Report No.
ES12123

London Borough of Bromley

PART ONE - PUBLIC

Decision Maker:	**EXECUTIVE**
Date:	**28 November 2012**
Decision Type:	Non-Urgent Executive Non-Key
Title:	**CARBON REDUCTION COMMITMENT (CRC) SCHEME: 2011/12 ANNUAL REPORT**
Contact Officer:	Alastair Baillie, Environmental Development Manager Tel: 020 8313 4915 E-mail: Alastair.Baillie@bromley.gov.uk
Chief Officer:	Nigel Davies, Director of Environmental Services Mark Bowen, Director of Resources
Ward:	(All Wards);

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1. Reason for reports

1.1 The Executive was first informed of the Carbon Reduction Commitment scheme at its December 2009 meeting (ES09101). That report identified significant future financial liabilities and the Executive, therefore, requested that annual progress reports should be submitted to ensure it was kept informed about this significant corporate financial liability.

1.2 Since then, the Executive has received annual reports in 2009 (ES09101), 2010 (ES10189) and 2011 (ES12005). This report sets out activity undertaken during the second reporting year (2011/12), including the purchasing of carbon allowances to cover 2011/12's emissions.

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2. RECOMMENDATION(S)

That the Executive:

2.1 Endorses the need for sustained action to continue to improve data quality, and reduce energy use and carbon emissions, in order to reduce the Council's financial liabilities under the CRC scheme.

2.2 Receives a further annual report next year setting out scheme compliance, emissions and allowance costs for 2012/13 together with a four year forecast of the Council's financial liabilities.

Corporate Policy

1. Policy Status: Existing Policy
2. BBB Priority: Quality Environment

Financial

1. Cost of proposal: Estimated Cost £328k (2012/13)
2. Ongoing costs: Recurring Cost Rising to £436k (2013/14); £603k (2014/15); £750k (2015/16); and £755k (2016/17)
3. Budget head/performance centre: Central Contingency; Dedicated Schools Grant
4. Total current budget for this head: £366k (£166k Central Contingency + £200k DSG)
5. Source of funding: Central Contingency; Dedicated Schools Grant

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Staff

1. Number of staff (current and additional): 1 FTE
2. If from existing staff resources, number of staff hours:

Legal

1. Legal Requirement: Statutory Requirement
2. Call-in: Applicable

Customer Impact

1. Estimated number of users/beneficiaries (current and projected): N/A

Ward Councillor Views

1. Have Ward Councillors been asked for comments? Not Applicable
2. Summary of Ward Councillors comments: N/A

3. COMMENTARY

Background

3.1 The Carbon Reduction Commitment (CRC) Energy Efficiency Scheme remains fundamental to Central Government's strategy for delivering the carbon budget targets set out in the Climate Change Act 2008. The CRC is a statutory scheme covering organisations which use more than 6,000MWh of electricity annually. In practice, participants have to record and annually report on their carbon emissions (from 2010/11 onwards) and purchase sufficient carbon allowances to cover their emissions from 2011/12 onwards.

3.2 The CRC scheme is aimed at medium-sized, non-energy intensive, public and private sector organisations. Some 2,100 organisations (including all the London boroughs) participate, which together account for ~10% of the UK's carbon emissions.

3.3 The latest estimates ahead of the final figures (due December 2012) are that the scheme will raise around £700 million p.a. for the Treasury.

3.4 The scheme was first reported to the Executive in December 2009 (ES09101) and reports are now submitted annually to review the past year and to forecast future emissions and costs.

3.5 Because the Council already has an active Carbon Management Programme (Executive Report ES12122: November 2012), LB Bromley was in a good position to comply with the scheme - although in practice the scheme's complexity meant that considerable amounts of additional work were involved. The measures in the Carbon Management Programme are not only helping to reduce energy consumption and control costs but are also helping to limit CRC tax liabilities.

3.6 The CRC scheme requires carbon data to be accurately recorded and reported or civil penalties (fines) may apply. In addition, carbon allowances have to be purchased retrospectively to cover carbon emissions from Council operational property, schools and street lighting. In 2011/12 the Council's CRC carbon emissions were 23,235t and our current 2012/13 forecast is that LB Bromley will report 24,486t.

