

EXETER CITY COUNCIL

SCRUTINY COMMITTEE COMMUNITY 4 SEPTEMBER 2007

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 2006/07. 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 non-recycled waste produced from the Civic Centre
- the reduction in energy consumption within Council premises
- the reduction in carbon dioxide emissions at the Civic Centre
- 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 related policies. The current indicators reflect, in particular, the level of resource use by the Council.
- 2.2 The indicators are kept under review, as is the Environmental Strategy itself. 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.
- 2.3 In parallel to this, the Council is working on a Carbon Management Programme, in conjunction with the Carbon Trust. Through the programme the Council will receive expert help to calculate and analyse its carbon footprint and explore opportunities to reduce emissions from Council buildings, vehicles and waste production, with the aim of developing an emissions reduction target and action plan for consideration by the Council by March 2008.

3 RESULTS

Paper Use

- 3.1 Following on from the review undertaken by Internal Audit into paper usage within the Council (September 2006) the following target was adopted as part of the review of the Environmental Strategy in June 2007:
- 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.

- 3.2 The results of the paper monitoring exercise are summarised below. A comparison with 1996/7 levels has also been included for monitoring purposes:

Year	Total paper purchased/ consumed (reams*)	Percentage change over previous year	Percentage change from 2005/06 levels	Percentage change from 1996/97 levels
1996/97	9,110 reams	-	-	-
1997/98	8,549 reams	6.2 % decrease	-	6.2 % decrease
1998/99	9,693 reams	13.4 % increase	-	6.4 % increase
1999/00	10,942 reams	12.9 % increase	-	20.1 % increase
2000/01	10,511 reams	3.9% decrease	-	15.4 % increase
2001/02**	10,657 reams	1.4% increase	-	17.0% increase
2002/03**	9,943 reams	6.7% decrease	-	9.1% increase
2003/04**	10,972 reams	10.3% increase	-	20.4% increase
2004/05	10,878 reams	0.9% decrease	-	19.4% increase
2005/06***	10,459 reams	3.9% decrease	-	14.8% increase
2006/07	10,867 reams	3.9% increase	3.9% increase	19.2% increase

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

** Paper consumed rather than purchased

*** Data previously reported for 2005/06 has been adjusted.

- 3.3 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.
- 3.4 A total of 5.4 million sheets of paper were used in 2006/07. This represents a 4% increase since last year and a 19% increase since 1996/7, when monitoring began. Although this is in contrast to the reduction seen over the last 2 years, the increase is not significant and is within the range of usage experienced since 1999/00.
- 3.5 Constant vigilance and commitment is required at all levels to actively reduce paper consumption, such as maximising electronic forms of data storage, rationalising distribution lists, increasing duplex printing and identifying unnecessary paper usage. To address this, Internal Audit will undertake a follow-up audit to identify areas where further improvements could be made in relation to reducing paper consumption.

Recycled Paper

- 3.6 Following on from the review undertaken by Internal Audit into paper usage (September 2006) the following target was adopted as part of the review of the Environmental Strategy in June 2007:
- Purchase 98% of paper (copier paper, headed paper and compliment slips) from a recycled source by 2007/08.

3.7 In 2006/07, 87% of the paper purchased (copier paper, headed paper and compliment slips) was from a recycled source, compared to 98% in 2004/05. The reason for this decrease is that the coloured paper now purchased does not contain recycled content. To achieve the target steps have been taken to substantially reduce the use of coloured paper and replace with white (recycled). This issue will be addressed as part of the follow-up audit to be undertaken by Internal Audit, as described in section 3.5.

Waste Reduction

3.8 A new target for a reduction in waste levels from the Civic Centre was adopted in the Environmental Strategy (2007–2012):

- 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.

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

Year	Non - recycled waste produced (Civic Centre)	Percentage reduction from baseline (April 1998)
April 1998	60 tonnes	N/A
April 2000	41 tonnes	32% reduction
May 2001	37.5 tonnes	37% reduction
July 2002	94 tonnes*	57% increase*
June 2003	32 tonnes	47% reduction
May 2004	29.5 tonnes	51% reduction
May 2006	27.3 tonnes	55% reduction
May 2007	28.4 tonnes	53% reduction

* Results based on only limited data due to industrial action and are skewed by a departmental clear-out during the monitoring period

3.10 The results were calculated from a waste auditing exercise, which involves monitoring the total amount of non-recycled waste (waste to landfill) produced from the Civic Centre over a two-week period. From this data, the mean quantity of waste disposed of per day and thus the annual waste production is estimated.

