in July 2013.

## 2.0 CLIMATE CHANGE STRATEGY PROGRESS UPDATES

2.1 Carlisle's Climate Change Strategy outlines the aims and objectives for the City Council to tackle climate change through its operations, service delivery and work with partners and communities it serves. The following information updates progress in line with the previously recognised NI185 National Indicator to date.

### ***NI185 data - CO<sub>2</sub> reduction from local authority operations***

The table below includes ALL City Council owned premises including those not directly "controlled" by the Council (e.g. Carlisle Leisure Ltd sites). **Units are emissions of carbon dioxide in tonnes.** Figures are subject to change in accordance with revised conversion factors from DEFRA, and new information coming to light, and as a result may be different from previous reports.



This represents a **Cumulative 2012/13** year on year **reduction of Carbon Dioxide** emissions **compared** to the baseline year of **2007/08** of some 3,058 tonnes. A reduction in cumulative terms compared with the actual emissions in 2007/8 of **49%**.

Source of Emissions (October 2010 conversion factors)	2007-08 (Baseline year)	2009-10	2010-11	2011-12	2012-13	Change from baseline year
Buildings (Electricity)	2,559.3	2,543.4	2,440.4	2,184.3	2,215.0	-13.5%
Buildings (Mains Gas)	1,908.2	1,674.9	1,668.9	1,398.5	1,674.4	-12.3%
Buildings (LPG)	5.5	8.9	7.3	3.8	5.8	4.7%
Buildings (Oil)	38.9	52.7	50.1	31.1	33.2	-14.7%
Street Lighting, Floodlighting, Car-parks & CCTV	339.2	310.4	298.0	294.4	286.5	-15.5%
Fleet Transport	1,261.6	1,157.1	1,122.2	1,052.2	1,056.0	-16.3%
Business Travel	126.7	93.4	93.2	78.4	64.7	-48.9%
<b>Total</b>	<b>6,239.4</b>	<b>5,840.7</b>	<b>5,680.2</b>	<b>5,042.7</b>	<b>5,335.6</b>	<b>-14.5%</b>

*Note: Slight adjustments made to previous figures following revised billing information.*

Following the large reductions made in emissions in 2011-12, the aim of reducing emissions further in 2012-13 proved somewhat harder to achieve. However, further reductions were achieved in the Street Lighting sector, and Business Travel which recorded a further 17% fall in emissions compared to the previous year.

In 2012/13 a reduction in Carbon Dioxide emissions of 14.5% was achieved in comparison to the 2007-08 baseline figures.

This however represented an increase of 5.8% from the previous year (2011/12), the first year on year increase since 2007/08. In 2012-13 the increase can be directly attributed to the **cold and prolonged winter** which caused **mains gas** consumption to **increase by almost 20%**. Over the same period, **electricity** consumption in buildings **increased by 1.4%**.

2012/13 was the first full year the Community Resource Centre was operational following completion in July 2011. Now fully operational the consumption in that building alone rose 30% more than the previous year.

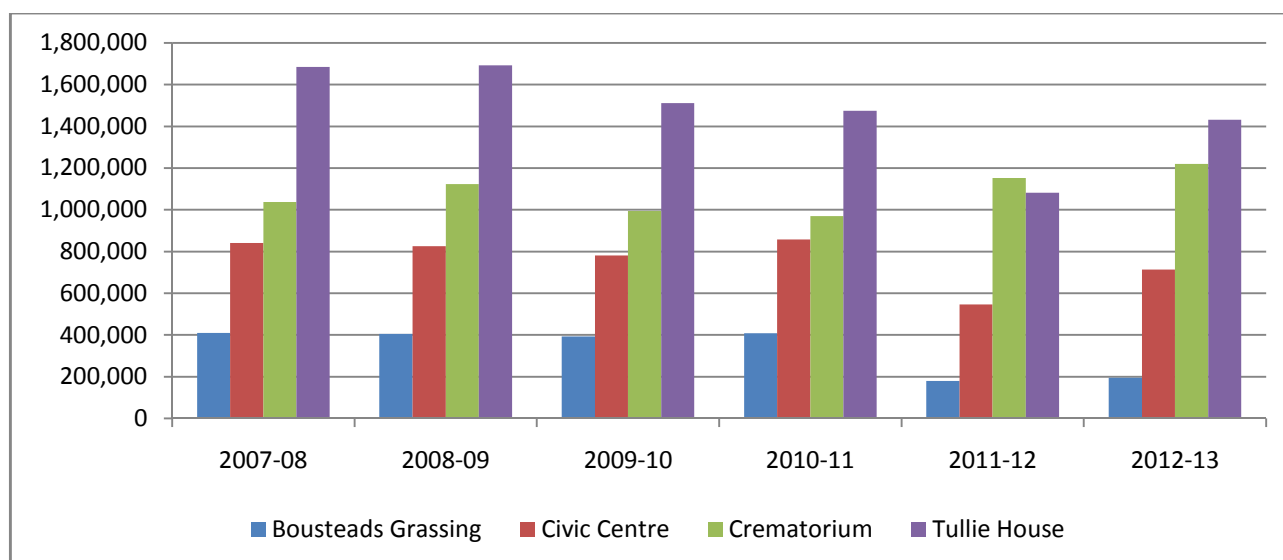
Finally, the cold weather significantly contributed to increase in deaths, responsible for an almost 10% increase in cremations at the Crematorium which caused further increases there in both gas and electricity consumption.

