

# CRC ENERGY EFFICIENCY SCHEME - PURCHASE OF CARBON ALLOWANCES FOR 2011/12

<b>Cabinet Member(s)</b>	Councillor Scott Seaman-Digby Councillor Jonathan Bianco
<b>Cabinet Portfolio(s)</b>	Co-ordination & Central Services Finance, Property and Business Services
<b>Officer Contact(s)</b>	Richard Coomber, Planning, Environment, Education and Community Services
<b>Papers with report</b>	None.

## **1. HEADLINE INFORMATION**

<b>Summary</b>	To advise Cabinet on the value of Allowances purchased from the Department of Energy and Climate Change (DECC) to cover energy emissions (tonnes of carbon dioxide) regulated by the Carbon Reduction Commitment (CRC) Energy Efficiency Scheme Legislation.
<b>Contribution to our plans and strategies</b>	Fulfil the Council's statutory obligations under the CRC Energy Efficiency Scheme
<b>Financial Cost</b>	The purchase of £298,860 for CRC Allowances was made in July 2012.
<b>Relevant Policy Overview Committee</b>	Residents & Environmental Services
<b>Ward(s) affected</b>	All

## **2. RECOMMENDATION**

That the Cabinet:

- 1) Notes the cost of £298,860 for the purchase of CRC Allowances following submission of the 2011-12 CRC Annual Report to the Environment Agency.
- 2) Notes that the Department of Energy and Climate Change (DECC) will publish its response to the CRC Simplification Consultation in the autumn.

### **Reasons for recommendation**

The purchase of CRC Allowances ensured that the Council complied with the following UK Legislation:

- The CRC Energy Efficiency Scheme Order 2010
- The CRC Energy Efficiency Scheme (Amendment) Order 2011
- The CRC Energy Efficiency Scheme (Allocation of Allowances for Payment) Regulations 2012

### Alternative options considered / risk management

The Council could have decided not to purchase and surrender allowances for its energy emissions (tonnes of carbon dioxide) regulated by CRC EES but would then be in breach of the CRC Order and could face fines from the Environment Agency of £40 per tonne of carbon dioxide – a potential fine of £1.2m. (CRC Order Article 100 ‘Failure to surrender allowances.’)

### Policy Overview Committee comments

None sought at this stage.

## **3. INFORMATION**

### Supporting Information

As advised in the report to Cabinet on 21<sup>st</sup> June 2012 participants in the CRC Energy Efficiency Scheme are required to produce an Annual Report on their emissions coverage and from the 2011/12 compliance year purchase allowances at a cost of £12 per tonne of carbon dioxide (tCO<sup>2</sup>).

London Borough of Hillingdon submitted its CRC Annual Report to the Environment Agency on 31<sup>st</sup> July 2012. The report details the Authority’s emissions coverage for gas and electricity supplies regulated by the CRC EES from the General Fund (GF), Maintained Schools and Academies and Housing Revenue Account (HRA) portfolio.

The reported emissions in kilo Watt hours (kWh)<sup>1</sup> and tonnes of carbon dioxide (tCO<sup>2</sup>)<sup>2</sup> are given in Table 1.0 below:

**Table 1.0 – CRC Annual Report 2011-12 Total Emissions**

Fuel	kWh	tCO <sup>2</sup>	% Emissions	£ Allowance Cost
Electricity	28,278,499	15,332	63%	£183,984
Gas	47,972,252	9,101	37%	£109,212
Total	76,250,751	24,433	100%	£293,196
Adjustment EGC	-14,922	-8		-£96
<b>CRC Emissions</b>	<b>76,235,829</b>	<b>24,425</b>		<b>£293,100</b>

<sup>1</sup> In the Annual Report Summary kWh figures are broken down by ‘Actual’ or ‘Estimated’ supply and by whether the Fuel source is defined as ‘Core’ or ‘Residual’. For clarity in this Report total kWh figures are presented for gas and electricity.

<sup>2</sup> tCO<sup>2</sup> figures in this report are as calculated in the CRC Registry and presented in the Annual Report Summary. The figures include an uplift of 10% for supplies classified as ‘estimated’ under the CRC rules. In the 2011-12 Annual Report 2% of electricity consumption and 33% of gas consumption was classed as estimated.

