# THE ROYAL BOROUGH OF KENSINGTON AND CHELSEA 2014/15 CARBON PERFORMANCE REPORT

#### **EXECUTIVE SUMMARY**

This report sets out a detailed account of the Council's performance in reducing its carbon emissions during the period April 2014 – March 2015. In line with its Climate Change Strategy, the Council has two targets, set for March 2020 and based on a 2007/08 baseline:

- Reduce carbon emissions from its operations by 40 per cent, with a second interim target of 30 per cent by March 2017.
- Achieve £7.8m cumulative financial savings from carbon reduction, with a second interim target of £3.9m by March 2017.

In 2014/15 the Council reduced its carbon emissions by 26.8 per cent (or 28.3 per cent when data is weather corrected) compared to 2007/08. This represents a reduction of 6,213 tonnes. The Council has reduced its carbon emissions by 6.2 per cent (5 per cent weather corrected) or 1,118 tonnes compared to 2013/14. The Council estimates that this reduction in energy and resource use represents a cumulative saving of approximately £3,649,000 since 2008/09.

The Council is now looking ahead to, and planning for, the 2016/17 interim target (see table one). With the progress made in the last few years and the projects currently being delivered, the Council will strive to achieve the 30 per cent carbon reduction target and the associated cumulative financial savings from energy/carbon reduction.

However, the Council is aware that the challenge is also wider than the scope of this report. For this reason it is investigating how to achieve more in the long run from its social housing stock, its regeneration programme and from other local partners, such as academies. This ambition is supported by the innovative 2016-2021 Air Quality and Climate Change Action Plan which is planned to be approved early 2016.

#### 1. Background

#### 1.1 Purpose of the Report

This paper gives Councillors, residents and council officers an annual update on the Council's progress in reducing the carbon use from its own operations and the financial savings made through this. Performance is measured against the Council's targets and plans originally defined in the 2009 Carbon Management Plan.

#### 1.2 Carbon Management Plan

The Carbon Management Plan (CMP), published by the Council in August 2009, is a key component in delivering the Council's Climate Change Strategy 2008-2015.

The CMP set out the Council's ambition to reduce carbon emissions from its own operations by 40 per cent by 2020 (see table one). It also states that the Council will establish a mechanism to continue reducing its carbon footprint beyond the 40 per cent target. The CMP was designed to be ambitious both in its wide scope and in its objectives. For example, the Council's main contractors, including the ones dealing with facility management, waste collection or the leisure centres, are included in the scope. In the recent years the scope has slightly reduced in size as academies have been taken out (see 2.1).

#### 1.3 Targets

The Royal Borough of Kensington and Chelsea wishes to be a leading local authority in carbon reduction and this is reflected in the ambitious targets it has set.

Target year	Туре	CO₂ saving target	Cumulative financial saving target
2013/14	Interim (achieved)	20 per cent	£1,500,000
2016/17	Interim	30 per cent	£3,900,000
2019/20	Final	40 per cent	£7,800,000

Table one – Interim and final targets. Please note assumptions are: energy prices increase based on an average 3 per cent RPI increase.

The Climate Change Programme works to deliver these targets and, where the opportunity exists, exceed them. In 2013/14 the Council over-achieved its first interim targets by reducing its carbon emissions by 22.0 per cent (or 24.6 per cent when data is weather corrected) compared to 2007/08. The Council also estimates that this reduction in energy and resource use represents a cumulative saving of approximately £2,255,000 since 2008/09.

Our estimates and assumptions are subject to external and internal uncertainties, which are difficult to predict and may be beyond the control of the Council. The Council can plan and attempt to anticipate future changes, but cannot give absolute assurance that our targets will be achieved.

The financial targets have been established to draw attention to the financial benefits of this programme of work. However, the high number of variables used to estimate the financial savings means that this forecast is indicative rather than cashable and should be read with caution.

In 2015/16, as in previous years, the Council will review the targets to ensure changes in the Council's strategic direction, and progress to date, are incorporated.

#### 1.4 Governance

The Climate Change Programme Board is made up of Project Executives with responsibility for the major areas of the Council's carbon emissions. The board has authority to make decisions and assign resources to identify opportunities to achieve the maximum possible carbon reduction. Its role is also to set up the direction for the long term and look for opportunities to influence beyond the scope of the CMP.

