

**Royal Borough of Greenwich  
Greenhouse Gas Emissions Report  
2016-2017**

## I. Summary Report

Greenhouse gas emissions (CO<sub>2</sub>e) data for period 1 April 2016 to 31 March 2017:

	2016-2017	2015-2016	% change (previous year)	Base Year 2009-2010	% change (base year)
Scope 1 (Gas and Fuel)	13,420	13,543	-0.91%	19,503	-31.19%
Scope 2 (Electricity)	15,487	19,310	-19.80%	23,344	-33.66%
Scope 3 (Business Travel)	266	284	-6.34%	385	-30.91%
<b>Total Gross Emissions (tCO<sub>2</sub>e)</b>	<b>29,173</b>	<b>33,138</b>	<b>-11.97%</b>	<b>43,232</b>	<b>-32.52%</b>
Carbon Offsets	0	0		0	
Total net revenue expenditure £M	96	122.8	-21.82%	276.1	-65.44%
<b>Total Annual Net Emissions (tCO<sub>2</sub>e)</b>	<b>29,173</b>	<b>33,138</b>	<b>-11.97%</b>	<b>43,232</b>	<b>-32.52%</b>
<b>Intensity measurement<sup>1</sup></b>	<b>304</b>	<b>270</b>	<b>+12.60%</b>	<b>157</b>	<b>+93.63%</b>

Table 1: Summary of GHG Emissions 2016-2017

<sup>1</sup> tonnes CO<sub>2</sub>e per £million net revenue expenditure

## 2. Supporting Information

### 2.1 Organisation Information

The Royal Borough of Greenwich (RBG) is required to report on greenhouse gas (GHG) emissions emitted by buildings and activities in compliance with the Department for Environment, Food and Rural Affairs (DEFRA) regulations for all Local Authorities in the UK. The Council must include emissions from Scopes 1 & 2 activities in the report as mandatory, and has chosen to voluntarily include the optional emissions from business travel in Scope 3.

The Royal Borough of Greenwich was created by the London Government Act 1963 and was bestowed Royal status by the Letters Patent dated 3 February 2012. The Royal Borough can be contacted at the Town Hall, Wellington Street, Woolwich, London, SE18 6PW.

### 2.2 Reporting Period

This report is for the period 1 April 2016 to 31 March 2017. The RBG reported 448 electricity supplies and 212 gas supplies with the total greenhouse gas emissions for 2016-2017 calculated as 29,131 tCO<sub>2</sub>e.

### 2.3 Changes in Emissions

The Royal Borough's greenhouse gas emissions for 2016-2017 are 32.52% lower than the base year 2009-2010 and an 11.97% decrease from the last reporting year (Table 1).

The reduction in emissions from the previous year, are mostly attributed to a reduction in energy consumption and the continued decarbonisation of the electricity network.

### 2.4 Approach

The Royal Borough has followed the Government's guidance on how to measure and report greenhouse gas emissions.

We have used data gathered to fulfil our requirements under the CRC Energy Efficiency scheme, and emission factors from UK Government's 2016 GHG Conversion Factors for Company Reporting.

Greenhouse Gas Reporting is similar to the scope of the Carbon Reduction Commitment (CRC) Energy Efficiency Scheme but there are some differences to be noted:

- The CRC report only requires electricity and gas supplies. The GHG report includes other fuels such as petrol, diesel and gas oil.
- The CRC does not report on gas supplies emitting less than 73,400 kWh. All gas supplies are included in GHG reporting.

- Scope 3 of GHG reporting includes reporting the indirect emissions from an organisation. RBG has defined Scope 3 as business travel and has included the emissions in this category.
- Emission factors in 2016/2017 for CRC and GHG are not the same due to differences in calculation methodologies between DEFRA and the Department for Business, Enterprise and Industrial Strategy (BEIS), the two government departments responsible for GHG and CRC.

