# THE ROYAL BOROUGH OF KENSINGTON AND CHELSEA 2013/14 CARBON PERFORMANCE REPORT

The Council's Carbon Performance Report for 2013/14 marks an important milestone in our continued commitment to tackle climate change and reduce our environmental impact. Having initially adopted a Climate Change Strategy in 2008, the Council laid out a 12 year plan to reduce carbon emissions from its own operations by 40 per cent by 2020. This was intended to demonstrate an ambitious commitment to be a local authority that leads by example in carbon reduction and inspires our residents and businesses to do the same.

Now, six years on from the first Strategy and at the half way point of our journey, the Council has reached its first interim carbon reduction target of 20 per cent, set for March 2014. I am delighted to report that the Council has managed to reduce its carbon emissions by 21.6 per cent compared to the 2007/08 baseline. This reflects a coordinated and innovative approach from departments across the Council. Some fantastic projects have been completed over the past six years as the Council continues to lead by example, including a personal highlight – the installation of a 50kw solar panel installation on the roof of our Town Hall which saves the Council 30 tonnes of carbon annually!

This good work continues to support the Council's drive to reduce costs and the cumulative financial savings derived from carbon reduction, in excess of £2 million, are a substantial additional benefit. Congratulations to everyone that has contributed to these achievements as they represent a real team effort.

The Council however will not rest on its laurels and it is important to remember that this is just a start. Attention now shifts to the next interim carbon reduction target of 30 per cent, set for March 2017, and beyond to our final reduction target of 40 per cent, set for 2020. Achieving these targets represents a significant challenge and will require further hard work and collaboration across the Council. Officers will continue to work closely to forecast future emissions and identify opportunities to drive efficiencies from our operations. We are also thinking more broadly, aiming to be more ambitious within the community. As carbon emissions within the Royal Borough have remained relatively stable over the last few years, there's no doubt that the renewal of the Climate Change Strategy and the innovative approach to integrate it with our Air Quality Action Plan will demonstrate our ambition to reduce carbon emissions in the long run as well as addressing climate change adaptation in the shorter term.

The Council continues to work with the community to make the Royal Borough a cleaner, greener place to live and to lead by example by reporting on our own carbon reduction performance on an annual basis.

Cllr Tim Ahern

Cabinet Member for Environment



#### **EXECUTIVE SUMMARY**

This report sets out a detailed account of the Council's performance in reducing its carbon emissions during the period April 2013 – March 2014. In line with its Climate Change Strategy, the Council has two targets, **set for March 2020 and based on a 2007/2008 baseline**:

- Reduce carbon emissions from its operations by 40 per cent, with a first interim target of 20 per cent by March 2014.
- Achieve £7.8m cumulative financial savings from carbon reduction, with a first interim target of £1.5m by March 2014

In 2013/14 the Council reduced its carbon emissions by 21.6 per cent (or 24.3 per cent when data is weather corrected) compared to 2007/08. This represents a reduction of 5,303 tonnes. The Council has reduced its carbon emissions by 12.1 per cent (8.1 per cent weather corrected) or 2,627 tonnes compared to 2012/13. The Council estimates that this reduction in energy and resource use represents a cumulative saving of approximately £2,046,000 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 considering changes likely to occur in the next two years, such as the opening of the new North Kensington Leisure Centre, some challenges remain.

## 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 its carbon use 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 are included in the scope.

## 1.3 Targets

The Council set an ambitious target to reduce carbon emissions from its operations by 40 per cent by March 2020, from the 2007/2008 baseline level. This would result in cumulative financial savings of £7.8m (see table one).

Target year	Туре	CO <sub>2</sub> saving target	Cumulative financial saving target*
2013/14	Interim	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 will work to deliver these targets and, where the opportunity exists, exceed them. Achieving these targets will have an additional positive financial impact on Council's energy expenditure and on payment to the Carbon Reduction Commitment (CRC) scheme. 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. 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 2014/15, 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 directors and senior officers 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. The Climate Change Programme produces a carbon plan each year, which identifies approved and potential projects that should reduce emissions, and monitors the most significant projects.