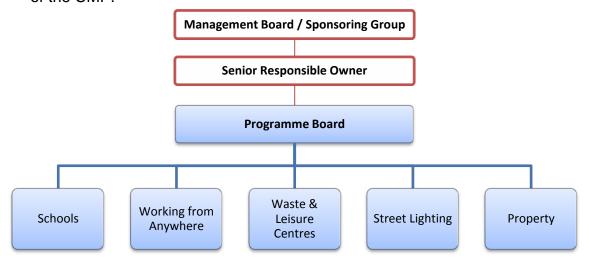


Figure one – Climate Change Governance

#### 2. Performance Overview

#### 2.1 Methodology and Previous Years' Revisions

Since 2012/13, the Council has presented both actual carbon and weather corrected carbon data. The weather correction methodology is used to compare the energy consumption of an organisation over time by adjusting the heating energy consumption to exclude the effect of variations in the external temperature, thus giving a better reflection of changes in underlying energy efficiency over time.

Where possible both actual and weather corrected emissions have been reported together. However, to ease the presentation, performance per area reported below (see 3.0 and Appendix A) is based on actual carbon emissions.

Please note that carbon emissions figures for previous years may be different to those included in historical Carbon Performance Reports. This is because revisions have been made to the scope of the CMP resulting in baseline adjustments, whilst some methodologies related to data collection and analysis have been improved. For example, schools attaining an academy status have been removed (academies are not within the scope of the CMP as they are outside the Council's control). Where changes to the CMP scope occur, the baseline is adjusted accordingly to ensure that results are not skewed.

#### 2.2 Performance Summary: Carbon

The Climate Change Programme and the Carbon Management Plan are now in their seventh year. Emissions have been reduced to roughly 16,929 tonnes of CO<sub>2</sub>, a 26.8 per cent actual reduction on 2007/08 levels (see figure two below).

Applying the weather correction methodology, carbon emissions were reduced to 16,590 tonnes of CO<sub>2</sub>, a reduction of 28.3 per cent on 2007/08 levels.

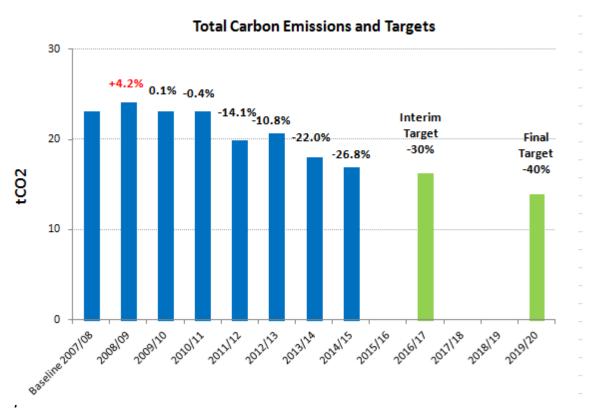


Figure two – Total actual carbon performance compared to baseline year of 2007/08 and future targets

#### 2.3 Performance Summary: Financial Savings

In 2013/14 the Council spent more than £3.8m on utilities (electricity, gas and water) and other resources (vehicle fuels and waste disposal). The Climate Change Team estimates that just over £1.3m was saved in 2014/15 by reducing overall resource use compared to the baseline year, some of which was attributable to contractors' efficiency improvements. Since 2009/10 the cumulative financial savings are estimated to £3.6m. It is worth noting that cost of electricity has risen by 27 per cent since 2008/09 from 8.2 p/kWh to 10.4 p/kWh whilst the cost of gas has reduced slightly from 3.85 p/kWh to 3.19 p/kWh. In addition the cost of CRC has increased from £12/t CO<sub>2</sub> to £16/t CO<sub>2</sub>, see section 6.2 for further information.

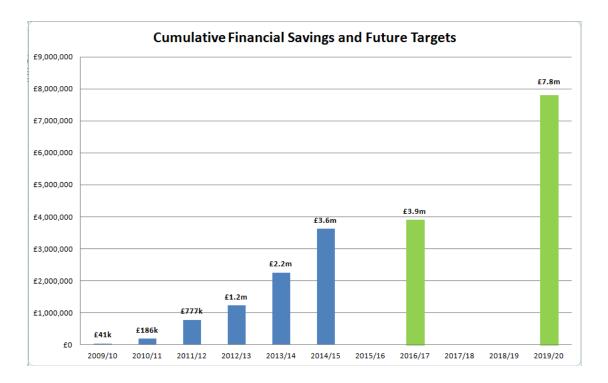


Figure three – The Council's estimated cumulative financial savings from carbon reduction

#### 3. Performance Per Area

Gas and electricity usage fell by 13.5 per cent and 2.2 per cent respectively in 2014/15 compared 2013/14 levels. Table two shows the 2014/15 performance (in actual carbon) compared to both the baseline year of 2007/08 and 2013/14 for each area. Please see Appendix A for a more detailed breakdown of each area. It also indicates the 2016/17 sub-targets agreed for each area. Future performance will be assessed against these targets.