## 2.5 Organisational Boundary

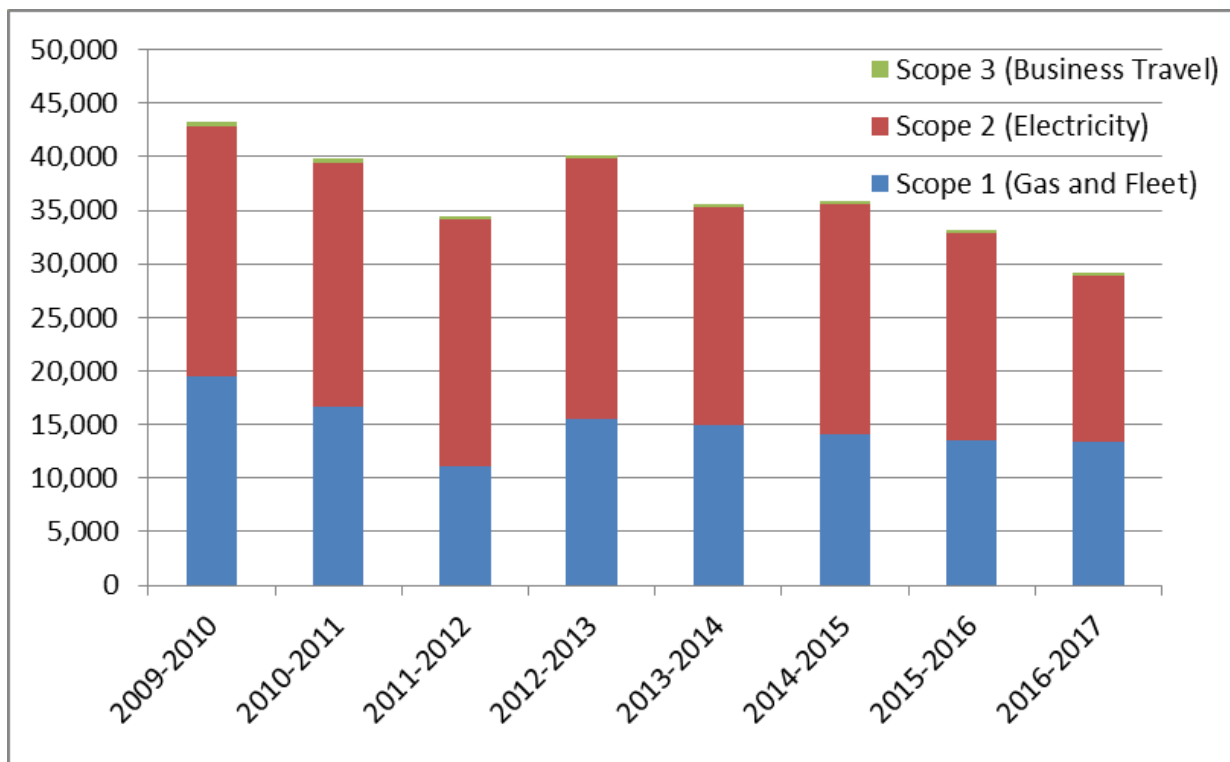
The Royal Borough has used the financial control approach as recommended in the Government guidance on how to measure and report greenhouse gas emissions. The Royal Borough has excluded domestic sources as well as outsourced services. In 2016-2017 there was a reduction in the number of energy supplies within the scope of this boundary to 660 (448 electricity and 212 gas) from 705 (448 electricity and 257 gas).

## 2.6 Operational Scopes

The Royal Borough has measured emissions from Scopes 1 and 2 as well as business travel for Scope 3 (Table 2). The Royal Borough has not reported fugitive emissions from air conditioning and refrigeration units in buildings due to the cost of data collection. These are estimated to be less than 0.5% of the Scope 1 emissions.