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. In the past the same methodology has been used to correct carbon emissions for the Government Estate<sup>1</sup>. 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.

The Council continues to report actual carbon emissions for a sense of consistency with the annual Greenhouses Gas (GHG) emissions reporting. Where possible both actual and weather corrected emissions have been reported together. The performance per area reported below (see 3.0 and Appendix A) is also 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 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 sixth year. Emissions have been reduced to roughly 19,237 tonnes of CO<sub>2</sub>, a 21.6 per cent actual reduction on 2007/08 levels (see figure two below).

<sup>&</sup>lt;sup>1</sup> Commitment to reduce carbon emissions on the Government Estate by 10% - weather correction methodology. <a href="http://data.gov.uk/sites/default/files/10percent">http://data.gov.uk/sites/default/files/10percent</a> analysis methodology v5.pdf

Applying the weather correction methodology, carbon emissions were reduced to 18,575 tonnes of CO<sub>2</sub>, a reduction of 24.3 per cent on 2007/08 levels.

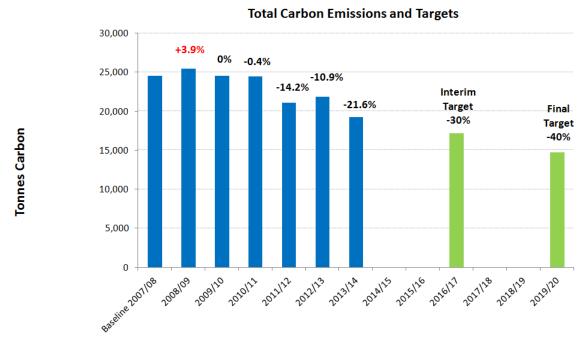


Figure two – Total actual carbon performance compared to baseline year of 2007/08 and future targets

#### 2.3 Performance Summary: Financial Savings

In 2013/14 the Council spent more than £3.5m on utilities (electricity, gas and water) and other resources (vehicle fuels and waste disposal). The reduction in our energy/resource use contributed to financial savings. The Climate Change Team estimates that just under £1m was saved in 2013/14 by reducing overall resource use compared to the baseline year, some of which was attributable to contractor's efficiency improvements. Since 2009/10 the cumulative financial savings are estimated to £2.05m. This includes over £24,000 in reduced payments to the CRC scheme (see 6.2). The cost of electricity has risen by 13 per cent since 2012/13 whilst the cost of gas has remained relatively constant.

#### **Cumulative Financial Savings and Future Targets**

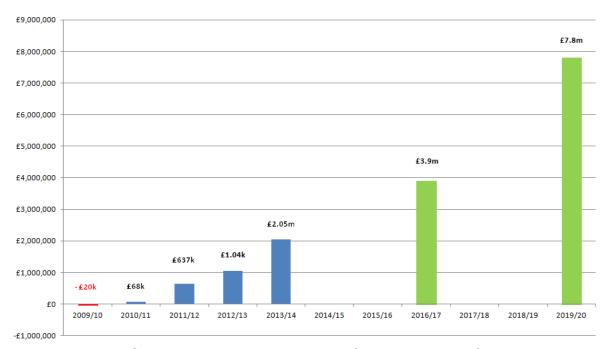


Figure three – The Council's estimated cumulative financial savings from carbon reduction

## 3. Performance per area

Gas and electricity usage fell by 24.5 per cent and 6.3 per cent respectively in 2013/14 compared 2012/13 levels. The significantly milder winter of 2013/14 played a role in the large fall in gas use.

Total actual carbon emissions fell by 12.1 per cent from 2012/13 levels whilst weather corrected carbon emissions fell by 8.1 per cent over the same period. Table two shows the 2013/14 performance (in actual carbon) compared to both the baseline year of 2007/08 and 2012/13 for each area. Please see Appendix A for a more detailed breakdown of each area.