Area	2014/15 Proportion (emissions in tonnes CO2)	Performance against 2013/14	Performance against baseline (2007/08)	2016/17 Sub-target against baseline (2007/08)
Property	49.61% (8,397)	-7.6%	-22.0%	-36.3%
Schools	19.52% (3,305)	-4.2%	-11.2%	-21%
Street Lighting	14.55% (2,464)	-6.4%	-27.2%	-30%
Leisure Centres (GLL) <sup>1</sup>	3.24% (549)	46.3%	-65.1%	-21.2%
Waste Collection (SITA)	5.15% (872)	-0.4%	-32.3%	-34.6%
Other Contractors	3.09% (524)	-30.7%	-34.7%	-32.0%
Transport	0.58% (98)	-5.8%	-45.3%	-46%
Waste	3.82% (648)	-5.7%	-52.0%	-53.1%
Water	0.43% (72)	-10.1%	-7.8%	-1.5%
Total	100.0% (16,929)	-6.20%	-26.8%	-32.0%

Table two – Actual carbon performance by area.

<sup>&</sup>lt;sup>1</sup> The emissions performance for Lesiure Centres (GLL) was impacted by the closure of Kensington Leisure Centre (KLC). Please see the information within Appendix A, Table Five: Greenwich Leisure Ltd for further information.

#### 4. Future outlook

#### 4.1 Within the Scope of the Carbon Management Performance

The Council and Programme are now shifting their focus towards the next interim targets of 30% carbon reduction and £3.9m cumulative savings, set for 2016/17.

More sites will be decommissioned in the next couple of years, in line with the Corporate Property Strategy, to rationalise the Council's stock. In the meantime new sites will be built, extended or largely refurbished. For these projects, energy efficiency will be, wherever possible, included from the design stage and impact on energy will be modelled and measured. Also, the facility management supplier has planned a vast energy efficiency programme of work for the three main sites to be completed by 2017, including the replacement of the boiler for the Town Hall.

The energy efficiency programme with schools will include the insulation of mechanical and electrical equipments and the installation of more LED lighting in schools. Finally particular attention will be given to the North Kensington Leisure Centre which opened in January 2015, to ensure that it achieves its planned BREEAM Excellent status by assuring the site maximises its energy saving design and equipment.

The Programme continues to work on improving the availability of energy and water data. It is the Programme's goal to make energy data for the Council's entire portfolio publically available online in order to improve transparency and to continue to demonstrate our commitment to driving carbon reduction. The Programme is considering reporting on its carbon intensity in addition to actual carbon emissions. Carbon intensity is the average carbon emission rate from a given source relative to the intensity of a specific activity; for example, tonnage of carbon dioxide released per pupil in a school or per number of officers working in a specific building. Using this approach would improve monitoring of the actual carbon released in perspective of a change in a specific activity (e.g. more pupils, less officers).

Additionally, the Programme Board places importance on the Council's influence on residents, businesses, partners and staff in combating climate change, along with prioritising that stakeholders are educated about climate change.

#### 4.2 Beyond the Scope of the Carbon Management Performance

Building on its current success, the Council and Programme are also investigating how to achieve more in the long run from its social housing stock, its regeneration programme and from other local partners, such as academies and social housing providers. This ambition is supported by the innovative 2016-2021 Air Quality and Climate Change Action Plan which is planned to be approved early 2016 but also takes into consideration the reduction in grants and funding made available by the Government.

RBKC housing stock managed by Kensington and Chelsea Tenant Management Organisation (KCTMO) is not part of the scope of the Council's CMP as the data

available for is not robust enough. However, it is estimated that the carbon emissions from the housing stock is about 31,000 tonnes compared to 18,570 tonnes from the other council's asset and activities. On average, the energy performance standard is relatively good in the housing stock (SAP rating of 72); however, significant discrepancies exist and a lot of the tenants still suffer from fuel poverty. As the Council has a great level of control over this asset and is at a time when long term decisions will be made, the Programme will be investigating how energy efficiency could be considered from the outset of the decision making process. There is a lot of evidence that a relatively modest additional investment in energy measures can generate long term benefits both financially and for the health and well being of the tenants.

Other regeneration projects for multifunction buildings, office buildings or schools will also be investigated when feasible. The Programme will also consider how to work more closely with local public sector partners and academies on this agenda.

