

# Greenhouse Gas Emissions

## Annual Report April 2016 - March 2017

### Background

The Department of Energy and Climate Change have required Local Authorities to report on greenhouse emissions as a result of their operations.

The aim is to measure the progress of local authorities annually in reducing emissions from providing Council services, including those emissions generated by contractors and others providing services on their behalf.

This report outlines greenhouse gas (GHG) emissions by the Council as a result of its own operations and service delivery for the past six years. The first report of this kind was published in 2008-09.

### Base year

The base line year used for carbon reporting is the financial year 2008/9. Emissions will be monitored against the base year and published annually.

### Approach for GHG emissions calculation

We have followed the Government's Guidance on how to measure and report greenhouse gas emissions. It recommends identifying and categorizing emissions released into three groups or scopes:

<b>Scope 1 (direct emissions)</b>	<ul style="list-style-type: none"><li>• Activities owned or controlled by the Council that release emissions straight into the atmosphere.</li><li>• <b>Examples:</b> emissions from combustion in owned controlled boilers or vehicles.</li></ul>
<b>Scope 2 (energy indirect)</b>	<ul style="list-style-type: none"><li>• Emissions being released into the atmosphere associated with our consumption of purchased electricity, heat, steam and cooling.</li><li>• These are indirect emissions which are a consequence of the organisation's activities but occur at sources that we don't own or control.</li></ul>
<b>Scope 3 (Other indirect)</b>	<ul style="list-style-type: none"><li>• Emissions that are a consequence of our actions, which occur at sources which we don't own or control and which are not classed as scope 2 emissions.</li><li>• <b>Examples:</b> emissions from business travel (not owned or controlled), waste disposal or purchase of materials. This scope is discretionary.</li></ul>

A breakdown of the Councils emissions under each scope is provided on the following page.

**GREENHOUSE GAS EMISSIONS 2016/17**

	2016/17		2015/16		2014/5		2013/14		2012/13		2011/12		2010/11		2009/10		2008/09	
	CO <sub>2</sub> tonnes	Total GHG CO <sub>2</sub> e tonnes	CO <sub>2</sub> tonnes	Total GHG CO <sub>2</sub> e tonnes	CO <sub>2</sub> tonnes	Total GHG CO <sub>2</sub> e tonnes	CO <sub>2</sub> tonnes	Total GHG CO <sub>2</sub> e tonnes	CO <sub>2</sub> tonnes	Total GHG CO <sub>2</sub> e tonnes	CO <sub>2</sub> tonnes	Total GHG CO <sub>2</sub> e tonnes	CO <sub>2</sub> tonnes	Total GHG CO <sub>2</sub> e tonnes	CO <sub>2</sub> tonnes	Total GHG CO <sub>2</sub> e tonnes	CO <sub>2</sub> tonnes	Total GHG CO <sub>2</sub> e tonnes
<b>Scope 1 - Direct Emissions</b> <i>Emissions resulting from gas usage in Council's owned and managed buildings and emissions from Council's owned vehicles</i>	401	402	417	419	391	392	386	388	432	433	388	389	410	411	469	470	465	466
<b>Scope 2 - Energy Indirect</b> <i>Emissions resulting from electricity usage in Council's owned and managed buildings</i>	572	575	699	705	713	719	651	655	683	688	720	724	760	764	761	766	835	840
<b>Scope 3 - Other Indirect</b> <i>Emissions resulting from energy consumption in Council's outsourced properties, emissions resulting from business travel, emissions resulting from transmission and distribution in both owned and managed properties and emissions resulting from transmission and distribution in outsourced properties.</i>	2798	2812	2837	2855	2715	2744	2537	2550	2722	2735	2651	2667	2821	2839	2801	2818	2954	2973
<b>Total Gross Emissions</b>	<b>3772</b>	<b>3790</b>	<b>3954</b>	<b>3978</b>	<b>3819</b>	<b>3855</b>	<b>3574</b>	<b>3593</b>	<b>3837</b>	<b>3856</b>	<b>3758</b>	<b>3781</b>	<b>3990</b>	<b>4014</b>	<b>4030</b>	<b>4054</b>	<b>4253</b>	<b>4279</b>
<b>Total Annual Net Emissions</b>	<b>3772</b>	<b>3790</b>	<b>3954</b>	<b>3978</b>	<b>3819</b>	<b>3855</b>	<b>3574</b>	<b>3593</b>	<b>3837</b>	<b>3856</b>	<b>3758</b>	<b>3781</b>	<b>3990</b>	<b>4014</b>	<b>4030</b>	<b>4054</b>	<b>4253</b>	<b>4279</b>
% Reduction in comparison to previous year	-4.61%	-4.73%	+3.53%	+3.19%	+6.85	+7.31	-6.84	-6.83	+2.09	+2.00	-5.82	-5.83	-1.00	-0.98	-5.24	-5.25	BASE YEAR	
% Reduction since baseyear (2008/09)	-6.42%	-6.53%	-7.04%	-7.04%	-10.21	-9.90	-15.97	-16.04	-9.80	-9.88	-11.65	-11.65	-6.24	-6.24	-5.24	-5.25		

### **Changes in 2015-2016:**

There were few changes to the GHG methodology for the period 2015 to 2016. Some conversion factors issued by Central Government were modified resulting in lower emission numbers against the same base data.

The Council's estate is now fully monitored to a greater degree than has been possible until now and improvements to the Civic Centre through the use of LED lighting have given small but valuable improvements to the overall energy consumption and consequently GHG reduction.

Warmer weather has also reduced the overall energy consumption across the entire estate.

### **Out of Scope Emissions**

We are now required to produce 'Out of Scope' data on biofuel use which provides data on an average biofuel mix from our own vehicles and contractor vehicle. The 'Out of Scope' emissions equal 37.57 tons of greenhouse gas emissions (CO<sub>2</sub>e Kg)

### **Supporting Explanations**

- The above GHG report covers emissions from Elmbridge Borough Council's estate and operations, including those main buildings owned by the Council but managed by third parties (Xcel Leisure Centre, public halls etc).
- All Scopes show modest improvement due to the slightly relaxed conversion factors provided by Central Government.
- Generally warmer weather has resulted in less energy consumption across the entire estate..

**Please contact Asset Management and Property Services for more information.**