GHG emissions in tonnes of CO <sub>2</sub> e	2016-2017	2015-2016	Base Year 2009-2010
<b>Scope 1 (Direct Emissions)</b>			
Gas Consumption	9,765	9,871	15,765
Owned Transport	3,457	3,476	3,173
Gas Oil for Heating	0	0	307
Plant and Machinery	193	197	258
<b>Total Scope 1</b>	<b>13,420</b>	<b>13,543</b>	<b>19,503</b>
<b>Scope 2 (Indirect Emissions)</b>			
Purchased Electricity	15,487	19,310	23,344
<b>Total Scope 2</b>	<b>15,487</b>	<b>19,310</b>	<b>24,349</b>
<b>Scope 3 (Other Indirect Emissions) Included</b>			
Business Travel	266	284	385
<b>Total Scope 3 Included</b>	<b>266</b>	<b>284</b>	<b>385</b>

Table 2: Breakdown of GHG Emissions 2016-2017



**Figure 1: Council GHG Emissions over time with breakdown by scope**

## 2.7 Geographic Breakdown

All of the GHG emissions reported by The Royal Borough are attributed to activities in England.

## 2.8 Base Year

The Royal Borough's base year is 2009-2010 for which a fixed base year approach was taken in accordance with Government guidance on how to measure and report your greenhouse gas emissions.

The Royal Borough has a base year recalculation policy. The policy is to recalculate annual emissions for relevant significant changes that meet the significance threshold. The significance threshold is 2% of the total base year emissions. This means that if a building or service ceases to be under the Royal Borough's financial control, and the emissions from that building or service accounted for more than 2% of the Royal Borough's base year emissions, the base year and every subsequent reporting year will be recalculated.

## 2.9 Data Analysis

There was a decrease of 3,965t CO<sub>2</sub>e in 2016-2017 compared to the last reporting year.

Emissions associated with gas consumption and fleet usage (Scope 1) have decreased by 123t CO<sub>2</sub>e on the previous reporting year.

Emissions associated with electricity consumption, which was reported under Scope 2 of the GHG reporting, has reduced by 3,823t CO<sub>2</sub>e on the previous reporting year.

Scope 3 Emissions from business travel by the RBG have been in decline since the base year, in 2016-2017, a further decrease of 18t CO<sub>2</sub>e is observed since the previous reporting year.

## 2.10 Targets

The Royal Borough's emission reduction target was to reduce GHG emissions (including Scopes 1, 2 and 3) by 25% by 2015 on a baseline year of 2009-2010. In 2015, RBG had reduced GHG emissions by 20.8% on baseline – below the target of a 25% reduction.

Since 2015, activity has continued to target additional GHG emission reductions and in 2017, The Royal Borough can report a 32.5% reduction in CO<sub>2</sub>e emissions on baseline.

Pippa Hack, Director of Regeneration Enterprise and Skills, and Tim Jackson, Deputy Director Regeneration, are responsible for the achievement of the target.

## 2.11 Intensity Measurement

The Royal Borough uses tonnes of CO<sub>2</sub>e per million £ of net revenue expenditure as an intensity measure. In 2016-2017, the intensity measurement is 304. This represents a 12.6% increase on the previous reporting year and a 93.6% increase on baseline.

## 2.12 External Assurance Statement

The Royal Borough has not commissioned an external assurance statement.

## 2.13 Carbon Offsets

The Royal Borough has not purchased carbon credits for its 2015-2016 emissions.

## 2.14 Electricity

In 2016-2017, the Royal Borough purchased green electricity for all supplies with NPower and all quarterly billed supplies with EDF. This represented 10,734 tonnes of CO<sub>2</sub>e or 39% of the total 2016-2017 emissions.

In 2016-2017, the Royal Borough generated 68,507 kWh of electricity from owned or controlled sources on site that we are actively monitoring. These are generated from nine sites across the borough.<sup>2</sup> The Royal Borough has not exported any generated electricity to the grid.

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<sup>2</sup> Mandella House, Icough Court, Collierston House, Selcroft House, 40 Little Heath, Ospringe, Court, Lydden Court, Brookes Close and the Woolwich Centre.

## 2.15 Heat Generation

The Royal Borough has not generated any heat within the scope of this report.