#### 5. Carbon Offsetting

As the Council's energy contracts have not been changed since 2010/2011 the stance on carbon offsetting remains the same as the previous year. The Council has not yet considered offsetting its carbon emissions as the priority remains to deliver carbon savings in the Council's own operations.

#### 6. Other Reporting Requirements

#### 6.1 Greenhouse Gas (GHG) Emissions Report

The Government asked all local authorities to publish their GHG data. Historical GHG reports are published on the Council's website and an annual update is published in late summer/early autumn each year.

#### 6.2 Carbon Reduction Commitment (CRC) Reporting

The CRC Energy Efficiency Scheme is a mandatory scheme that requires large non-energy-intensive organisations in the public and private sectors to report their  $CO_2$  emissions and to buy  $CO_2$  allowances for the amount of the emissions reported. For the period 2014/15 (first year of the second CRC phase) the Council has reported 10,722 tCO2 at a cost circa £167,500 at an average cost of £15.6/tCO2

#### 7. Statement of Programme Board's Responsibility and Approval

The Climate Change Programme Board is responsible: for preparing the 2014/15 Carbon Performance Report; for selecting appropriate reporting policies; for making appropriate judgements and estimates; for presenting the information fairly and in accordance with the UK Climate Change Act 2008 regulation; and for maintaining records from which to prepare the report. This report has been approved by the Programme Board in September 2015.

Sue Harris Senior Responsible Owner for the Climate Change Programme

# Appendix A: Performance per area

The performance per area reported below is based on actual carbon emissions.

Table one: Energy in Property



		Baseline	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
I	tCO2	10,766	10,713	10,491	10,437	9,533	9,873	9,087	8,398
	%	-	-0.5%	-2.6%	-3.1%	-11.5%	-8.3%	-15.6%	-22.0%

Property	
Context	Approx. 110 sites – accounts for around 49.6 per cent of the Council's total emissions.
2014/15 Performance	<ul> <li>In 2014/15 a number of sites were decommissioned or leased out such as Piper House Residential Home, Isaac Newton PDC and Westway Information Centre.</li> <li>Electricity consumption decreased by 19.7 per cent compared to the baseline, and decreased 2.1 per cent compared to 2013/14.</li> <li>Gas consumption decreased by 29.8 per cent compared to the baseline, and 21.2 per cent compared to 2013/14.</li> </ul>
Plans for 2015/16 and further	<ul> <li>Strategic Asset Management continues to identify opportunities for better utilisation of our operational estate. More sites will be refurbished and decommissioned over the coming years.</li> <li>Opportunity to retrofit some corporate buildings with energy saving measures is under investigation.</li> <li>The Total Facilitates Management (TFM) supplier, Amey, have outlined projects for 2015/16 to reduce our electricity and gas consumption from the three main office buildings.</li> </ul>

### **Table two: Schools**



	Baseline	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
tCO2	3,722	3,949	3,945	3,805	3,213	3,948	3,450	3,305
%	-	6.1%	6.0%	2.2%	-13.7%	6.1%	-7.3%	-11.2%

Schools	
Context	<ul> <li>Account for 19.5 per cent of the Council's overall carbon emissions.</li> <li>There are 36 schools, of which four are nurseries, 28 are primary schools and four are secondary schools. Approximately half are community schools and half are diocese.</li> <li>Holland Park School, Middle Row Primary School, Cardinal Vaughan Memorial School and Parkwood Hall School have been removed from the scope of this report due to their Academy status.</li> </ul>
2014/15 Performance	<ul> <li>Electricity consumption decreased by 2.4 per cent compared to 2013/14 and 4.1 per cent compared to the baseline year.</li> <li>Gas consumption decreased by 6.1 per cent compared to 2013/14 and 17.9 per cent compared to the baseline year.</li> <li>The Programme has worked closely with schools to implement the insulation of mechanical and electrical (M&amp;E) equipments and the installation of LED lighting during 2014/15.</li> </ul>
Plans for 2015/16 and further	Key elements of the carbon plan for schools for 2015/16 are:  1) Accelerate the work with schools on LED and M&E insulation.  2) Continue to develop a borough wide network to underpin the energy efficiency work already implemented in schools.

