



ENVIRONMENT AND ECONOMY OVERVIEW AND SCRUTINY PANEL

Committee Report

Public

Date of Meeting: 1st December 2011

Title: ENVIRONMENTAL PERFORMANCE OF THE COUNCIL

Report of: The Assistant Director (Governance)

Report reference: GD 67/11

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 CO₂ 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.

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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

1.0 BACKGROUND INFORMATION

1.1 In line with the latest Council priorities the Environmental Policy Statement was reviewed and updated in January 2011. This will be reviewed again in January 2012 and resigned by the newly appointed Town Clerk and Chief Executive.

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 NI185 National Indicator to date.

NI185 data - CO₂ 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 as a result are slightly different from previous reports.

| Source of Emissions (October 2010 conversion factors) | 2007/08 (Baseline year) | 2008/09 | 2009/10 | 2010-11 | Change from baseline year |
|--|------------------------------------|----------------|----------------|----------------|----------------------------------|
| Buildings (Electricity) | 2,559.3 | 2,538.5 | 2,543.0 | 2,440.8 | -4.6% |
| Buildings (Mains Gas) | 1,908.2 | 1,783.7 | 1,674.9 | 1,668.9 | -12.5% |
| Buildings (LPG) | 5.5 | 7.8 | 8.9 | 7.3 | +31.3% |
| Buildings (Oil) | 38.9 | 40.0 | 54.6 | 52.0 | +33.8% |
| Street Lighting, Floodlighting, Car-parks & CCTV | 339.2 | 314.8 | 310.4 | 298.0 | -12.2% |
| Fleet Transport | 1,259.3 | 1,215.7 | 1,157.1 | 1,122.2 | -10.9% |
| Business Travel | 126.7 | 110.5 | 93.4 | 93.2 | -26.4% |
| Total (tonnes of CO₂) | 6,237.1 | 6,011.0 | 5,842.3 | 5,682.4 | -8.9% |

From the table above it can be seen that Carlisle City Council made further progress to reduce its carbon dioxide emissions. In comparison to its 2007/08 baseline of 6,237.1

tonnes, the output of 5,682.4 tonnes in 2010/11 represented a decrease of 8.9%. There was a reduction of 2.74% from 2009/10 to 2010/11.

3.0 ENERGY USE IN DIRECTLY CONTROLLED CITY COUNCIL BUILDINGS

Gas consumption (kW/h):

Since 2007/08 (baseline year) gas use has reduced at three out of our four main sites. Tullie House has achieved the most success with more than a 12% reduction in consumption, with the Crematorium achieving around 1.4%. The sites have contributed to an overall reduction across the City Council buildings of 12.5% over the same period:

| Site | 2007-08 (Baseline year) | 2008-09 | 2009-10 | 2010-11 | Change from baseline year |
|---------------------------------|----------------------------|------------------|------------------|------------------|------------------------------|
| Bousteads Grassing | 410,435 | 405,414 | 393,491 | 408,066 | - 0.6% |
| Civic | 840,404 | 826,238 | 780,776 | 858,022 | +2.1% |
| Crematorium | 1,038,105 | 1,123,939 | 995,045 | 1,023,626 | -1.4% |
| Tullie House | 1,684,257 | 1,693,065 | 1,512,199 | 1,474,511 | -12.5% |
| City Council Total * | 10,322,955 | 9,649,390 | 9,061,121 | 9,028,594 | -12.5% |

* Figures different from previous reports due to Mains Gas and LPG being shown separately for the first time. Some estimated figures have also been superseded by actual figures.

Electricity consumption (kW/h):

Since 2007/08 (baseline year) electricity use has been cut at Boustead's Grassing and Tullie House, but has risen at the Civic Centre and the Crematorium. These compare with an overall reduction across the City Council buildings of 4.7%.

| Site | 2007-08 (Baseline year) | 2008-09 | 2009-10 | 2010-11 | Change from baseline year |
|---------------------|----------------------------|------------------|------------------|------------------|------------------------------|
| Bousteads | 268,762 | 267,314 | 225,645 | 219,524 | - 18.3% |
| Civic | 1,053,105 | 1,112,637 | 1,123,072 | 1,082,152 | + 2.7% |
| Crematorium | 50,463 | 60,693 | 66,976 | 67,803 | + 34.4% |
| Tullie House | 1,155,269 | 1,098,884 | 1,121,054 | 995,419 | -13.8% |
| Total * | 4,726,814 | 4,687,093 | 4,695,435 | 4,506,706 | -4.7% |

**Percentage from the baseline year of -4.7% is a slightly higher percentage (-0.1%) than when considering carbon footprints (-4.6%) as a direct result of idiosyncrasies with published carbon conversion factors.*

4.0 GREEN TRAVEL PLAN

The Green Travel Plan was approved in April 2008, and the following are highlights from the financial year 2010/11.

4.1 Business Mileage undertaken by Staff and Members remained unchanged (at around 280,000 miles) in 2010/11 compared with that of the previous year. This still represents a sustained reduction of 27.3% in comparison with the 2007/08 baseline years of 385,459 miles.