Area	Proportion of 2013/14 Total	Performance against Baseline (2007/08)	Performance against 2012/13
	9,093 tonnes		
Property	(47.2 per cent)	-15.6 per cent	-8.0 per cent
	4,633 tonnes		
Schools	(24.1 per cent)	-9.5 per cent	-10.6 per cent
	2,633 tonnes		
Street Lighting	(13.7 per cent)	-22.2 per cent	4.3 per cent
	375 tonnes		
Leisure Centres	(2.0 per cent)	-76.1 per cent	-74.1 per cent

SITA (Waste	875 tonnes		
Contractor)	(4.6 per cent)	-32.0 per cent	-0.4 per cent
	756 tonnes		
Other Contractors	(3.9 per cent)	-5.7 per cent	-7.3 per cent
	104 tonnes		
Transport	(0.5 per cent)	-42.0 per cent	-1.0 per cent
	687 tonnes		
Waste	(3.6 per cent)	-49.1 per cent	-28.3 per cent
	81 tonnes		
Water	(0.4 per cent)	2.5 per cent	-3.5 per cent
	19,237 tonnes		
Total	(100 per cent)	-21.6 per cent	-12.0 per cent

Table two – Actual carbon performance by area. See appendix A for a more detailed breakdown of each area and an explanation for the street lighting/water increases.

#### 4. Future outlook

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

The Council's new facilities management service provider, Amey, will work with the Council to identify energy efficiency projects across key sites, such as Kensington Town Hall, in order to reduce our environmental impact and drive financial savings.

The Council continues to ensure all new developments or major refurbishments incorporate energy efficiency measures (e.g. double glazing, insulation, voltage optimisation, solar PV panels) into plans where appropriate. Late 2014 will see the delivery of a new Academy and Leisure Centre in the north of the Borough which will achieve the BREEAM Excellent standard. In 2014/15 we will need to demonstrate that sustainability and energy efficiency have been embedded from the design to the delivery of these new buildings.

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 continue demonstrating our commitment to driving carbon reduction.

The Programme is also working towards a sustainable procurement policy so that new and renewed contracts consider the environment footprint of procurement. It is also looking at a way to report the Council's emissions more accurately in light of some operations now merging with those of Westminster City Council and the London Borough of Hammersmith and Fulham.

# 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 legal requirement for all large UK organisations. The Council submitted its fourth annual CRC report and footprint report in July 2014. It reported 2013/14 emissions at 15,118 tCO $_2$ . The Council are required to purchase allowances to cover their emissions, one allowance per tonne of CO $_2$  reported. The cost per tonne of CO $_2$  is currently set at £12, but will rise in the future. The Council purchased £168,636 worth of credits to cover 14,503 tCO $_2$  with the remainder covered by credits carried over from previous years.

#### 7. Statement of Programme Board's responsibility and approval

The Climate Change Programme Board is responsible for preparing the 2013/14 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 was approved by the Programme Board in September 2014.



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** 

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Property	
Context	<ul> <li>Approx. 100 sites – accounts for around 47 per cent of the Council's total emissions</li> <li>Kensington Town Hall represents around half of emissions from Property</li> </ul>
Performance	<ul> <li>15.6 per cent reduction from the baseline</li> <li>In 2013/14 a number of sites were decommissioned or leased out, such as the Isaac Newton PDC (staff were relocated to the new Malton Road Hub). We will see the impacts of this in the 2014/15 energy data.</li> <li>Electricity consumption decreased by 17.3 per cent compared to the baseline, and decreased 6 per cent compared to the previous year 2012/13.</li> <li>Gas consumption decreased by 10.9 per cent compared to the baseline, and 12.2 per cent compared to the previous year 2012/13.</li> </ul>
Plans for 2014-2015 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. Staff from the Westway Information Centre and Oxford Gardens are likely to be relocated to Malton Road with these sites then leased out.</li> <li>Opportunity to retrofit some corporate buildings with energy saving measures is under investigation.</li> <li>The new Tri Borough Total Facilitates Management (TFM) supplier, Amey, will identify and deliver work to reduce our electricity, gas and water consumption. Amey have already outlined a project plan and work will begin imminently.</li> </ul>
Comments	<ul> <li>Significant progress has been made but the Programme will continue to work with Property and Amey to ensure the portfolio is managed and operated as efficiently as possible.</li> <li>Since 2011/12 the Property department is in charge of capital works for all Council's Properties including the leisure centres and schools.</li> <li>Since late 2013 Amey is in charge of providing facilities management for tri-borough</li> </ul>

