



Annual Greenhouse Gas Emissions Report, 2015-16

1.0 Introduction

This report gives the annual summary of emissions of greenhouse gases (GHG) from East Sussex County Council's (ESCC) estate and transport operations, measured as carbon dioxide equivalent (CO₂e) emissions. The report follows guidance from the Department of Food, Environment and Rural Affairs (DEFRA) on how we should measure and report on these emissions.

2.0 Base year recalculation

In order to allow meaningful year-on-year comparisons, our policy is to recalculate base year emissions and prior year emissions where structural changes meet or exceed our significance threshold of 5% of total base year emissions. Changes to the estate in 2015/16 did not meet the significance threshold, so no base year recalculation has been carried for this report.

3.0 CO₂e Emissions

3.1 Performance against target

Table 1 below presents a summary breakdown of CO₂ equivalent (t CO₂e) emissions for 2008/09 (base year), and 2013/14 to 2014/15. ESCC has achieved a 11.7% reduction in emissions in 2015/16 compared with the prior year, versus a target of a 3% annual reduction; and a 30.0% reduction compared to emissions in 2008/9. For more information on what these figures include please see Section 4.5.

Table 1 ESCC CO₂ emissions summary for 2008/09, and 2013/14 to 2015/16 in t CO₂e.

	2008/09	2013/14	2014/15	2015/16
Scope 1 Emissions	10,573	9,913	7,892	6,900
Scope 2 Emissions	21,216	16,710	17,390	15,279
Scope 3 Emissions	4,222	3,559	3,247	3,025
TOTAL GROSS EMISSIONS	36,012	30,183	28,529	25,203

3.2 Approach to reducing CO₂e emissions

ESCC has an ongoing energy management programme aimed towards reducing the carbon emissions from its various functions. The types of projects that contributed to a reduction in carbon emissions in 2015/16 included:

- County Hall improvements including:
 - energy efficient boilers
 - internal and external lighting
 - double glazed windows
 - cavity wall insulation
 - solar PV
- Internal and external lighting upgrades
- Loft insulation
- Cavity wall insulation
- Improved boiler controls
- Solar PV
- Energy awareness workshops for schools
- Good housekeeping
- Monitoring and targeting

Other factors that affected carbon emissions are estates openings and closures and the weather, which was colder in 2015/16 than the prior year.

In order to further reduce carbon emissions, we will continue identify and carry out energy efficiency projects in 2016/17.

4.0 Other and Supporting Information

4.1 Organisation Information

For information on the services that ESCC provides and is responsible for delivering and how we are organised and managed, please refer to our [website](#).

4.2 Reporting Period

This report covers the period from 1st April 2015 to 31st March 2016. Our base year is 2008/09, which was originally chosen as our base year as it was used for previous national indicator NI185.

4.3 Organisational Boundary

We are defining our organisational boundary via the equity share approach. Although we have 100% equity in the majority of our estate, there are some buildings where we are not in full control of

operations but are still responsible for paying a proportion of the energy bills, e.g. some leisure centres. Adjustments have been made to these figures during the calculation phase, to take account of the portion for which we are responsible.

4.4 Geographical Boundary

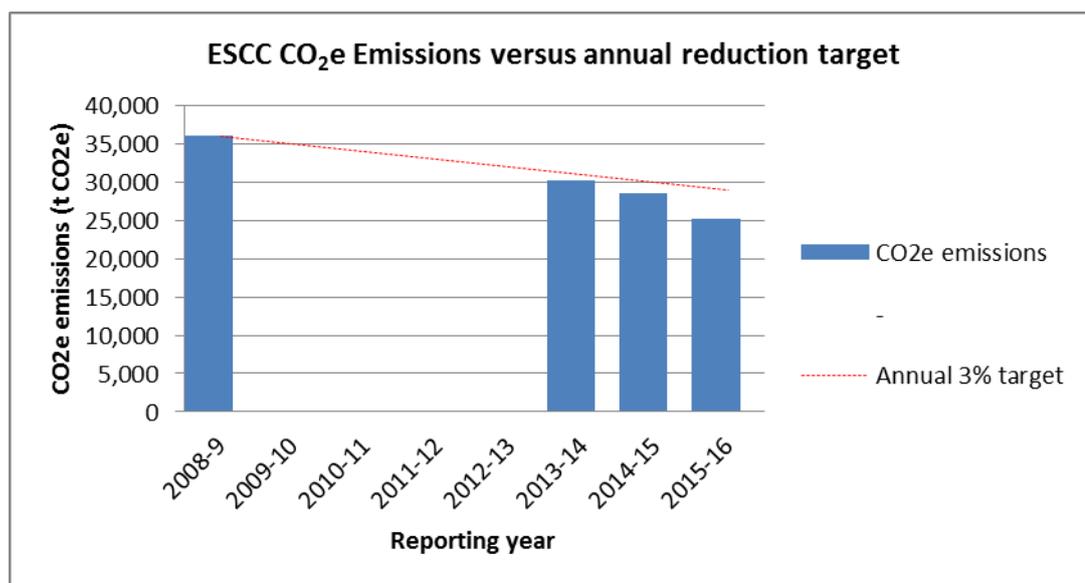
All of ESCC's operations are carried out within the UK.