### 3.0 ENERGY USE IN DIRECTLY CONTROLLED CITY COUNCIL BUILDINGS

#### 3.1 Gas consumption (kW/h):

Since 2007/08 (baseline year) gas use has reduced at three out of our four main sites. Bousteads Grassing has achieved the most success with more than a 52% reduction in consumption, with the Civic Centre and Tullie House achieving 15% each. The halving of gas consumption at Bousteads Grassing reflects the decrease following the relocation of staff in the main building to the Civic Centre, and the demolition of the main building. The Crematorium used almost 18% more gas in 2012-13 than 2007-08 which reflected a 27% increase in cremations, and so gas usage per cremation actually fell. The sites in the table on the following page have made up an overall reduction across the City Council buildings of more than 12% over the same four year period:

**Graph showing annual comparisons of Gas Consumption (KW/h) at main sites**



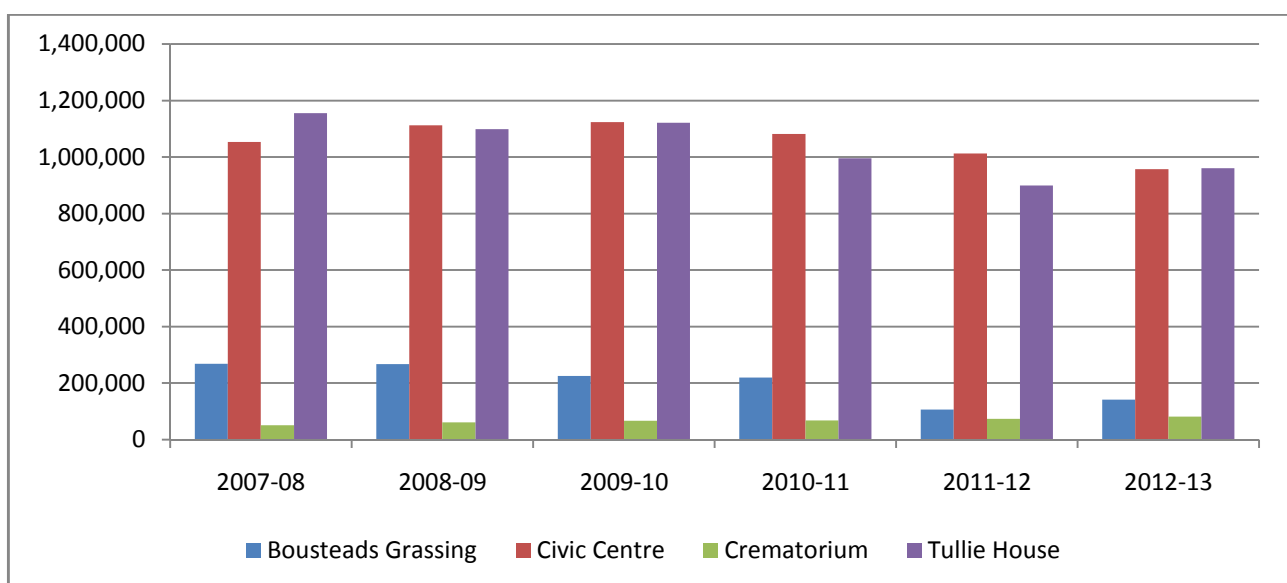
Site	2007-08 (Baseline year)	2009-10	2010-11	2011-12	2012-13	Change from baseline year
<b>Bousteads Grassing</b>	410,435	393,491	408,066	179,953	195,244	- 52.4%
<b>Civic Centre</b>	840,404	780,776	858,022	545,705	714,088	-15.0%
<b>Crematorium</b>	1,038,105	995,045	969,136	1,152,019	1,220,323	+17.6%
<b>Tullie House</b>	1,684,257	1,512,199	1,474,511	1,082,474	1,430,959	-15.0%
<b>City Council Total *</b>	<b>10,322,955</b>	<b>9,061,121</b>	<b>9,028,562</b>	<b>7,565,666</b>	<b>9,057,919</b>	<b>-12.3%</b>

*\* Figures may be different from previous reports due to Mains Gas and LPG now being shown separately. Some estimated figures have also been superseded by actual figures.*

### 3.2 Electricity consumption (kW/h):

Since 2007/08 (the baseline year) electricity use has been cut at Bousteads Grassing, the Civic Centre and Tullie House. The large decrease at Bousteads Grassing mirrors the decrease in gas consumption at the same site and for the same reasons. The Civic Centre usage has shown further improvement in 2012-13 and is now below the 1 million kW/h threshold for the first time, aided by the installation of solar panels in March 2012. The solar panels are generating around 25,000 kW/h annually or 2.5% of the building's usage. An overall reduction of 13.5% has been achieved across City Council buildings for the five year period.