The CRC Registry adjusts reported emissions to account for energy generated from renewable sources that are not covered by Feed in Tariffs (FITs) or Renewable Obligation Certificates (ROCs). In 2011-12 the solar panels installed in the Civic Centre produced 14,922 kWh of electricity saving 8 tCO<sup>2</sup> and this amount is deducted as an Electricity Generating Credit (EGC) from reported emissions. **London Borough of Hillingdon's total CRC emissions for Annual Reporting year 2011/12 is therefore 24,425 tCO<sup>2</sup> or £293,100 in CRC Allowances.**

### **CRC Allowance Purchase 2011-12**

Table 1.1 summarises the CRC Allowances purchased from the Department of Energy and Climate Change (DECC) on 27<sup>th</sup> July 2012.

**Table 1.1 Summary of CRC Allowance Purchase**

<b>Allowance Type</b>	<b>Number Allowances</b>	<b>£ CRC Allowances</b>
CRC Emissions	24,425	£293,100
Contingency	480	£5,760
<b>Total</b>	<b>24,905</b>	<b>£298,860</b>

In total 24,905 Allowances at £12 per tonne of CO<sup>2</sup> were purchased to the value of £298,860. This amount is sufficient to cover Hillingdon's 2011-12 CRC Emissions (24,425 Allowances at a cost of £293,100). A contingency of 480 Allowances at a cost of £5,760 were also purchased to allow for any adjustments to the Annual Report made after the closure of the Allowance sale window on 31<sup>st</sup> July 2012 but before the Allowance surrender deadline of 28<sup>th</sup> September 2012.

### **Analysis**

The emissions coverage across the energy portfolio is as set out in the tables below. The figures are for reported emissions and do not take account of the adjustment for Electricity Generating Credits (EGCs)

**Table 1.2 Total Emissions 2011-12 (Gas & Electricity) by Portfolio Group**

<b>Group</b>	<b>kWh</b>	<b>tCO<sup>2</sup></b>	<b>% Emissions</b>	<b>£ CRC Allowances</b>
Academies	24,521,069	8,189	33.5%	£98,262
Maintained Schools	29,150,389	8,187	33.5%	£98,244
GF	20,802,715	7,502	30.7%	£90,029
HRA	1,776,578	555	2.3%	£6,660
<b>Total</b>	<b>76,250,751</b>	<b>24,433</b>	<b>100%</b>	<b>£293,196</b>

The table above highlights the significant contribution of schools to CRC emissions with 67% of emissions from the school sector. General Fund energy supplies account for the majority of the remaining 33% of emissions.

The tables below provide a further breakdown of emissions by Fuel type across the portfolio and explores further the differences between emissions reported in the 2010-11 Annual Report.

**Table 1.3 Electricity Emissions 2011-12**

Group	kWh	tCO <sup>2</sup>	% Electricity Emissions	£ CRC Allowances	% Total Emissions
Academies	10,033,761	5,440	35%	£65,281	22.3%
Maintained Schools	7,537,783	4,087	27%	£49,042	16.7%
GF	10,088,456	5,470	36%	£65,637	22.4%
HRA	618,499	335	2%	£4,024	1.4%
<b>Total</b>	<b>28,278,499</b>	<b>15,332</b>	<b>100%</b>	<b>£183,984</b>	<b>62.8%</b>

In the 2010-11 CRC Annual Report electricity consumption was 35,311,256 kWh. In 2011-12 electricity consumption has reduced by 20% to 28,278,499 kWh. The main reason for the reduction is the exclusion of a street lighting supply following a technical change that altered its CRC reporting status. Following advice from the London Energy Project (LEP) the supply was changed on 1<sup>st</sup> April 2011 from a Dynamic UMS (Un-Metered Supply) to a Passive UMS. Passive UMS supplies are excluded from CRC whilst Dynamic UMS supplies are reportable and subject to CRC Allowances. This supply consumed 7,282,692 kWh in 2011-12 equivalent to 3,940 tCO<sup>2</sup> and therefore its exclusion reduced the potential burden on the Council by £47,279 in CRC Allowances. A similar level of avoided costs should also be achieved in 2012-13 reporting year.