3.11 A 53% reduction in the amount of non-recycled waste produced from the Civic Centre was observed in May 2007, compared to the baseline of April 1998. This represents a slight increase (4%) in waste levels since last year.

3.12 The results indicate that further work is required to reduce waste production and increase recycling rates at the Civic Centre in order to meet the new target of a 60% reduction by 2011. A comprehensive set of recycling facilities is available for staff use, including office paper, newspapers, magazines, envelopes, cans, plastics, printer cartridges, glass and cardboard, therefore further work needs to be undertaken to increase the utilisation of these facilities by staff.

Energy Use and Carbon Dioxide Emissions

- 3.13 The Council's first target to reduce energy consumption in Council premises was set in 1992 and was submitted to the Energy Efficiency Office's Corporate Commitment Campaign. This aimed to reduce energy consumption in eight targeted premises* by 20% between 1992/3 and 1997/98 and thereafter to stabilise energy consumption at this level. Although this target was achieved and maintained until 2001/02, since then energy consumption has risen, with a 14.4% reduction achieved in 2006/07.

Reduction in Energy Use in Targeted Premises* (Target 1)

Period	Consumption (kWh)	Saving on 1992/93 (kWh)	% Saving on 1992/3
1992/93	3599196	-	-
1995/96	2959721	639475	17.8%
1996/97	2956757	642439	17.9%
1997/98	2711629	887567	24.7%
1998/99	2828294	770902	21.4%
1999/00	2992703	606493	16.9%
2000/01	2859190	740006	20.6%
2001/02	2813259	785937	21.8%
2002/03	3040975	558221	15.5%
2003/04	3016048	583148	16.2%
2004/05	3098447	500749	14.3%
2005/06**	3001610	597586	16.6%
2006/07	3079382	519814	14.4%

* Civic Centre, Guildhall, Corn Exchange, Toronto House, Rougemont House, Broadwalk, King William St Extension, Guildhall and Harlequin Car Parks.

** Provisional data due to energy manager post being vacant.

- 3.14 Whilst a significant reduction in energy consumption for heating purposes was observed last year at the Guildhall, Corn Exchange and Civic Centre, overall energy consumption for the targeted premises increased by 2.6%. The main reason for this was a 37% increase in electricity consumption at the Civic Centre, the reasons for which are discussed in section 3.16. Also, a significant increase (24%) in consumption was observed at King William Car Park Extension, due to extension in the operating hours lit. The lighting schedule has now returned to normal so this should not persist further. Scope exists to identify further opportunities to reduce energy consumption in the targeted premises through the Carbon Management Programme.
- 3.15 The Council's second energy target is to achieve a 20% reduction in energy use in a further set of targeted premises** by 2002/03, from a baseline of 1997/98, and thereafter to stabilise energy consumption at this level. A summary of the results is shown below.

Reduction in Energy Use in Targeted Premises (Target 2)*

Period	Consumption (kWh)	Saving on 1997/98 (kWh)	% Saving on 1997/8
1997/98	902999	-	-
1998/99	800733	102266	11.3%
1999/00	859166	43833	4.9%
2000/01	985164	5632	0.6%
2001/02	823627	79372	8.8%
2002/03	852997	50002	5.5%
2003/04	794378	108621	12.0%
2004/05	745410	157589	17.4%
2005/06**	909285	-6286	-0.7%
2006/07	735361	167638	18.6%