3.7 The CRC has already been changed from a 'cap and trade' scheme, to what is effectively a carbon tax. The scheme's future is currently being discussed by the government and while it is possible that it will be abolished, it is more likely that further changes will be made to simplify the scheme (an announcement is imminent).

3.8 Schools comprise the largest single element of the Council's carbon emissions. The Council is required to administer the scheme and to purchase allowances on behalf of both maintained and academy schools – though this is also subject to consultation and may change.

3.9 The scheme is regulated by the Environment Agency. In July 2012, LB Bromley submitted its second annual report and purchased carbon allowances for the first time. The Annual Report for 2011/12 reported 23,235t (23,002t Regulated Emissions plus an uplift for estimate data), which resulted in a carbon tax of £278,820.

3.10 In this Executive report, carbon dioxide emissions may be termed 'carbon,' 'emissions' or 'CO_2' for brevity, and are expressed in tonnes (t).

Scheme Timetable

3.11 The timetable below sets out the key dates for qualification, registration, reporting, allowance purchasing and league table publication.

Table 1: CRC Timeline

Qualification period for first phase opened	January 2008
Qualification period for first phase ended	December 2008
Registration for the first phase: 1 April 2010 – 30 September 2010	April-Sept 2010
Submit annual report for 2010/11	July 2011
Submit footprint report for 2010/11	July 2011
Publication of the first CRC performance league table	November 2011
Qualification period for the second phase of the CRC begins	April 2012
First retrospective sale of CRC allowances for 2011/12 emissions	June 2012
Submit annual report to EA for 2011/12	July 2012
Purchase allowances for 2011/12	July 2012
Surrender allowances for 2011/12	September 2012
Updated guidance qualification, registration, supply and organisational rules	September 2012
Government Response to DECC's Simplification consultation	Autumn 2012
Autumn Budget Statement (May cover the scheme's future and price of carbon)	December 2012
Publication of the second CRC performance league table	December 2012
Qualification period for the second phase of the CRC ends	March 2013
Registration for the second phase of the scheme – 1 April - 30 September 2013	April-Sept 2013
Second sale of CRC allowances for retrospective 2012/13 emissions	June 2013
Submit annual report to EA for 2012/13	July 2013
Purchase allowances for 2012/13	July 2013
Surrender allowances for 2012/13	September 2013

Environment Agency Reporting

3.12 In July 2012 LB Bromley reported its 2011/12 carbon emissions to the Environment Agency. This is the second reporting year and the first year for which full participants are required to purchase allowances (see section 5).

3.13 It should be noted that the carbon factors and scope used to define the Council's CRC emissions differ from those used for the Carbon Management Programme (see Executive Report E12122) and so direct comparisons are not possible.

2011/12 Annual Report

3.14 In the 2011/12 Annual Report, LB Bromley reported 23,235 tCO_2 and consequently was required to purchase and surrender £278,820 of CRC Allowances. This process is explained in more detail in Table 2 but in simple terms the process is as follows:

(a) Core Emissions from large gas and electricity meters are calculated and added to by …
(b) Emissions from other energy use until 90% of LBB's total emissions are covered;
(c) The amount of emissions which are deemed to have been estimated is then calculated;
(d) A 10% uplift (effectively a surcharge) is added (by the EA) to those emissions;
(e) The Council's CRC emissions are then finalised; and
(f) Allowances must be purchased and surrendered for every tonne of CRC Emissions

Table 2: 2010/11 and 2011/12 Annual Report comparisons

	Annual Report 2010/11	Annual Report 2011/12
Core Emissions (a) Emissions that LBB is obliged to include, such as those associated with large-consuming gas and electricity meters	29,380 tCO_2	19,554 tCO_2
Opted-In Residual Emissions (b) Residual Emissions are those from any energy supply other than Core supplies. LBB must 'opt-in' some residual sources until its combined CRC coverage is >90% of Total Footprint[i]	3,480 tCO_2	3,448 tCO_2
Estimated Emissions (c) Emissions from Core and Residual sources deemed to be estimated rather than actual (read)	4,476 tCO_2	2,366 tCO_2
Uplifted Emissions (d) 10% uplift penalty added to such Estimated Emissions	448 tCO_2	237 tCO_2
CRC Emissions (e) Emissions for which LBB must purchase allowances (Core + Opted in Residual + 10% uplifted Estimated Emissions)	33,308 tCO_2	23,235 tCO_2[ii]
CRC Allowance Cost (f) The cost of purchasing sufficient allowances to cover LBB's CRC Emissions (@ £12/ tCO_2)	N/A	£278,820

