

## EXETER CITY COUNCIL

### SCRUTINY COMMITTEE - COMMUNITY 31 AUGUST 2010

#### CORPORATE ENVIRONMENTAL PERFORMANCE INDICATORS: RESULTS AND PROGRESS

## 1 PURPOSE OF THE REPORT

1.1 This report presents information on the Council's corporate environmental performance indicators for the period 2009/10. The specific indicators under consideration are:

- the reduction in the total quantity of paper resources used by the Council
- the purchase of recycled paper
- the reduction in waste produced from the Civic Centre
- the reduction in carbon dioxide emissions within the Council
- the reduction in water consumption at the Civic Centre

## 2 BACKGROUND

2.1 The environmental performance indicators are used to monitor progress in implementing the objectives of the Council's Environmental Strategy and Carbon Management Plan. The current indicators reflect the level of resource use by the Council.

2.2 The indicators are kept under review and changes are made, where appropriate, to take account of the increasing knowledge and understanding about how the Council's policies and practices impact on the environment.

## 3 RESULTS

### Paper Use

3.1 The Council's Environmental Strategy sets the following target for paper consumption by the Council:

- To reduce paper consumption (office paper, copier paper, headed paper, compliment slips) within the Council by 10% by 2007/08 from a baseline of 2005/06 levels.

| Year    | Total paper purchased/consumed (reams*) | Percentage change over previous year | Percentage change from 2005/06 levels |
|---------|---|--------------------------------------|---------------------------------------|
| 2005/06 | 10,459 reams                            | 3.9% decrease                        | -                                     |
| 2006/07 | 10,867 reams                            | 3.9% increase                        | 3.9% increase                         |
| 2007/08 | 9,280 reams                             | 14.6% decrease                       | 11.3% decrease                        |
| 2008/09 | 8,936 reams                             | 3.7% decrease                        | 14.5% decrease                        |
| 2009/10 | 8,577 reams                             | 4.0% decrease                        | 18.0% decrease                        |

\* A ream comprises 500 sheets of standard A4 paper, or its equivalent

- 3.2 The figures are calculated from data supplied by the relevant administrative sections on the quantity of paper used during the years in question. Due to difficulties in quantifying 'ad hoc' uses of paper, such as leaflets for promotions, only paper in every day use (copier paper, headed paper, compliment slips) is included and this is used as an indicator of overall performance.
- 3.3 The target for this indicator was achieved in 2007/08 and the aim since then has been to achieve a steady decrease in paper consumption each year.
- 3.4 The results of monitoring paper consumption in 2009/10 show that a total of 4.3 million sheets of paper were used, which represents a 4.0% decrease since the previous year and a decrease of 18.0% since the baseline year of 2005/06. This reduction is thought to be due to a drive towards duplex printing and electronic forms of data handling and storage, as well as increased awareness brought about by campaigns run by the Environmental Champions.
- 3.5 Constant vigilance and commitment is required at all levels to actively reduce paper consumption further, such as maximising electronic forms of data storage, rationalising distribution lists, increasing duplex printing and identifying unnecessary paper usage. The recent introduction of new duplex printers across the Council should have a significant impact on reducing paper usage further.

### **Recycled Paper**

- 3.6 The Council's Environmental Strategy (2007-12) sets the following target for recycled paper purchased by the Council:
- Purchase 98% of paper (copier paper, headed paper and compliment slips) from a recycled source by 2007/08.
- 3.7 In 2009/10, 92.4% of monitored paper (copier paper, headed paper and compliment slips) was from a recycled source, compared to 87% in 2006/07. To achieve the target of 98% it would be necessary to further reduce the consumption of coloured paper or to purchase recycled coloured paper (as was done in the past). A reduction in the amount of colour photocopying would also be needed, as a source of recycled paper suitable for this purpose has not been identified.
- 3.8 To encourage the purchase of recycled paper, the Council has registered with the Supply of Printing and Copier Papers Framework, operated by OGC Buying Solutions. This enables the Council to access good quality recycled copier and printing papers at a reduced cost, both when purchasing paper directly or via a printing contractor. It is estimated that savings of approximately 20% can be made by purchasing paper through the framework.

### **Waste Reduction**

- 3.9 The Council's Environmental Strategy sets the following target for the reduction of waste produced from the Civic Centre:
- Reduce the amount (by weight) of office waste for disposal from the Civic Centre by 60% by April 2011, from a baseline of April 1998 (60 tonnes) and thereafter stabilise production at this level.