**Table two: Schools** 

Schools	
Context	<ul> <li>Account for 24.1 per cent of the Council's overall carbon emissions</li> <li>There are 35 schools, of which four are nurseries, 28 are primary schools and three are secondary schools. Approximately half are</li> </ul>

	community schools and half diocese
Performance	<ul> <li>Overall emissions decreased 9.5 per cent from the baseline figure. In comparison to the previous year, 2012/13, schools' emissions decreased 10.6 per cent.</li> <li>Electricity consumption decreased by 1.5 per cent compared to 2012/13 and 1.9 per cent compared to the baseline year.</li> <li>Gas consumption decreased by 20.8 per cent compared to 2012/13 and 15.7 per cent compared to the baseline year.</li> </ul>
Plans for 2014-2015 and further	<ol> <li>Key elements of the carbon plan for schools for 2014/15 are:         <ol> <li>Continuing to work with schools to take them through the GLA's RE:FIT programme, ensuring implementation of energy efficiency measures</li> <li>Replicating the success of Carbon Countdown projects which have delivered reduction in energy use.</li> <li>Publicising the carbon reduction success with schools</li> <li>Providing eco-school training and developing a Borough wide network to underpin the energy efficiency work already implemented in schools</li> </ol> </li> </ol>
Comments	<ul> <li>Every school has different plant and equipment, different set ups and building conditions; implementing a bespoke approach has helped uncover and resolve some complex operating issues, and this in turn is leading to energy savings and improved efficiency.</li> <li>Money spent on implementing simple measures e.g. paying for flange &amp; valve insulation has encouraged schools to participate in other reduction measures.</li> <li>Focussing on gas use is likely to yield greater savings at present and it is able to be monitored readily.</li> <li>Issues in relation to AMR electricity data still exist and monitoring is only possible through manual readings or with installation of additional equipment (which is not always feasible).</li> <li>Diocesan schools rules on borrowing preclude them from receiving Salix interest free loans which makes participation in the RE:FIT programme reliant on capital funds being allocated from the Diocese.</li> <li>Holland Park School has been removed from the scope of this report due its new Academy status.</li> </ul>

# Table three: Street Lighting

Street lighting	
Context	Accounts for 13.7 per cent of the Council's total carbon emissions
Performance	<ul> <li>Emissions decreased by 22.2 per cent from 2007/2008 baseline.</li> <li>Emissions increased by 4.3 per cent from the previous year 2012/13.</li> </ul>
Plans for 2014-2015 and further	<ul> <li>Planned projects for 2014/15 are predicted to reduce carbon emissions by approximately 50 tonnes.</li> <li>LED retrofit gear trays will be trialled in Chelsea Coronet residential columns. If successful, then a wider roll out will follow in future years.</li> </ul>
Comments	<ul> <li>The increase from 2012/13 can be explained by:         <ul> <li>The coding of older equipment was reviewed and the energy consumption of some products was increased.</li> <li>The CRC criteria changed. To ensure the best value for the Council, we moved from dynamic to passive metering in the short term until new rules were clarified. This accounted for two to three per cent of emissions.</li> <li>A large private street signed a maintenance agreement with the Council. All of these assets were added to our scope.</li> <li>No two years are the same. Some fluctuations in consumption are natural and dictated by when street lights switch on and off, according to lighting conditions.</li> </ul> </li> <li>Projects during 2013/14 include conversion of lanterns to high efficiency units, LED flashing units and sign lights, introduction of Centre Island photocell control, and a new lighting scheme for Pont St.</li> </ul>

Table four: SITA

SITA (Waste o	contractor)
Context	<ul> <li>Accounts for 4.6 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>
Performance	<ul> <li>Emissions decreased by 32 per cent from 2007/2008 baseline.</li> <li>Emissions decreased by 0.4 per cent from the previous year 2012/13.</li> </ul>
Plans for 2014-2015	<ul> <li>All projects in the current carbon plan have been implemented.</li> <li>SITA will continue to monitor their performance in order to identify where rescheduling of collections could result in savings.</li> <li>The vehicle management systems are being constantly monitored and refined in order to maximise performance.</li> </ul>
Comments	In the past SITA have been supportive of the Council's desire to reduce carbon use. This is reflected by the substantial decrease

in emissions achieved since the baseline year.