[i] *An organisation's total emissions after subtracting those from excluded activities or covered by other legislation.*
[ii] *Emissions totalled 23,239t but EA Registry rounds figures down to the nearest tonne and so 23,235t was reported*

3.15 In 2011/12, LB Bromley's emissions showed that academy schools were the largest sector (37%) followed by maintained schools (32%), then operational property (31%).

3.16 In July 2012 LB Bromley purchased allowances for 2011/12 emissions at a cost of £278,820.

Table 3: 2011/12 Carbon by Sector

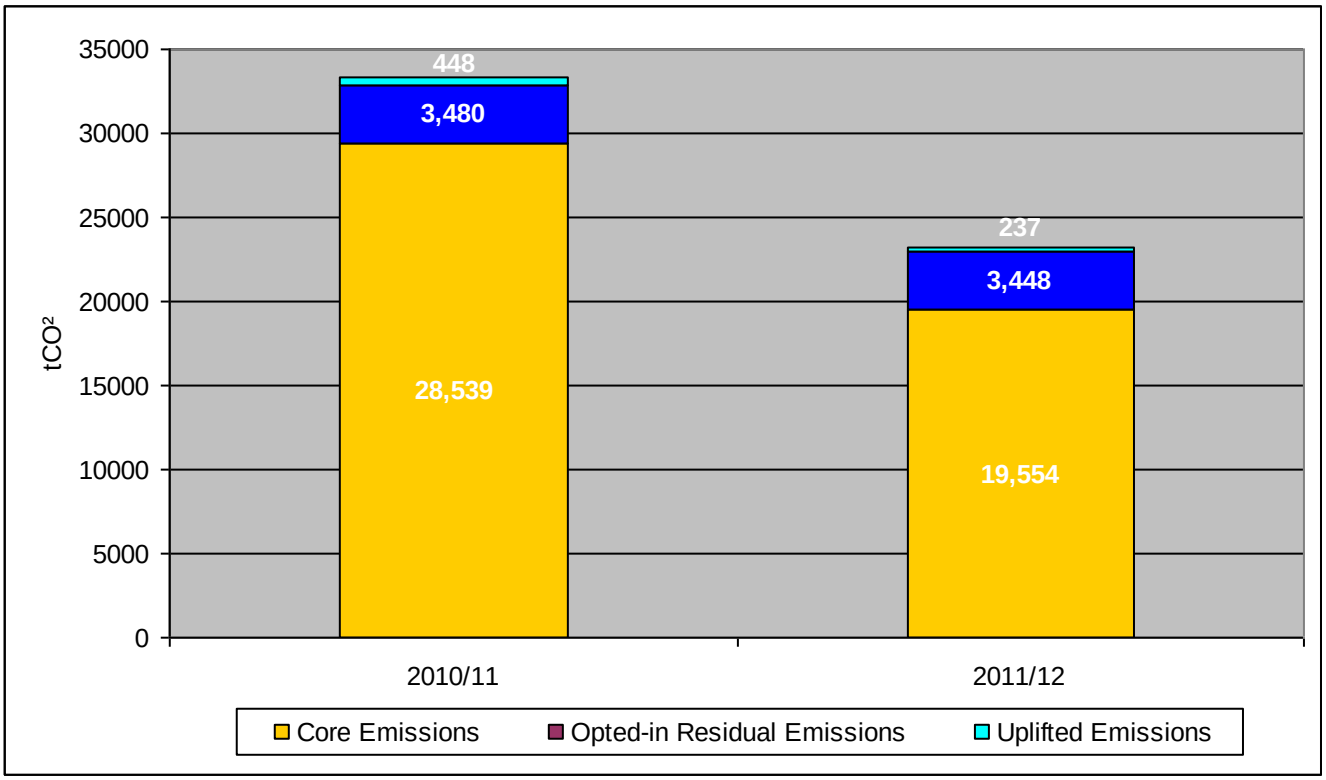
Sector	%	CRC Emissions (tCO_2)
Operational Properties	31.12%	7,158
LBB Maintained Schools	32.25%	7,417
Academy Schools	36.63%	8,427
Total CRC Emissions (excluding uplift[1])	100%	23,002