3.10 The results for waste reduction at the Civic Centre are summarised below:

| <b>Year</b> | <b>Waste produced (Civic Centre)</b> | <b>Percentage change from baseline (April 1998)</b> |
|-------------|--------------------------------------|---|
| May 2006    | 27.3 tonnes                          | 55% reduction                                       |
| May 2007    | 28.4 tonnes                          | 53% reduction                                       |
| May 2008    | 24.7 tonnes                          | 59% reduction                                       |
| May 2009    | 15.1 tonnes                          | 75% reduction                                       |
| May 2010    | 16.7 tonnes                          | 72% reduction                                       |

- 3.11 The results were calculated from a waste auditing exercise, which involves monitoring the total amount of waste (for landfill disposal) produced from the Civic Centre during a week. From this data, the mean quantity of waste disposed of per day and thus the annual waste production is estimated.
- 3.12 A 72% reduction in the amount of waste (by weight) for landfill disposal from the Civic Centre was observed in May 2010, compared to the baseline of April 1998. Although this represents an 11% increase since the previous year, the result is significantly above the target of a 60% reduction by April 2011. In addition, the results represent a 32% reduction on May 2008 levels, before the new recycling scheme was introduced, suggesting that the benefits of the new scheme are still being achieved.
- 3.13 New recycling points for small domestic batteries have been introduced at the Civic Centre and Bradninch Office, adding to the points already available at Oakwood House and Belle Isle Nursery. The facilities, which are suitable for all types of portable batteries e.g. AA, AAA, button cells etc, will help divert some of the 1 billion batteries discarded in the UK each year and so help prevent pollution by removing the hazardous metals they contain from the waste stream.
- 3.14 An improvement in recycling rates has also been observed at Oakwood House, with a 68% rate being recorded in May 2010, compared to 50% in April 2008, before the new recycling and waste collection scheme was introduced.

### **Carbon Dioxide Emissions**

- 3.15 The following carbon reduction target has been adopted as part of the Council's Carbon Management Strategy and Implementation Plan:
- To reduce carbon dioxide emissions from energy, water, waste and transport by 10% by 2009/10 and 20% by 2012/13 from a baseline of 2006/07.
- 3.16 The main target is broken down into individual targets for energy, transport and waste as follows:
- To reduce carbon dioxide emissions from energy use in buildings by 25% by 2012/13
  - To reduce carbon dioxide emissions from transport by 10.5% by 2012/13
  - To reduce carbon dioxide emissions from waste by 20% by 2012/13
- 3.17 A further target has been set to ensure that a significant portion of the Council's carbon dioxide reduction target is derived from energy reduction and efficiency measures (as opposed to renewable energy):
- To reduce energy consumption in buildings by 15% by 2012/13

- 3.18 In October 2009, the Council also signed up to the national 10:10 climate campaign, making a commitment to reduce emissions by 10% by 2010/11.
- 3.19 The results of the monitoring of the carbon footprint are shown below. Overall, the Council's carbon footprint reduced by 5.4% in 2009/10 compared to the baseline of 2006/07, which is below the target of a 10% reduction by 2009/10.

| Source                  | Tonnes CO <sub>2</sub> 2006/07 | Tonnes CO <sub>2</sub> 2007/08 | Tonnes CO <sub>2</sub> 2008/09 | Tonnes CO <sub>2</sub> 2009/10 | % change from 2006/07 baseline |
|-------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Energy use in buildings | 1,898                          | 1,744                          | 1,741                          | 1,912                          | 0.7% increase                  |
| Transport fleet         | 913                            | 952                            | 983                            | 766                            | 16.1% reduction                |
| Business mileage        | 83                             | 77*                            | 70*                            | 62                             | 25.0% reduction                |
| <b>Total transport</b>  | <b>995</b>                     | <b>1,029</b>                   | <b>1053</b>                    | <b>828</b>                     | <b>16.9% reduction</b>         |
| Waste                   | 25                             | 25                             | 24                             | 19                             | 21.6% reduction                |
| Water                   | 6                              | 7                              | 7                              | 8                              | 21.6% increase                 |
| <b>Total</b>            | <b>2,925</b>                   | <b>2,806</b>                   | <b>2,824</b>                   | <b>2,767</b>                   | <b>5.4% reduction</b>          |

\* Small adjustment made to business mileage data due to new information received