4.5 Operational Boundary

Table 2 on the following page shows what we have included and excluded from our reporting in 2015/16. We have used the 2015 conversion factors, published by DBEIS, available [here](#).

4.6 Our Goals

Our target is to reduce CO₂e emissions by 3% per annum against the previous year's emissions. The overall goal of this yearly target is to contribute in line with the national target of an 80% reduction on 1990 levels of carbon emissions by 2050. Our progress against this goal is shown in the graph below.



Our goal is embedded in Principle 3 of our Corporate Property Asset Plan (available [here](#)) and contributes to one of the Council's four priorities: making best use of our resources. We do this through carrying out a number of efficiency improvements each year and promoting good energy housekeeping and awareness.

Table 2 Operational scope for emissions reported in 2014/15.

	Emissions Included (t CO2e)	Explanation
Scope 1		
Gas Consumption	5,287	All natural gas used in ESCC buildings or those which we occupy to which ESCC is the counter party to the energy bill, including schools, properties closed and sold in 2015-16 and our portion of shared use.
Gas Oil, Burning Oil and Propane Consumption	1,304	All gas oil, burning oil and propane used in ESCC buildings or those which we occupy to which ESCC is the counter party to the energy bill, including schools, properties closed and sold in 2015-16 and our portion of shared use.
Owned Transport	308	All core fleet owned and operated by ESCC.
Process Emissions	n/a	Excluded as not applicable to ESCC activities.
Fugitive Emissions	n/a	Excluded due to cost of data collection.
Total Scope 1	6,900	
Scope 2		
Purchased Electricity	15,279	All purchased electricity used in ESCC buildings or those which we occupy to which ESCC is the counter party to the energy bill, including schools, properties closed and sold in 2015-16 and our portion of shared use. Including street lighting and traffic signals.
Total Scope 2	15,279	
Scope 3		
Transmission and Distribution	1,262	Transmission and distribution loss associated with all purchased electricity
Business Travel	1,763	All mileage claimed in private or leased vehicles, but excludes public transport and taxis, as below.
Employee Commuting	n/a	Excluded due to lack of data accuracy.
Waste Disposal	n/a	Excluded due to lack of data accuracy.
Product in Use	n/a	Excluded due to cost of data collection.
Supply Chain	n/a	Excluded due to cost of data collection and lack of data available from many vendors.
Total Scope 3	3,025	
GRAND TOTAL	25,203	

4.7 Alterations to Previous Figures

This year we made an adjustment to previous emissions figures for delivered fuels due to the wrong conversion factors being applied in previous reports. No other alterations have been made to previous figures.

4.8 Intensity Measurement

As recommended by the Carbon Trust, we divide our total emissions by our annual net revenue expenditure to give a carbon intensity measurement for comparison between years and other public sector organisations.

With a net expenditure of £370.2m and emissions of 25,023 t CO₂e, our intensity measurement for 2015/16 is 67.6 t CO₂e per £million. This is a decrease of 11.0% on 2014/15, when we recorded 76.3 t CO₂e per £million.

Table 3 shows how our carbon intensity has changed since the prior year and base year; we have made some corrections to the figures previously published in relation to our carbon intensity, the most up to date ones are shown below. These include adjustments to the emissions as explained in Section 4.7.

Table 3. Carbon intensity summary, 2008/09, 2013/14 and 2014/15.

	2008/09	2013/14	2014/15	2015/16
Emissions (t CO₂e)	36,012	30,183	28,529	25,023
Net Revenue Budget (£m)	314.4	379.6	373.8	370.2
Carbon Intensity	114.5	79.5	76.3	67.6
Change on Prior Year	n/a	n/a	-4%	-11%
Change on Base Year	n/a	-30.6%	-33.4%	-41.0%

4.9 Carbon Offsets

We have not purchased carbon offsets, as it is not part of our policy to reduce our emissions in this manner.

4.10 Renewable Generation

Some of our sites benefit from onsite renewable generation, in the form of solar thermal, solar photovoltaic and biomass boilers for example and these will continue to play an increasing and important role in years to come to help us reduce our CO₂ emissions further.

4.11 Limitations

We have automatic meters installed across most of our estate which allows us to report with a high level of accuracy on most of our CO₂ emissions. Street lighting consumption is unmetered and the local distribution network allocates our usage based on the information we submit to them on our street

lighting stock. At this time, we do not hold any information on combusted biofuel as the purchasing of the fuel is delegated to individual sites and so we lack sufficient data to report. Our data on solar PV generation, particularly on schools, is also limited.

We have made the best efforts to report on our emissions using the data we have available at this time and, although we are confident in the quality of the data that we hold, there will always be scope for further improvement and adjustment in years to come and we will continue to look to achieve this.