[1] NB the 10% uplift on estimated data is applied on a granular level (meter-by-meter) and is not represented in this table.

2010/11 and 2011/12 Comparisons

3.17 LB Bromley's CRC emissions decreased by 30% (10,069t) between our first (2010/11) and second (2011/12) reporting years. This is a positive outcome but was due, in large part, to the Council (in common with other London boroughs) excluding Street Lighting emissions (by changing from dynamic to passive procurement arrangements). This represents a significant financial saving for Phase 1 of the scheme but scheme rule changes mean that it is likely that such emissions will have to be paid for in Phase 2 (this has been accounted for in the forecast).

Figure 1: 2010/11 and 2011/12 Annual CRC Emissions Comparison



3.18 The 30% decrease in CRC emissions may be ascribed to a number of factors:

- By March 2011 all street lighting was converted from 'Dynamic' to 'Passive' supply. Dynamic supply is an inventory-based 'active' form of metering and billing energy for street lighting; it is included in the CRC. Passive supply is 'Non Half-Hourly unmetered supply' or 'passively metered Half-hourly traded' and is excluded from the CRC. This loop-hole in the CRC scheme resulted in an avoided annual cost of £68,382 in carbon allowances.
- 2011/12 was slightly milder than 2010/11, which means fewer carbon emissions resulting from heating. In 2010/11 there were 2,099 degree days compared to 1,819 heating degree days in 2011/12 (the colder the weather the greater the number of heating degree days).
- Several energy efficiency measures were carried out under the Carbon Management Programme, which also contributed to the decrease including:
  - Three new condensing boilers and a Building Management System (Civic Centre)
  - Decentralisation of hot water with the three direct-fired water heaters (Civic Centre)
  - Reduction in hot water temperature of Walnuts District Heating System
  - North Block being empty and unheated
  - Activities promoted by the Environmental Champions' Network (e.g. behaviour change)
  - Activities promoted by the Bromley Sustainable School Forum
  - Elements of the Planned maintenance programme (e.g. insulation work)
- As is evident, there was also less estimated data in 2011/12 due to better data processes (such as the Laser Bureau Service) and consequently a lower penalty associated with uplifted emissions. See section 3.24 for more details.

Resubmission of 2010/11 Data

3.19 It should be noted that 2010/11 data was resubmitted due to the scheme regulator (the Environment Agency) interpreting the legislation incorrectly. Subsequently LB Bromley had to recalculate and resubmit its 2010/11 report; the change added an additional six million kWh of gas to Bromley's core gas consumption (there was no 2010/11 financial implication).

Data Management

3.20 Since the scheme commenced in April 2010, LB Bromley's data quality has improved dramatically. This is mainly due to the Laser Bureau Service (LBS) which is vital to our ability to comply with the CRC scheme as it:

- hosts LB Bromley's carbon data
- provides a web portal to allow sites (including schools) to upload their data
- improves the accuracy of our Environment Agency reporting
- limits the amount of estimated data for which additional allowances have to be purchased
- outputs the Footprint and Annual Reports for submission to the Environment Agency

3.21 Gathering CRC data is a major undertaking: in 2011/12, LB Bromley reported on 688 gas and electricity meters located at 231 sites.

3.22 If LB Bromley had not used the LBS for its 2010/11 and 2011/12 CRC data, calculations show that 74% and 63% (respectively) of data would have been estimated resulting in £17,304 of uplift costs in 2011/12 (the actual cost was £2,844).