- 3.20 A significant reduction in emissions was observed during 2009/10 from the transport fleet (22%), business mileage (11%) and waste levels (18%), however these successes have largely been counteracted by a 10% increase in emissions from buildings. A significant increase in the consumption of fuel for heating purposes was observed at the Civic Centre, Corn Exchange, Belle Isle, Matford Centre and MRF in 2009/10, which can, in part, be explained by the cold winter, although the increases observed are greater than the would be expected purely on the basis of the weather. Other increases in consumption include a 36% increase in electricity consumption at the MRF (considered to be due to increased processing of recyclables from the trade waste recycling scheme), as well as a 133% increase at the Museum due to contractors working on site.
- 3.21 The 22% increase in water consumption observed since 2006/07, is mainly due to a 125% increase in consumption at the MRF. This is considered to be due to the acquisition of new hot washing and graffiti machines, as well as a change to filling up the street cleaning machines at the MRF rather than from water hydrants en route.
- 3.22 Whilst the Council is making progress towards achieving the 20% reduction target, there is still considerable way to go if the target is to be met by 2012/13 and the 10:10 target is to be achieved this year. A number of projects are underway or planned for 2010/11 to reduce emissions from the transport fleet. The use of biodiesel is to be extended to further refuse and street sweeping vehicles and the potential to install a tank at Belle Isle Nursery to provide fuel for Parks and Open Spaces vehicles is being explored. Plans are also underway to introduce eco driver training, to help reduce fuel consumption. A trial of hydrogen hybrid technology is being undertaken in one of the Council's refuse vehicles, to assess the improvement to fuel efficiency, with a view to fitting to further vehicles if successful. All refuse collection vehicles are being tracked in order to monitor efficiencies and reduce duplication of routes, plus all new vans are being fitted with a tracking system for the same reasons.
- 3.23 Works planned for 2010/11 to reduce energy use in buildings include a total of 13kW Solar PV arrays, advanced SMART meters to provide 1/2 hourly consumption data, energy efficient lighting in car parks and the installation of active voltage regulation

systems at the Corn Exchange and MRF. In total, the annual savings from these measures are predicted to be 130,763 kWh and 41.5 tonnes of carbon dioxide.

### **Water Use at the Civic Centre**

3.24 The following target for reduction in water consumption was originally adopted by SMT in February 2003, for submission to the Government's former 'Making a Corporate Commitment Campaign' (MACC2):

- To reduce water consumption at the Civic Centre by 8% by 2003/4, from a baseline of 2001/02.

### **Reduction in Water Consumption at the Civic Centre**

| <b>Period</b>  | <b>Water Consumption (m<sup>3</sup>)</b> | <b>Saving on 2001/02 (m<sup>3</sup>)</b> | <b>% Saving on 2001/02</b> |
|----------------|--|--|----------------------------|
| <b>2001/02</b> | 4705                                     | -  | -                          |
| <b>2004/05</b> | 4190                                     | 515                                      | 10.9%                      |
| <b>2006/07</b> | 4361                                     | 344                                      | 7.3%                       |
| <b>2007/08</b> | 4351                                     | 354                                      | 7.5%                       |
| <b>2008/09</b> | 3752                                     | 953                                      | 20.3%                      |
| <b>2009/10</b> | 2985                                     | 1720                                     | 36.6%                      |

3.25 The target for this indicator was achieved in 2004/05 and the aim since then has been to achieve a steady decrease in water consumption each year.

3.26 Between 2008/09 and 2009/10 there was a 20.4% decrease in water consumption at the Civic Centre, resulting in a 36.6% saving since the baseline in 2001/02. These savings have been achieved in part by the ongoing refurbishment of the washrooms, which include low-flush toilets and more efficient taps. In addition, ongoing monitoring and regulating of water flow allows prompt action to be taken to provide consistent flow patterns such that urinals are flushed only when needed and not on a standard cycle.

## **4 RECOMMENDED**

- (1) that the improving results for paper use, purchase of recycled paper, waste production, carbon dioxide emissions and water consumption are noted;
- (2) that the targets are kept under review; and
- (3) that a further report is submitted to this Committee in 12 months time.

HEAD OF ENVIRONMENTAL HEALTH SERVICES

S:PA/LP/Committee/810SCC9  
23.07.10

COMMUNITY & ENVIRONMENT DIRECTORATE

**Local Government (Access to Information) Act 1985 (as amended)**  
**Background papers used in compiling this report:**