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| SUSTAINABLE GROWTH AND ENVIRONMENT CAPITAL SCRUTINY COMMITTEE | Agenda Item No. 6 |
| 6 SEPTEMBER 2012 | Public Report |

Report of the Executive Director of Operations

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UPDATE ON THE PETERBOROUGH CITY COUNCIL'S 2010/11 AND 2011/12 CARBON EMISSION SUBMITTED UNDER DIFFERENT REPORTING REQUIREMENTS.

1. PURPOSE

- 1.1 This report provides an update on Peterborough City Council's 2010/11 and 2011/12 carbon dioxide emissions. These emissions are reported as part of its mandatory participation in the Carbon Reduction Commitment Energy Efficiency Scheme and to assess progress under its Carbon Management Action Plan.

2. RECOMMENDATIONS

- 2.1 The contents of this report are noted and comments invited accordingly.
- 2.2 That future updates remain an annual scrutiny item in September, following the annual reporting deadlines at the end of July.

3. LINKS TO THE SUSTAINABLE COMMUNITY STRATEGY

- 3.1 The council's carbon emissions directly relate to two priorities of the Sustainable Community Strategy: creating the UK's Environment Capital and delivering substantial and truly sustainable growth. As a key partner in the Environment Capital the council is in a position to lead by example on reducing its climate change impact and ensuring that growth in the city is environmentally sustainable.

4. BACKGROUND

- 4.1 The three similar but slightly different carbon emission reports are described in detail below. The table in section 4.5 below summarises the differences in scope, conversion factors and method.
- 4.2 **Carbon Reduction Commitment Energy Efficiency Scheme (CRC):** The participants in this mandatory scheme (including 197 other Local Authorities) are required to report annual carbon emissions and purchase allowances at £12 per tonne of CO₂ emitted. Reporting started in 2010/11 and the first allowances were required for 2011/12 emissions. A performance league table is published in November showing the ranking of participants based on 3 metrics – absolute emissions, emissions relative to revenue or turnover, and a metric rewarding early uptake of Automatic Meter Readers and accredited carbon reductions. The report brought to Environment Capital Scrutiny in March 2011 estimated that the council's costs under the scheme would be approximately £309k annually based on 2008/9 emissions.
- 4.3 **Carbon Management Action Plan (CMAP):** The CMAP commits the council to achieving a 35% reduction in carbon dioxide emissions from its own buildings and operations by 2013/14 relative to 2008/9 baseline. It was presented to Environment Capital Scrutiny in February 2010 and adopted by Full Council in April 2010.
- 4.4 **Greenhouse Gas Report (GHG):** Local Authorities are asked to resume reporting of their emissions formerly know as NI 185 for DCLG's Single Data List. There are no financial implications or targets associated with this report.

4.5 Table 1:

| Report | Scope | Conversion factors | Method notes |
|--------|--|---|---|
| CRC | Buildings where PCC pays the energy bills (including Vivacity and rental units). Also includes schools and Academies. Excludes emission from street lighting, transport and where energy is part of the rent e.g. Stuart House. | Factors specific to the scheme published by DECC. | CO2 emissions only. Can exclude 10% of emissions. Estimated emissions subject to 10% uplift. Reports renewable electricity using same conversion factor as electricity imported from the grid. |
| CMAP | Includes building, street lighting, fleet transport and business transport emissions. Also includes significant outsourced services which were originally part of the city council – i.e. Enterprise Peterborough. | Original factors provided by the Carbon Trust. Going forward GHG Report scope 1 and 2 factors used. | CO2 emissions only. Reports renewable electricity as zero emissions. Scope will increase in 2012/13 to include emissions arising from water |
| GHG | Essentially same as CMAP but the sources are treated differently. Reporting outsourced services and business travel is discretionary, and they are reported as scope 3. | Factors revised and published by Defra annually. Use both scope 1, 2 and 3 factors. | Requires report to include all main greenhouse gases converted into CO2 equivalent. Scope 3 emissions are reported using scope 3 conversion factors. |

5. KEY ISSUES

5.1 The council's carbon emissions have reduced over the last two years compared to 2008/09 emissions in all three reports. This is due to a combination of milder winter in 2011/12, and ongoing energy efficiency works.

Please note, the reductions are different for each report due to their different scopes as shown in Table 1.