In real terms Electricity consumption has remained static between the 2010-11 and 2011-12 Annual Reports. If the consumption from the excluded street lighting supply were added back in the difference in figures would be less than 1%.

**Table 1.4 Gas Emissions 2011-12**

Group	kWh	tCO <sup>2</sup>	% Gas Emissions	£ CRC Allowances	% Total Emissions
Academies	14,487,308	2,748	30.2%	£32,981	11.2%
Maintained Schools	21,612,606	4,100	45.1%	£49,203	16.8%
GF	10,714,259	2,033	22.3%	£24,392	8.3%
HRA	1,158,079	220	2.4%	£2,636	0.9%
<b>Total</b>	<b>47,972,252</b>	<b>9,101</b>	<b>100%</b>	<b>£109,212</b>	<b>37.2%</b>

In the 2011-12 Annual Report Gas consumption of 47,972,252 kWh has reduced from the 2010-11 level of 58,380,114 kWh. The difference in consumption of 10,407,862 kWh equates to a reduction of 18%. The reduction translates to 1,911 tCO<sup>2</sup> or £22,931 in CRC Allowances.

Gas consumption is more sensitive to seasonal variances than electricity due to its primary use for heating systems. The reduction in gas consumption is seen to be a likely result of a milder winter in 2011-12 than in 2010-11.<sup>3</sup>

<sup>3</sup> Published data on Heating Degree Days for the Thames Valley Region (Watford Area) shows that for the period April 2010 to March 2011 there were 2,138 Heating Degree Days calculated from a base temperature of 15.5°C. For the period April 2011 to March 2012 the number of Heating Degree Days had fallen to 1,707 a reduction of 20%. Source <http://www.degreedaysforfree.co.uk/index.aspx>

## **CRC Consultation**

The Department of Energy and Climate Change (DECC) is due to publish its response on the CRC Simplification Consultation in the autumn. The consultation response will cover all aspects of the scheme including the future treatment of Academies in the CRC EES and alternative funding mechanisms for Academy CRC Allowances.

### **Financial Implications**

The main financial implications are set out in the body of the report.

As previously reported a provision of £362,000 was made in the accounts for 2011/12 for CRC Allowances which was based on estimates from accumulative data as at January 2012. The purchase of £298,860 for CRC Allowances was made in July 2012 consisting of £293,100 for reported emissions and a contingency of £5,760. The difference between the provision and the allowance purchase can be explained by the exclusion of a passive street lighting supply which had been included in the estimate and more generally what can be seen to be a reduction in gas consumption due to a milder winter than the previous year.

It should be noted that the allowance payment for schools both Maintained and Academy comes from a top slice of the Dedicated Schools Grant in accord with guidance from the Department for Education, and therefore is not a cost to the General Fund.

## **4. EFFECT ON RESIDENTS, SERVICE USERS & COMMUNITIES**

### **What will be the effect of the recommendation?**

The primary aim of the CRC EES is to promote energy efficiency and reduce CO2 emissions resulting in reduced fuel bills for the Council and reduced CRC allowances cost.

### **Consultation Carried Out or Required**

**None**

## **5. CORPORATE IMPLICATIONS**

### **Corporate Finance**

Corporate Finance has reviewed this report and concurs with the financial implications set out above, noting that the final purchase of CRC allowances was lower than the estimate reported to Cabinet on 21 June 2012 primarily due to the exemption of unmetered supplies from the CRC scheme.

This report indicates that a similar level of allowances will required for 2012/13, which would be contained within the contingency of £450k approved as part of the General Fund budget in February 2012. Officers will continue to monitor the requirement to draw down on this contingency and provide updates to Cabinet through the monthly budget monitoring report.

## **Legal**

The Borough Solicitor confirms that by purchasing the CRC Allowances from the Environment Agency, the Council is complying with its obligations under the CRC Energy Efficiency Scheme (Allocation of Allowances for Payment) Regulations 2012.

## **Corporate Property and Construction**

Corporate Property and Construction is in support of the recommendations contained in this report.

## **6. BACKGROUND PAPERS**

NIL