

SUSTAINABLE GROWTH AND ENVIRONMENT CAPITAL SCRUTINY COMMITTEE	Agenda Item No. 7
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Report of the Director of Growth and Regeneration

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Update on Peterborough City Council's 2013/14 carbon emissions as submitted under different reporting requirements.

1. PURPOSE

- 1.1 In line with previous years, this report provides an update on Peterborough City Council's 2013/14 carbon dioxide emissions. These emissions are reported as part of its mandatory participation in the Carbon Reduction Commitment Energy Efficiency Scheme, the local authorities Greenhouse Gas Report (formerly NI 185) and to assess progress under the city council's 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 October/November, 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 aspiration 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 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 198 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. An annual report is published which includes information about the participants organisation type, CO₂ emissions and renewable energy use. 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 is the result of a programme of work that the council undertook with the Carbon Trust in 2009 to ensure the organisation was well placed to make progress towards reducing its environmental impact. The plan committed the council to achieve 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 known as NI 185 for the Department of Communities and Local Government's Single Data List. There are no financial implications or targets associated with this report.

Table 1:

Report	Scope (for 13/14)	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 un-metered street lighting, transport and where energy is part of the rent e.g. Stuart House.	Factors specific to the scheme published by DECC.	CO ₂ emissions only. Excludes non-core supplies such as oil and LPG 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.	CO ₂ emissions only. Reports renewable electricity as zero emissions. Scope will increase in 2014/15 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 CO ₂ equivalent. Scope 3 emissions are reported using scope 3 conversion factors.

5. KEY ISSUES

5.1 The headline conclusion is that emissions have decreased in 2013/14. This is mainly due to more favourable weather conditions, overall energy efficiency works and a change to more sustainable sources in both energy and transport fields.

In addition, whilst all reports show an overall decrease in emissions from the baseline year (2008/09) it should be noted that the figures are positively and negatively affected by a range of factors including outsourcing of services, increase in the number of children in the city's schools, variability of corporate assets, changeable weather and energy efficiency improvement works.

Please note, the figures 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 fourth annual CRC report in July 2014. Internal Audit has approved the process used. The key points for this year are:

- Annual report emissions = 22,301 tonnes of CO₂
- Annual cost of allowances = £267,612.00
- Schools proportion = 62% of emissions equating to approximately £166k

5.3 **CMAF:** 2013/14 is the final reporting year where progress against the 35% reduction target will be monitored. The data shows a reduction of 24% since the baseline year (2008/09). Whilst this does not equate to the full 35% reduction that the council aimed for it still represents a significant reduction.

Table 2:

Emission source	Carbon Dioxide Emissions (tonnes)					
	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14
Council buildings	8,046	9,976	8,766	7,241	8,315	7,631
Schools	21,850	14,215	14,392	12,919	14,930	13,107
Street lighting	4,391	4,517	4,497	4,233	5,823	4,978
Fleet vehicles	2,375	2,478	2,117	-	-	-
Business transport	618	507	477	365	430	398
Outsourced services	-	-	-	2,593	2,632	2,131
Total emissions	37,280	31,694	30,250	27,351	32,130	28,245

Figure 1 shows the evolution of each emission source over the CMAF period. As it can be seen, the schools are the largest emitters and their performance has improved over the last five years. The corporate estate is the second largest emitter and this also shows an overall improvement, though to a lesser extent. A corporate review of the council's street lighting assets has resulted in this source becoming the third largest source of emissions. The emissions generated from fleet vehicles is now classed as outsourced services.

Figure 1:

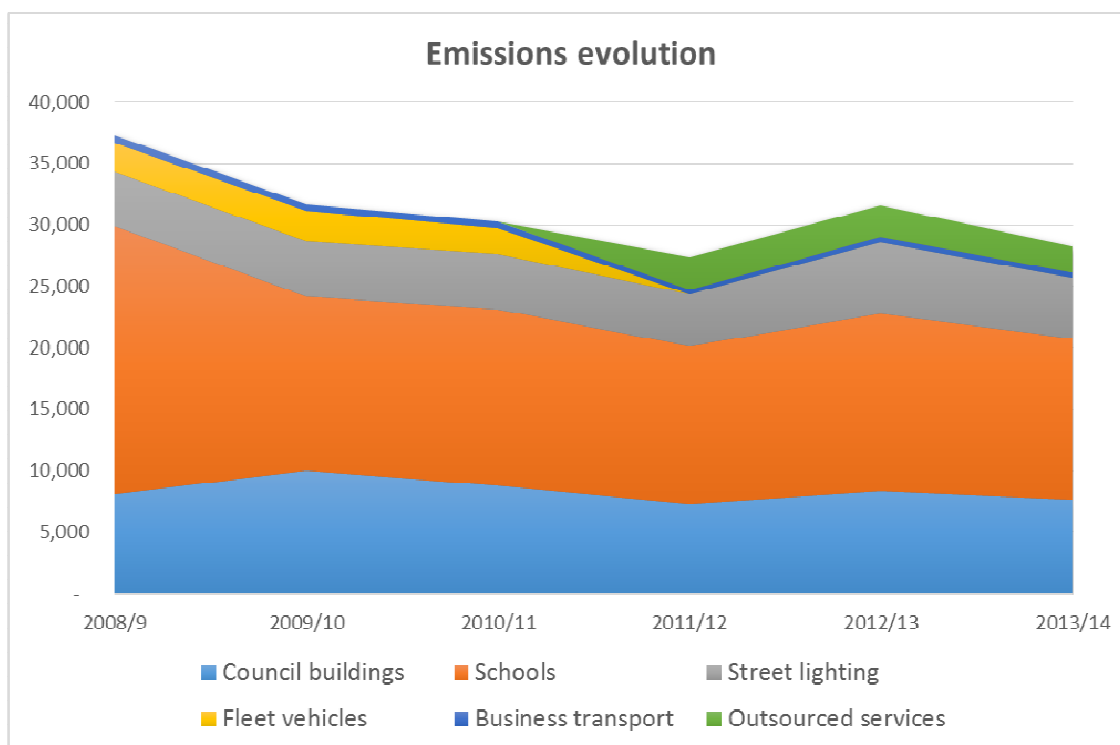


Table 3 shows normalised figures of the CO₂ emissions during the CMAF against different metrics. The assessment includes the total emissions and the individual sources of emissions assessed against the relevant factors such as revenue turnover, per habitant (estimated figure by the planning department based on population trends as there is no data available for 2014) or pupils from primary and secondary schools. The data shows an overall reduction of 31.4% based on per £m revenue turnover and a 28.7% reduction based on per habitant. However, looking at the individual sources of emissions, a variance can be seen. This is mainly due to different variables like the comprehensive review of street lighting which has increased the associated emissions.

Table 3:

Normalised emissions	Emissions (tons of CO ₂)		% Reduction
	2008/9	2013/14	
Total emissions			
Per £m revenue turnover	77.8	53.3	31.4%
Per habitant	0.208	0.148	28.7%
Individual sources emissions			
Schools emissions per pupil	0.76	0.41	46.4%
Street lighting emissions per habitant	0.025	0.026	-6.6%

- 5.4 **GHG report:** The council has published the reports for 2009/10, 2010/11, 2011/12, 2012/13 and 2013/14 emissions on its website. The figures are in line with the other reports and it includes the emissions in both CO₂ equivalent and CO₂ (Tables 4 and 5 respectively) for information purposes. They show a 12% reduction in 2013/14 and an overall reduction of 29%.

Table 4:

GHG emissions data for period 1 April 2008 to 31 March 2014						
	Tonnes of CO _{2e}					
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Scope one	16,525	12,139	11,521	7,960	10,380	8,374
Scope two	18,930	17,826	17,048	15,263	17,458	16,105
Scope three	2,097	1,923	1,853	2,183	2,468	2,229
Total gross emissions	37,552	31,888	30,422	25,406	30,306	26,709
Carbon offsets	0	0	0	0	0	0
Green tariff	0	0	0	0	0	0
Total net emissions	37,552	31,888	30,422	25,406	30,306	26,709
Intensity measurement (kg CO _{2e} per gross revenue expenditure)	£0.08	£0.07	£0.06	£0.05	£0.05	£0.05

Table 5:

GHG emissions data for period 1 April 2008 to 31 March 2014						
	Tonnes of CO ₂					
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Scope one	16,402	12,076	11,470	7,931	10,353	8,355
Scope two	18,798	17,708	16,938	15,166	17,346	15,993
Scope three	2,080	1,909	1,841	2,168	2,363	2,218
Total gross emissions	37,280	31,694	30,250	25,266	30,061	26,566
Carbon offsets	0	0	0	0	0	0
Green tariff	0	0	0	0	0	0
Total net emissions	37,280	31,694	30,250	25,266	30,061	26,566
Intensity measurement (kg CO _{2e} per gross revenue expenditure)	£0.08	£0.07	£0.06	£0.05	£0.05	£0.05

6. IMPLICATIONS

- 6.1 **CRC:** The decrease in emissions from 2012/13 to 2013/14 has reduced the overall costs of allowances from £ 288,408 to £ 267,612.
- 6.2 **CMAF:** Whilst the conditions listed in 5.1 such as the weather variability resulted in a slight variability in emissions in some years, over the 5 years since the baseline year, the trend shows a reduction in emissions. However, the latest result shows a 24% reduction in the last year of CMAF, which does not hit the ambitious 35% reduction target. It is worth noting

that the benefits as a result of the upcoming energy efficiency works as part of the Energy Performance Contract with Honeywell will not be felt until a later date which will likely impact, in a positive way, the figures significantly. Collectively, the results from these actions will help the council continue to reduce emissions towards the 35% target although it will probably take a year or longer than originally anticipated. Therefore, it is intended to continue monitoring the original 35% reduction target to 2016, as stated in the Environment Capital Action Plan to realise the effects of the above mentioned actions.

6.3 **GHG:** None

7. CONSULTATION

7.1 No further consultation on the CMAP 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 2014/15 emissions will be compiled for each reporting requirement in summer 2015. It should be noted that government is consulting on amendments to the CRC scheme. If this has implications it will be reported to scrutiny as appropriate.

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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