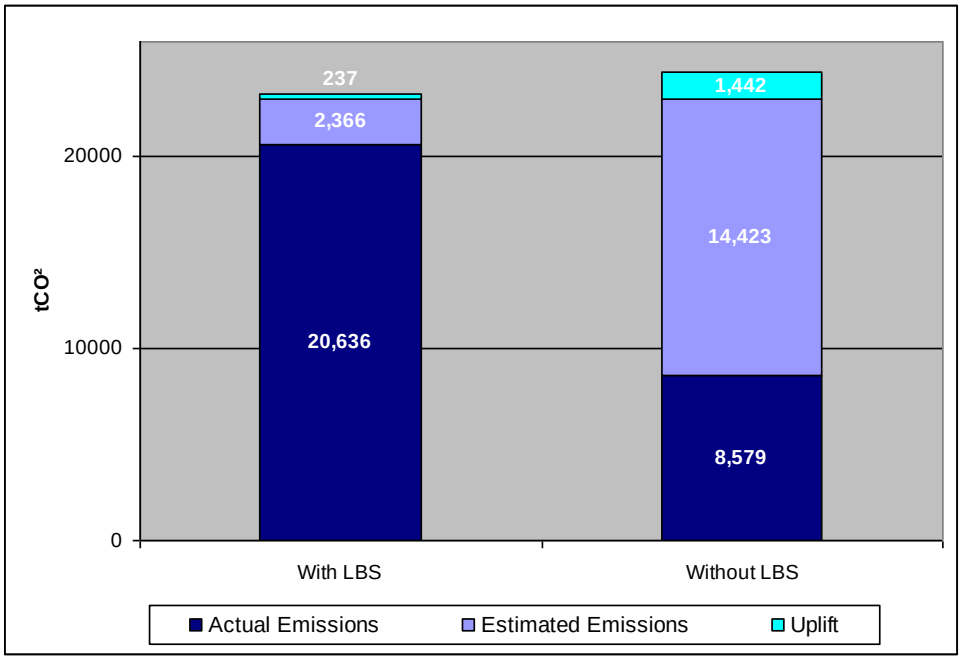
3.23 The LBS has ensured an avoided cost of £14,464 for 2011/12. Figure 2 shows the amount of estimated data with and without the LBS (i.e. if no action was taken to improve data).

3.24 In conjunction with the LBS, the Carbon Hub (C-Hub) was designed as a portal for exchange of information, queries and other issues relevant to the administration of the CRC. This is used between Laser and LB Bromley and ensures further accuracy of data.

Figure 2: 2011/12 CRC Data with and without LBS

	With LBS	Without LBS
Total Emissions (t)	23,002	23,002
Actual Emissions (t)	20,636	8,579
Estimated Emissions (t)	2,366	14,423
Estimated %	10%	63%
Uplift (t)	237	1,442
Uplift cost	**£2,844**	**£17,304**
CRC Emissions (t)	23,235*	24,444

** Emissions totalled 23,239t but EA rounds figures down and so 23,235t was reported*



Audit Assurance

3.25 Internal Audit: The Council (and all participants) is required to conduct an internal audit of its Evidence Pack and to produce an audit certificate.

3.26 LB Bromley's Evidence Pack is held on Onebromley, so it can be accessed by relevant officers from all departments and by the Environmental Management Programme Board.

3.27 The Council's Internal Audit team undertook this function as data and evidence was being gathered for the Evidence Pack, also conducting spot checks on data.

3.28 Their subsequent report confirmed that the structure, content and data within the Evidence Pack continued to be robust.

3.29 The report also acknowledged that the six key recommendations from the previous year's Internal Audit had been actioned:

- Making CRC scheme information available to the public
- Included a signed copy of the SLA with LASER in the evidence pack
- Including data on renewable energy in the evidence pack
- Holding data on the evidence pack in a secure format
- Aligning financial and environmental data
- Introducing an issues log on the C Hub

3.30 Internal Audit made no Priority 1 ('Significant') recommendations, but made eight lower priority recommendations which are currently being addressed by officers. The management summary noted that external auditors (see 3.31) had observed: "Overall the opinion was that the Evidence Pack was one of the better examples that had been audited to date."