4.2 In 2010 /11 (compared with the previous year - 2009/10) there was a slight reduction in carbon dioxide emissions in fleet vehicle diesel usage of 2.8% and a reduction in vehicle fleet petrol usage of 9%.

Compared against the baseline year of 2007/08 the overall fleet vehicle carbon dioxide emissions reduction in 2010/11 was 10.9%.

Overall fleet vehicle use is calculated after factoring in the rounds undertaken on our behalf by FOCSA (previously Cumbria Waste Recycling), and deducting the emissions associated with Garden Waste rounds undertaken by Carlisle City Council for Eden District Council.

Transport CO2 emissions (tonnes):

| Source of Emissions (2010 Conversion Factors) | 2007-08 | 2008-09 | 2009-10 | 2010-11 | Change from baseline year |
|--|----------------|----------------|----------------|----------------|--------------------------------------|
| Diesel | 1,105.6 | 1,067.3 | 1,056.2 | 1,026.3 | -7.2% |
| Petrol | 32.1 | 29.0 | 27.6 | 25.1 | -21.8% |
| Gas oil | 103.8 | 94.2 | 66.5 | 77.5 | -25.3% |
| Vehicle hire * | Unrecorded | 2.5 | 1.6 | 1.1 | N/A |
| CWR / FOCSA Rounds | 119.5 | 124.7 | 119.8 | 113.6 | -4.9% |
| Eden Rounds | -102.0 | -102.0 | -114.7 | -121.3 | 18.9% |
| Total | 1,259.0 | 1,215.7 | 1,157.1 | 1,122.2 | -10.9% |

* *“Missing” emissions from fuel purchased for hire vehicles when the fuel wasn’t purchased on a fuel card. It is therefore not captured in the totals for diesel and petrol, and so has to be calculated separately.*

5.0 CUMBRIA BUSINESS ENVIRONMENT NETWORK (CBEN) AWARDS

5.1 The City Council retained the Gold level of the Cumbria Business Environment Network (CBEN) Awards in March 2011. The Environmental Performance Team continues to work with Site Managers to update annual environmental performance plans. These plans ensure compliance with environmental legislation and that actions are in place to address the issues of waste, energy, procurement etc. CBEN have now changed the way they structure their awards. The main difference is the differentiation between large corporate organisations / Public bodies and Small and Medium Enterprises (SME`s). The Safety, Health and Environmental team will be working with CBEN in January 2012 with an aim to understanding how we can embrace these changes and continue to work with CBEN.

5.2 In 2010/11 the City Council retained / achieved seven Green Flag Awards for the Tullie House garden, Bitts Park, Hammonds Pond, Richardson Street Cemetery and the Crematorium, Kingmoor Nature Reserve, St Michaels Churchyard Stanwix, and Talkin Tarn Country Park. The Green Flag Awards key criteria include environmental sustainability and conservation.

6.0 INVEST TO SAVE PROGRAMMES / EQUIPMENT RENEWALS

In spite of the current austerity measures within the Council the investment in equipment has been maintained largely as a result of the real need to replace old inefficient equipment. The majority of investment has been in the replacement programme of our old inefficient boilers for new condensing boilers and the replacement of the chiller at Tullie House for a “free cooling” system. The following sections highlight the works undertaken since the last report which have significantly contributed to our continued success in reducing energy consumption and overall carbon dioxide emissions.

6.1 Tullie House

- Replacement of old boilers with new condensing boilers
- The fitting of variable speed drives to air handling unit
- Replacement of chiller with “free cooling” chiller

- Revised heating arrangements for the atrium and shop areas
- Installation of electricity consumption monitoring system
- Modification of door controls to reduce air change rates
- Replacement of sodium floodlights with LED floodlights
- Replacement of metal halide ground lights with LED fittings

6.2 The Civic Centre

- Replacement of old boilers with new condensing boilers
- Installation of electricity consumption monitoring system
- Replacement of lighting to stairwells with smart fittings
- Replacement of halogen spotlights with LED lights
- Insulation of external walls and the upgrade of windows
- General lighting upgrade to smart fittings – part of ongoing refurbishment
- Additional recycling facilities
- Requesting contractors to recycle cardboard rather than disposing as commercial waste via the skips.

6.3 Greystone Community Centre

- Replacement of old boilers with new condensing boilers
- Upgrade of windows

7.0 CONCLUSION

It is clear that the City Council understands that even in difficult times it is vitally important to invest in new energy efficient technologies. This not only has the effect of reducing our carbon emissions but also helps mitigate the continued rise in energy costs.

The total reduction in output of carbon dioxide since the baseline year of 2007/08 equates to 1175.6 tonnes. To put this in context this represents 19% of the original baseline year emissions which were 6,237.1 tonnes.

As savings are realised and the scope for new technologies are exhausted, further reductions will become more difficult to find.

The next step

Energy efficient equipment will continue to be introduced into council owned buildings whenever financially viable. The next key future step in our continued efficiencies programme is now being undertaken with the rationalisation of our property portfolio. Work is currently underway for example to remove the main building at Bousteads Grassing.

Employees previously located in this building are now based at the Civic Centre.

The benefits in terms of overall reduced energy consumption and therefore reduced carbon dioxide emissions will start to be realised in this current financial year 2011/12.