**Graph showing annual comparisons of Electricity Consumption (KW/h) at main sites**



Site	2007-08 (Baseline year)	2009-10	2010-11	2011-12	2012-13	Change from baseline year
<b>Bousteads Grassing</b>	268,762	225,645	219,524	105,991	141,472	-47.4%
<b>Civic Centre</b>	1,053,105	1,123,072	1,082,152	1,012,385	957,554	-9.1%
<b>Crematorium</b>	50,463	66,976	67,803	73,716	81,962	62.4%
<b>Tullie House</b>	1,155,269	1,121,054	995,419	899,205	960,220	-16.9%
<b>City Council Total *</b>	<b>4,726,814</b>	<b>4,696,083</b>	<b>4,505,995</b>	<b>4,032,974</b>	<b>4,089,691</b>	<b>-13.5%</b>

*\* Figures may be different from previous reports due to some estimated figures having been superseded by actual figures.*

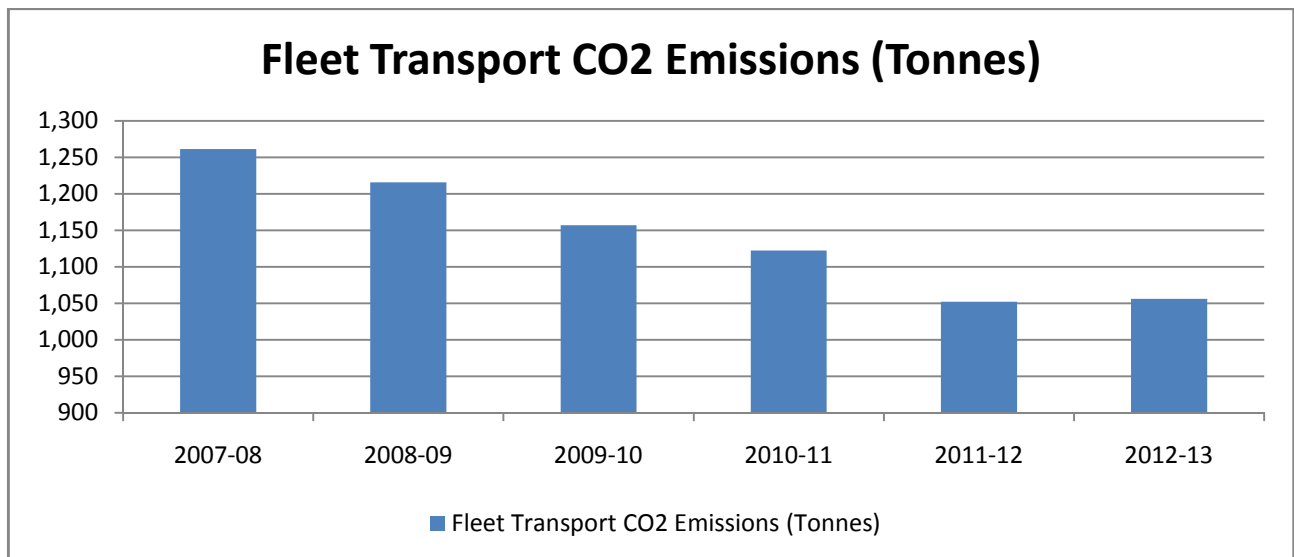
## 4.0 GREEN TRAVEL PLAN

The Green Travel Plan was approved in April 2008, and the following are highlights from the financial year 2012/13.

4.1 Business Travel declined further from 235,504 miles in 2011-12 to 191,442 miles in 2012-13 (a reduction of almost 19%). Over the 5 year period in question, Business Travel has shown the largest reduction from the 2007/08 baseline year, just over 50% or more than 194,000 miles saved. This is equivalent to a journey round the circumference of the earth more than seven times over.

4.2 In 2012-13 there was an 11.8% reduction in diesel consumption (116.6 tonnes carbon dioxide emissions) compared to the previous year, but this was largely due to the ending of garden waste collections for Eden District Council which ceased on 30<sup>th</sup> June 2012. However, this does not equate to a reduction in carbon dioxide emissions, as the fuel used for Eden Garden Waste rounds is counted as “Eden District Council emissions” and appears as a deduction in the table below.

