

## Green House Gas (GHG) Emissions Report July 2016

### 1. Introduction

Eastleigh Borough Council has adopted the Department for Energy and Climate Change (DECC) request that, as from July 2011, Local Authorities report greenhouse gas (GHG) emissions from their own estates and services using a standard methodology and format.

### 2. Emissions Summary

Table 1 summarises Eastleigh Borough Council's GHG emissions for the past three years and the base year of 2007/08 in tCO<sub>2e</sub>

	2015/16	2014/15	2013/14	2007/08
Scope 1	1696	1726	1670	2036
Scope 2	817	917	784	754
Scope 3	46	52	56	98
<b>Total gross emissions</b>	<b>2559</b>	<b>2696</b>	<b>2510</b>	<b>2887</b>
Carbon credits	473	552	448	0
<b>Total net emissions</b>	<b>2115</b>	<b>2145</b>	<b>2063</b>	<b>2887</b>
<b>%reduction from 2007/08</b>	<b>27%</b>	<b>26%</b>	<b>29%</b>	

Table 1 - GHG emissions summary not weather corrected tCO<sub>2e</sub>

### 3. Company Information

Eastleigh Borough Council is a district Council within Hampshire providing a range of services to a resident population of 120,000. The registered address is Eastleigh House, Upper Market Street, Eastleigh, Hampshire, SO50 9YN

### 4. Reporting Period

This report is for the financial year 1 April 2015 to 31 March 2016.

### 5. Changes in Emissions

Emissions have dropped for this period over the previous year. Some individual properties have increased by small amounts but a few have made significant reductions:

- This is the second year the Council has occupied Eastleigh House and the facilities team are improving the use of the energy management system to realise real energy savings.
- The Point with funding from the Council and The Arts Foundation has completed an energy saving refit which has resulted in reductions in both electricity and gas.
- The Berry and the Mitchel Road Car Park have registered significant reductions in electricity usage.
- Business mileage and fuel for the Fleet have reduced.

- This year Street Lighting located in the Borough and owned by the Council but operated by Hampshire County Council has been included and has been backdated to 2014/15. This has seen a reduction due to additional dimming introduced in May 2015.

## 6. Measuring and Reporting approach

The DEFRA “Environmental reporting Guidelines: Including mandatory greenhouse gas emissions reporting guidance” was used to prepare this report.

## 7. Organisational Boundary

We have used the financial control approach as recommended in the guidance to define our organisational boundary. Our scope includes emissions from buildings and transport used for the delivery of our services.

## 8. Operational Scope

Table 2 shows what is included in each scope measured in tCO<sub>2</sub>e.

	2015/16	2014/15	2013/14	2007/08
<b>Scope 1 (Direct Emissions)</b>				
Gas	688	660	615	989
Oil	4	5	11	29
Fleet	1005	1061	1043	1017
<b>Total</b>	<b>1696</b>	<b>1726</b>	<b>1670</b>	<b>2036</b>
<b>Scope 2 (Indirect emissions)</b>				
Electricity	804	859	771	743
Street Lighting	28	43		
Water	15	15	12	11
<b>Total</b>	<b>847</b>	<b>918</b>	<b>784</b>	<b>754</b>
<b>Scope 3 (Indirect other)</b>				
Business Travel	46	52	56	98
<b>Total</b>	<b>46</b>	<b>52</b>	<b>56</b>	<b>98</b>
<b>Total gross emissions</b>	<b>2589</b>	<b>2696</b>	<b>2510</b>	<b>2887</b>
<b>Credits</b>				
Green Tariff	404	476	399	
PV Export Only	69	76	49	
<b>Total</b>	<b>473</b>	<b>551</b>	<b>448</b>	<b>0</b>
<b>Total nett emissions</b>	<b>2115</b>	<b>2145</b>	<b>2063</b>	<b>2887</b>

Table 2 - Breakdown of Scope 1,2 & 3 not weather corrected tCO<sub>2</sub>e

The CO<sub>2</sub>e conversion factors used in calculating the GHG have been taken from the DEFRA web based tool “Government conversion factors for company reporting”.

The figures have not been weather corrected.

## 9. Geographical Breakdown

All Eastleigh Borough Council’s activities are in the UK.

**10. Targets**

Council to reduce nett GHG emissions from its own operations by 50% by 2020 (against a 2007 baseline)

**11. Base Year**

The baseline year for the target is 2007/08.

Since last years reported figures no recalculation of the baseline has been made due to the sale or acquisition of council properties.

**12. Intensity Measurement**

We have chosen the intensity measurement of tCO<sub>2e</sub> per full time equivalent (FTE) member of staff and per £m income as most relevant to local government.

	2015/16	2014/15	2013/14	2012/13
<b>tCO<sub>2e</sub> per FTE</b>	4.47	4.68	4.27	
<b>tCO<sub>2e</sub> per £m income</b>	30.97	30.55	29.90	32.01

**13. External Assurance Statement**

The Council has not received independent external assurance over our reported emissions.

**14. Carbon Offsetting**

The Council has not purchased any carbon offsets

**15. Green Tariffs**

The Council purchases green energy for the majority of its sites from EDF Energy 100% Renewable.

**16. Electricity Generation**

The Council began a programme of installing solar PV in 2011 and this year generated a total of 321MWh across 15 sites. No additional generation sites were commissioned during this period, the next additional site will be at Lakeside Country Park.

	2015/16	2014/15	2013/14	2012/13
<b>kWh Consumed on site</b>	170,719	169,248	131,993	98,534
<b>kWh Exported</b>	149,856	152,807	98,190	61,792
<b>Total Generated</b>	<b>320,575</b>	<b>322,055</b>	<b>230,183</b>	<b>160,326</b>

**17. Heat Generation**

The Council operates one biomass boiler which due to government guidance should be reported outside of scope. All figures are measured in tCO<sub>2e</sub>.

	2015/16	2014/15	2013/14	2012/13
<b>Biomass (Pellets) tCO<sub>2e</sub></b>	8.67	11.51	13.19	3.30

**18. Future Direction of Energy Management**

The Council has successfully reduced its GHG emissions by 27%, this is despite new buildings and activities being included in recent calculations. The Council is embarking on a wide range of activities over the next 5 years aimed at further reducing emissions and

operational costs. These include the following:

**19. Fleming Park District Energy Scheme**

The Council is building a new Energy Centre on the Fleming Park Leisure Centre site comprising of a natural gas powered Combined Heat & Power engine. It will provide low carbon electricity and heat to the leisure centre and heat to the Civic Office redevelopment site and be offered to the existing Holiday Inn & Hampshire Fire & Rescue Service.

**20. Ageas Bowl District Energy Scheme**

The area around the Ageas Bowl is undergoing a feasibility study to determine the potential for a District Heating Scheme. It could supply low carbon electricity and heat to commercial and residential locations.

**21. Energy Monitoring System**

The Council is implementing an Energy Monitoring System across the Council's property portfolio. It will monitor electricity, gas, water, PV, heat generation and biomass. The knowledge it gives us will allow targeting of energy saving schemes and alert us when unusual usage occurs.