• Previous projects have included rerouting collections, limiting the frequency of collections, installing on board vehicle management systems and procuring new vehicles with Euro 6 engines.

## **Table five: Greenwich Leisure Ltd**

GLL (Leisure centres contractor)		
Context	<ul> <li>Accounted for two per cent of the Council's total carbon emissions in 2013/14 (although it was over six per cent in 2012/13).</li> <li>Kensington Leisure Centre is under refurbishment from December 2012 until end of 2014 and thus has contributed zero emissions.</li> </ul>	
Performance	<ul> <li>Emissions decreased by 76.1 per cent from the baseline year.</li> <li>Emissions decreased by 74.1 per cent from 2012/13. The size of the reduction reflects the contribution which Kensington Leisure Centre makes to Greenwich Leisure Ltd's (GLL) total emissions.</li> </ul>	
Plans for 2014-2015	<ul> <li>The new North Kensington Leisure Centre (KLC) is to be delivered in early 2015. It is still on track to achieve BREEAM Excellent with various measures implemented to ensure energy efficiency is a priority. The reopening of KLC will result in a large rise in energy, and subsequently carbon, use.</li> <li>The re-furbished gym at Chelsea Sports Centre opened in mid 2014. The new gym is much larger than the previous one and membership is expected to rise. The Programme will work with GLL to assess the impact of this.</li> </ul>	
Comments	<ul> <li>The decrease is largely due to the refurbishment of the Kensington Leisure Centre and emissions will rise at its completion in early 2015.</li> <li>The new KLC will achieve BREEAM Excellent, the second highest environmental assessment rating. The Programme will work with GLL to ensure the new facility runs as efficiently as possible.</li> </ul>	

# **Table six: Other carbon contributors**

Other contractors	<ul> <li>Five additional contractors account for 3.9 per cent of the Council's carbon emissions</li> </ul>
	<ul> <li>Emissions from these contractors decreased by 5.7 per cent from the baseline 2007/2008, however one contractor Hackney Community Transport (HCT) was not included in the baseline year.</li> </ul>

- Emissions decreased by 7.3 per cent from the previous year 2012/13.
- Three contractors have decreased their emissions from the baseline year; Crystal Coaches by 46 per cent, NSL-Parking services by 9.75 per cent and Ringway by 40.6 per cent.
- HCT's baseline year is 2010/11 and has reduced its emissions by 25.7 per cent by reducing its fleet and rerouting to be more efficient.
- One contractor has increased its emissions from the baseline year; Quadron by 33.9 per cent. This is primarily due to an expansion in their operations. The Programme is working with Quadron to address carbon use and have together identified a range of measures which can be implemented in 2014/15 to address consumption.

## **Transport**

- Transport accounts for 0.5 per cent of RBKC's total carbon 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>
- Emissions have reduced by 42 per cent from 2007/2008 and decreased by 1 per cent from 2012/13.
- Grey fleet has decreased in line with budget cuts.

#### Waste

- Waste (internal offices) accounts for 3.6 per cent of the Council total carbon emissions.
- Carbon emissions have decreased significantly from the baseline year by 49.1 per cent and decreased from 2012/13 by 28.3 per cent.
- 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. The Programme will continue to use the new methodology in future and have set up measurement processes with the waste contractor SITA to maintain data quality and availability.

#### Water

- Water accounts for a very small amount of our overall carbon emissions (approx 0.4 per cent), but for a much larger financial proportion.
- Carbon emissions from water use have increased by 2.5 per cent from baseline but decreased by 3.5 per cent from 2012/13.
- 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.

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