* Grandisson Court, King William St and Mary Arches St Multi Storey Car Park

** Provisional data due to energy manager post being vacant.

- 3.16 An 18.6% decrease in energy consumption was observed in the targeted properties in 2006/07 compared to 1997/98 levels. This is primarily due to a 26% reduction in gas consumption at Grandisson Court, as a result of the installation of new condensing boilers. The problem highlighted in last year's report with the building management system at Mary Arches St car park has now been rectified, however consumption still remains above 2004/05 levels due to extended opening times.
- 3.17 To reinforce the Council's commitment to resource efficiency, the following target for reduction in carbon dioxide emissions was adopted by SMT in February 2003, for submission to the Government's 'Making a Corporate Commitment Campaign' (MACC2):
- To reduce carbon dioxide emissions at the Civic Centre by 2% by 2007/2008, from a baseline of 2001/02 and thereafter to stabilise energy consumption at this level
- 3.18 The results for carbon dioxide emissions at the Civic Centre are summarised below:

Reduction in Carbon Dioxide Emissions at the Civic Centre

Period	Carbon Dioxide Emissions (te CO ₂)			Saving on 2001/02 (te CO ₂)	% Saving on 2001/02
	Offices*	Car Park	Total		
2001/02	445.8	89.4	535.2	-	-
2002/03	469.4	101.2	570.6	-35.4	-6.6%
2003/04	457.9	102.1	560.1	-24.9	-4.7%
2004/05	444.9	109.7	554.6	-19.5	-3.6%
2005/06**	412.1	85.3	497.5	37.7	7.0%
2006/07	553.1	98.0	651.1	-116.0	-21.7%

* The energy for heating has been degree-day corrected to correct for variations in external temperature, and therefore heating demand, over the monitoring period.

** Provisional data due to energy manager post being vacant.

- 3.19 Between 2001/02 and 2006/07 there was a 21.7% increase in carbon dioxide emissions from the Civic Centre. Although a 19% reduction in emissions from heating has been observed over this period, mainly due to new double glazed windows and increased roof insulation, this has been offset by a 40% increase in emissions from electricity consumption at the Civic Centre. The cause of this increase is thought to be due to the additional energy consumption from the customer service centre and increased air conditioning for IT servers, as well as a significant number of staff leaving their computer switched on overnight.
- 3.20 A number of projects are underway that will reduce emissions from the Civic Centre, including the upgrading of the building management system to gain better control over the heating and ventilation systems, continuation of the lighting replacement programme and the installation of 3 wind turbines on the roof of Phase 1. In addition, subject to the success of the installation of a wood pellet boiler at Belle Isle Nursery, a similar system will be installed at the Civic Centre in 2007/08. Further opportunities to reduce emissions will be explored through the Carbon Management Programme, including the possibility of optimising the electricity supply voltage (potential to reduce energy use and cost by up to 20%) and opportunities to influence staff behaviour and encourage a culture of carbon management.

Water Use

- 3.21 The following target for reduction in water consumption was adopted by SMT in February 2003, for submission to the Government's '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 and thereafter to stabilise energy consumption at this level.

Reduction in Water Consumption at the Civic Centre

Period	Water Consumption (m³)	Saving on 2001/02 (m³)	% Saving on 2001/02
2001/02	4705	-	-
2002/03	4598	107	2.3
2003/04	4540	165	3.5
2004/05	4190	515	10.9
2006/07	4361	344	7.3

- 3.22 Between 2001/02 and 2006/07 there was a 7.3% decrease in water consumption at the Civic Centre, which falls just short of the 8% reduction target. In recent years, various projects have been undertaken to reduce water consumption, such as the installation of urinal flush controls and cistern dams and the use of water monitoring equipment to detect leaks. Further opportunities to reduce water consumption, such as rainwater harvesting, waterless urinals and automatic taps, will be investigated further through the Carbon Management Programme.

4 RECOMMENDED

- (1) that the results for paper use, purchase of recycled paper, energy consumption, carbon dioxide emissions and water consumption are noted and that these results are also

communicated to staff and management, with an emphasis on the need for all to contribute to reaching and maintaining the targets;

- (2) that the targets are kept under review, particularly in light of the outcomes of the Carbon Management Programme;
- (3) that a further report is submitted to this Committee in 12 months time.

HEAD OF ENVIRONMENTAL HEALTH SERVICES

S:LP/Committee/907SCC6
23.8.07

COMMUNITY AND ENVIRONMENT DIRECTORATE

Local Government (Access to Information) Act 1985 (as amended)

Background papers used in compiling the report:-

None