5.2 **CRC:** The council successfully prepared and submitted the first two annual CRC reports for 2010/11 and 2011/12 emissions in July 2011 and 2012 respectively. Internal Audit has approved the process used and the figures in these reports. The key points for each year are:

2010/11

- Annual report emissions = 21,620 tonnes CO₂
- Theoretical cost of allowances = £259,444 (not required for first year)
- Schools' proportion = 68% of emissions equating to approximately £177k
- Ranking in first performance league table = 977 out of 1301 (based on third metric alone)

2011/12

- Annual report emissions = 19,577 tonnes CO₂
- Actual cost of allowances = £234,924 (9% lower than expected)
- Schools proportion = 63% of emissions equating to approximately £149k
- Performance league table due to be published later in the year and ranking will be based on all three metrics.

The annual report of 2011/12 emissions is 9.4% less than 2010/11 and 24% less than the 2008/09 baseline. The costs are correspondingly less too.

5.3 **CMAF:** 2011/12 is the third of 5 years of monitoring progress against the 35% reduction target. The headline figures show an overall decrease in total emissions; a reduction of 5.6% in 2011/12 compared to 2010/11 and 16.3% compared to the 2008/09 baseline (Table 2). Please note the emissions previously recorded under fleet vehicles are effectively transposed to the outsourced services category.

Table 2:

| Emission source | Carbon Dioxide Emissions (tonnes) | | | |
|------------------------|-----------------------------------|---------------|---------------|---------------|
| | 2008/9 | 2009/10 | 2010/11 | 2011/12 |
| Council buildings | 7,890 | 9,945 | 8,776 | 7,577 |
| Schools | 17,809 | 14,107 | 14,327 | 13,424 |
| Street lighting | 4,444 | 4,457 | 4,461 | 4,488 |
| Fleet vehicles | 3,203 | 2,478 | 2,117 | - |
| Business transport | 649 | 499 | 473 | 352 |
| Outsourced services | - | - | - | 2,620 |
| Total emissions | 33,995 | 31,487 | 30,155 | 28,462 |

The 35% reduction target implies an annual reduction of 8% each year for 5 years to achieve the target level of emissions in 2013/14 (Figure 1). This translates to a cumulative reduction of 23% by the third year since the baseline. The cumulative reduction of 16% to date, whilst a welcome achievement, is not in line with the steady reduction trajectory. In order to achieve the final emissions level in 2013/14, the council will need to deliver a 22% reduction on 2011/12 emissions in the final two years of the CMAF (Table 3).

Figure 1:

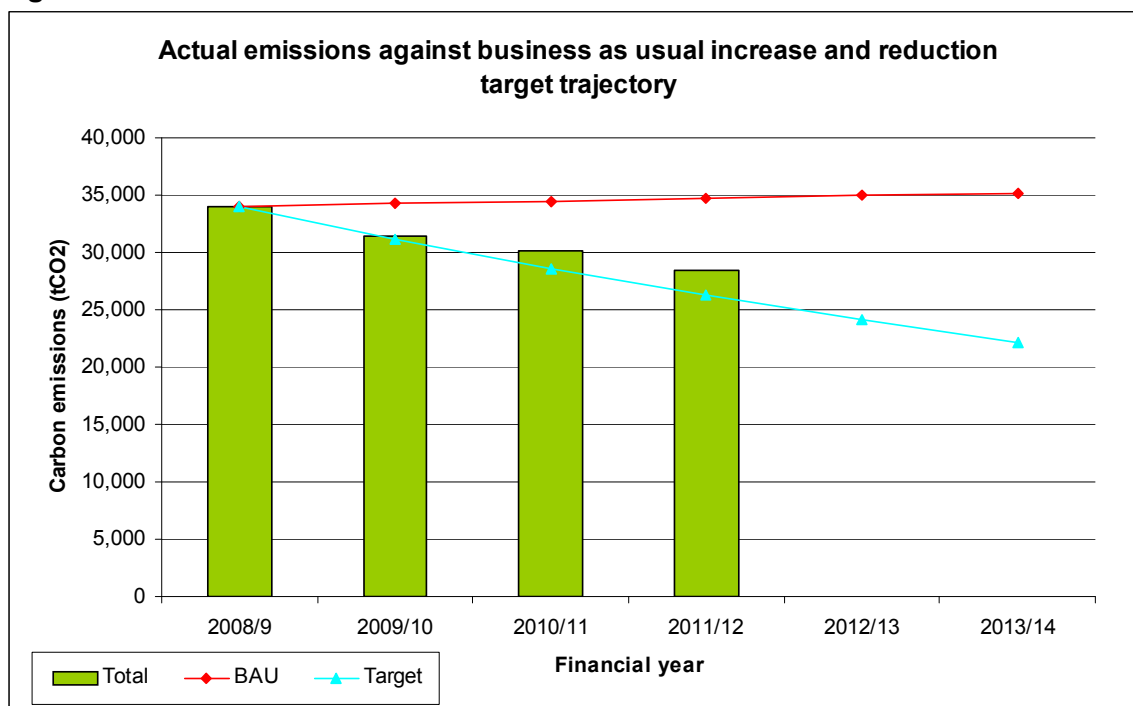


Table 3:

| | 2008/9 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|---|--------|---------|---------|---------|---------|---------|
| Total emissions (tCO ₂) | 33,995 | 31,487 | 30,155 | 28,462 | - | - |
| Target emissions with 8.25% annual reduction (tCO ₂) | 33,995 | 31,189 | 28,614 | 26,252 | 24,085 | 22,096 |
| Cumulative reduction required to meet 35% target by 2014 | n/a | 8.25% | 15.83% | 22.78% | 29.15% | 35.00% |
| Cumulative reduction achieved | n/a | 7.38% | 11.29% | 16.28% | - | - |
| Annual reduction achieved | n/a | 7.38% | 4.23% | 5.62% | - | - |
| Revised cumulative reduction required to meet target | n/a | n/a | n/a | n/a | 15.38% | 22.36% |
| Revised target emissions with 11.89% annual reduction required to meet target (tCO ₂) | n/a | n/a | n/a | n/a | 25,077 | 22,095 |

- 5.4 **GHG report:** The council has published the reports for 2009/10, 2010/11 and 2011/12 emissions on its website. The figures show a dramatic reduction in emissions between 2011/12 and the preceding years (Table 4), some of which is due to the newly outsourced fleet vehicles being counted as Scope 3 in 2011/12. The results also show that there has been a reduction in carbon emissions relative to the council's annual gross revenue expenditure.

Table 4:

| | Carbon dioxide equivalent emissions (tonnes of CO _{2e}) | | | |
|---|---|---------|---------|---------|
| | 2008/09 | 2009/10 | 2010/11 | 2011/12 |
| Scope 1 – gas, petrol diesel | 16,525 | 12,139 | 11,521 | 7,960 |
| Scope 2 - electricity | 20,043 | 18,939 | 18,429 | 17,570 |
| Scope 3 – outsourced services | 160 | 176 | 144 | 678 |
| Total net emissions | 36,728 | 31,254 | 30,094 | 26,273 |
| Intensity measurement kg CO _{2e} per gross revenue expenditure | 0.076 | 0.064 | 0.058 | 0.055 |

6. IMPLICATIONS

- 6.1 **CRC:** The reduction in emissions in 2011/12 has resulted in a lower than expected bill for allowances which is very welcome. However this level is not assured going forward and costs may also increase if the government increase the costs of allowances as suggested in 2014.
- 6.2 **CMAF:** Achieving a cumulative carbon reduction of 16% over 3 years should be welcomed, however further progress is needed if the City Council is to achieve the ambitious 35% reduction target by 2013/14. To deliver the required 22% reduction on 2011/12 emissions will necessitate significant implementation of energy efficiency projects. Upcoming energy efficiency and renewable energy projects will deliver savings in the medium term but unlikely within the timescale of the CMAF. Therefore it is anticipated at this stage that the CMAF target will not be fully achieved by 2013/14.
- 6.3 **GHG:** none

7. CONSULTATION

- 7.1 No further consultation on the CMAF has taken place since it was approved at Full Council in April 2010. No consultation is needed on the CRC or GHG report.

8. NEXT STEPS

- 8.1 Officers will continue to monitor carbon emissions annually for the delivery of upcoming energy efficiency and renewable energy projects.
- 8.2 Annual reports on 2012/13 emissions will be compiled for each reporting requirement in summer 2013.
- 8.3 It is recommended that this remains a regular item for this scrutiny board to ensure continued progress.

9. BACKGROUND DOCUMENTS

- 9.1 Information about the CRC scheme can be obtained from the Environment Agency's website:
<http://www.environment-agency.gov.uk/business/topics/pollution/126698.aspx>
- 9.2 The council's Carbon Management Action Plan is available from:
<http://www.peterborough.gov.uk/pdf/env-cc-ct-cmap.pdf>
- 9.3 The council's Greenhouse Gas Emissions Report is available at:
http://www.peterborough.gov.uk/environment/climate_change/what_is_the_council_doing/carbon_reporting.aspx

10. APPENDICIES

- 10.1 None

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