4.3 Overall emissions from the Fleet Transport sector were almost the same in 2012-13 as 2011-13 and remain around 16% below baseline level, achieved through more fuel efficient vehicles, and more efficient refuse and recycling rounds.



## Transport CO2 emissions (tonnes):

Source of Emissions (2010 Conversion Factors)	2007-08 (Baseline year)	2009-10	2010-11	2011-12	2012-13	Change from baseline year
Diesel	1,105.6	1,056.2	1,026.3	990.3	873.6	-21.0%
Petrol	32.1	27.6	25.1	24.6	29.9	-6.8%
Gas Oil	103.8	66.5	77.5	70.6	89.5	-13.8%
Vehicle Hire *	2.5	1.6	1.1	0.9	0.5	-81.8%
CWR / FCC Environment Rounds	119.5	119.8	113.6	102.0	96.9	-18.9%
Eden Rounds	-102.0	-114.7	-121.3	-136.2	-34.4	-66.2%
<b>Total</b>	<b>1,261.6</b>	<b>1,157.1</b>	<b>1,122.2</b>	<b>1,052.3</b>	<b>1,056.0</b>	<b>-16.3%</b>

*\* Vehicle Hire is “missing emissions” for fuel purchased for hire vehicles when a fuel card wasn’t used. In these circumstances the fuel used is not captured in the totals for diesel and petrol, and so has to added as a separate item.*

## 5.0 ENVIRONMENTAL AWARDS

5.1 The City Council retained the Gold level of the Cumbria Business Environment Network (CBEN) Awards in January 2013.

5.2 In 2013/14 the City Council applied for and achieved 4 Green Flag Awards for Hammonds Pond, Rickerby Park & Eden Bridge Gardens, Talkin Tarn Country Park and Chances Park. The Green Flag Awards key criteria include environmental sustainability and conservation.

## 6.0 INVEST TO SAVE SCHEMES & ENVIRONMENTAL INITIATIVES

### 6.1 Solar PV installation at other council buildings

Although the feed in tariff rate has dropped by a significant amount, the cost of the solar panels has also reduced and the business case for further investment remains viable. The initial feasibility study identified other suitable buildings in the Council’s portfolio and these could further benefit carbon reduction and revenue income as well as assisting the building users with locally generated electricity. Following the asset management review suitable buildings that remain will have a “Solar PV” feasibility study carried out with a view to funding the installation as part of the Councils “Invest to Save” scheme.

6.2 Future investment in the Sands Centre to improve its facilities including potentially incorporating the Cities main swimming pool from its current James Street site is still being considered. The James Street site uses almost 3 times as much gas as the Civic Centre every year. It is very difficult to retrofit devices to further reduce consumption at the Pools and investment in new facilities is feasibly the only realistic option of substantially improving efficiencies and reducing energy consumptions particularly in terms of gas usage.

6.3 External cladding of the Civic Centre has been investigated as this would significantly reduce the heat loss from this 1965 building. The costs and lack of external funding mean that this is currently not a feasible invest to save option.

Over the years many initiatives including the “quick wins” have been undertaken in many of our buildings. Every year it does become more difficult to achieve further savings in terms of reducing our carbon emissions and reducing energy costs. However this should not be viewed as failure. To maintain the same reductions from projects undertaken over the years compared with the original baseline year of 2007/08 is providing continuous savings. Without these projects to improve our buildings efficiencies, together with increasing energy prices our energy bills would have been significantly higher than we currently pay.

## **7.0 CONCLUSIONS**

Carlisle City Council has continued to operate in difficult economic times over the last year, and the pressure that Local Authorities are under to make financial savings across all services continues. The savings made by using less fuel and energy are significant enough to make “invest to save schemes” worthwhile. It is unfortunate however that as a result of an unprecedented winter, there was an increase in gas and electricity consumption compared with the previous year of 2011/12. This shows that whatever targets are set for energy use and carbon dioxide emission reductions, the actual level of consumption is always going to be partially determined by factors outside the organisation’s control, namely the weather.

Carlisle City Council’s carbon dioxide emissions were 6,239 tonnes in the baseline year 2007-08 and 5,335 tonnes in 2012-13. This reduction in carbon dioxide emissions reflects the commitment by Carlisle City Council across all Directorates to reduce its environmental impact.

Since 2007/8 a huge amount of effort has been undertaken to monitor and deliver projects to reduce our energy consumption within our own sites. Carbon Dioxide emissions have, as a result of these efforts, been very successfully reduced. The Council will continue to review and where applicable invest in technological advances than can provide efficiencies to reduce our energy consumption.



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**Manager**

## Appendices

**attached to report:**    **None**

**Note: in compliance with section 100d of the Local Government (Access to Information) Act 1985 the report has been prepared in part from the following papers: None**