**Table three: Street Lighting** 



	Baseline	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
tCO2	3,385	3,123	2,838	2,661	2,356	2,525	2,633	2,464
%	-	-7.7%	-16.2%	-21.4%	-30.4%	-25.4%	-22.2%	-27.2%

Street lighting	
Context	Accounts for 14.5 per cent of the Council's total carbon emissions.
2014/15 Performance	The decrease in 2014/15 included conversion of lanterns to LED flashing units and sign lights.
Plans for 2015/16 and further	<ul> <li>Planned projects for 2015/16 are predicted to reduce carbon emissions by approximately 51 tonnes.</li> <li>Projects include replacement of high consumption lights (Halogen, Sigh, Beacon and Cdott) to LED and high efficiency units.</li> </ul>

Table four: SITA



	Baseline	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
tCO2	1287	1292	1303	1216	1082	879	875	872
%	-	0.4%	1.2%	-5.5%	-15.9%	-31.7%	-32.0%	-32.3%

SITA (Waste o	SITA (Waste contractor)					
Context	<ul> <li>Accounts for 5.2 per cent of the Council's total carbon emissions (emissions from transport fuel use only).</li> <li>Electricity and gas consumption is included as part of the Council's property.</li> </ul>					
2014/15 Performance	All projects in the current carbon plan have been implemented.					

# Plans for 2015-2016 and further

- SITA continue to monitor and explore further options to continue reducing their carbon emissions.
- Options in discussion include changing fleet to more energy efficient vehicles (Euro 6) and changing collection times to take place during less busy periods of the day.
- At present, vehicle management systems are being constantly monitored and refined in order to maximise performance.

**Table five: Greenwich Leisure Ltd** 



	Baseline	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
tCO2	1,573	1,793	1,687	1,716	1,585	1,446	375	549
%	-	14.0%	7.3%	9.1%	0.8%	-8.0%	-76.1%	-65.1%

Greenwich Le	Greenwich Leisure Ltd's (GLL)						
Context	<ul> <li>Accounted for 3.2 per cent of the Council's total carbon emissions in 2014/15.</li> </ul>						
2014/15 Performance	<ul> <li>Kensington Leisure Centre (KLC) fully opened in January 2015 after its refurbishment from December 2012 until the end of 2014.</li> </ul>						
Plans for 2015/16 and further	<ul> <li>Data collected in 2015/16 will provide us with a complete year of energy usage since the reopening in January 2015.</li> <li>Thus 2015/16 data of KLC will result in a large rise in energy, and subsequently carbon use. The Programme will work with GLL to assess the impact of this.</li> <li>The Programme will work closely with GLL to ensure that a BREEAM Excellent rating, the second highest environmental assessment rating, is achieved.</li> </ul>						

**Table six: Other Carbon Contributors** 

	Baseline	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Contractors	802	786	886	996	851	815	756	524
%	-	-1.9%	10.5%	24.2%	6.1%	1.7%	-5.7%	-34.7%
Transport	179	152	123	115	104	105	104	98
%	-	-15.2%	-31.5%	-35.9%	-42.0%	-41.4%	-42.0%	-45.3%
Waste	1,350	2,211	1,655	2,031	1,074	958	687	648
%	-	63.9%	22.6%	50.5%	-20.4%	-29.0%	-49.1%	-52.0%
Water	79	91	86	80	84	83	81	72
%	-	15.7%	9.6%	1.4%	6.4%	6.2%	2.5%	-7.8%

## • Five additional contractors account for 3.1 per cent of the Council's Other contractors carbon emissions. All of our contractors have decreased their emissions from the baseline year; NSL-Parking services by 1.39 per cent, Ringway by 63 per cent and Quadron by 2.65 per cent. HCT's baseline year is 2010/11 and has reduced its emissions by 63.4 per cent by reducing its fleet and rerouting to be more efficient. • Changes from 2013/14 include: We are no longer reporting on Crystal Coaches. We are adding our contractor Amey's vehicle fleet to our scope. The Programme will work with all contractors and continue to address carbon use and reduction targets. • Transport accounts for 0.6 per cent of RBKC's total carbon **Transport** emissions. This includes the Council's fleet usage and grey fleet (staff mileage claims). Transport's financial contribution is much larger than its contribution to CO<sub>2</sub>. Grey fleet has decreased in line with budget cuts. The Programme is currently working closely with fleet managers to procure electric and hybrid vehicles. Waste (internal offices) accounts for 3.8 per cent of the Council Waste total carbon emissions. 2013/14 marked a change in methodology for calculating emissions from waste thanks to an improvement in data availability and quality after the Programme commissioned an internal waste audit. • Water accounts for a very small amount of our overall carbon Water emissions (approx 0.4 per cent), but for a much larger financial proportion. The quality and availability of water data has consistently improved since 2012 due to work conducted between the Council

and Thames Water. The Council intends to focus further on water
efficiency in the future.