3.31 External Audit: The internal audit review of the 2011/12 data / reporting was complemented by external assurance by Green Energy Partners, appointed by the London Energy Project to carry out audit checks across London.

3.32 The Council can expect to be externally audited at least once in each phase by the Environmental Agency's scheme auditors (KPMG, Atkins & AEA). Auditing is done on a 'risk basis' and the Council was not selected in the first cohort (the Council presents a low risk).

3.33 Officers will investigate whether the Environment Agency can be granted remote access to the CRC onebromley site to reduce the amount of officer time required in any such external audit.

Performance League Table

3.34 The Performance League Table (PLT) was originally to have been used to determine participants' financial reward, or liability, according to league ranking, when the CRC was a trading scheme. Since the scheme rules changed and it effectively became a carbon tax, the PLT lost its primary purpose. However, it has been retained to keep relative performance in the public eye (poor performance may present a reputational risk).

3.35 It should be noted the PLT is not considered a high priority. The important issue for participants is to maintain a consistent focus on reducing energy consumption, as this reduces procurement costs, carbon emissions, and CRC liabilities.

3.36 At the time of writing, the 2011/12 PLT data has not been published by the EA - it is due for release in December 2012. For the record, the 2010/11 PLT data (published in November 2011) ranked LB Bromley 584th of 2,102 participants and the Council was the 8th best performing London borough (this may have been slightly downgraded in light of the resubmission detailed in 3.18). The 2010/11 league table was based solely on Early Action Metrics (Advanced Meter installation and Carbon Trust Standard), as it was the base year.

3.37 In addition to the second Performance League Table, the Environment Agency has confirmed that it will also publish three separate tables. These will cover the Early Action Metric, change in Absolute Emissions, and the Growth Metric (which measures the carbon intensity of growth).

Governance

3.38 Activity relating to the CRC is overseen by a Programme Board with senior officer level representation from Environmental Services, Finance, Property, Legal, Procurement, Internal Audit, and Education & Care Services. LB Bromley is also required to nominate and register a Senior Contact, Primary Contact, Secondary Contact, Invoice Contact, and two Account Representatives.

3.39 The scope of the CRC Programme Board has been widened to align with complementary work programmes and improve efficacy (also an Internal Audit recommendation).The Programme Board was established to ensure that the Council was in compliance with the scheme as a statutory commitment. However, in addition to compliance, LB Bromley also has programmes designed to improve energy efficiency and reduce carbon across its estate and operations (the Carbon Management Programme and Carbon Management Fund). It makes sense that both demand management and legal compliance that such activity is brought together under the same governance arrangements.

3.40 Similarly, as the cost of poor environmental performance increases, work programmes which address other environmental impacts such as waste, water and procurement will also be brought together under the same governance arrangement and in this way the CRC Programme Board has become the Environmental Management Programme Board.

4. POLICY IMPLICATIONS

4.1 A key aim of the 2012-15 Environment Portfolio Plan is: “Reducing energy costs and emissions”

4.2 The CRC is a statutory scheme and one of two Council carbon-related programmes: the other being the Carbon Management Programme. The Carbon Management Programme (see ES12122) complements CRC-related activity by taking action to reduce consumption and emissions through a successful programme of energy demand reduction projects.

4.3 The Government launched a consultation on simplifying the CRC in March 2012, the resultant policy changes are due to be released in autumn 2012. Proposed changes include:

- Reducing the number of fuels covered by the scheme from 29 to four.
- Moving to fixed price allowance sales instead of establishing an emissions cap and holding annual auctions.
- Simplifying the organisational rules
- Making qualification processes easier
- Reducing overlap with other schemes

4.4 In parallel to this, DECC also launched a review of Academies’ participation in the scheme, given that local authorities (including LBB Members) have expressed concern about the work and cost involved – given that councils no longer have direct control over such schools.

4.5 However, all these proposed changes may not be relevant if Treasury pressure results in the scheme being stopped after Phase 1 (end 2013/14): there may be an announcement on this in the autumn Budget Statement (December 5). If the scheme did stop after the first phase, it would be replaced by another revenue-raising measure (such as an increase in the Climate Change Levy) which would still need to be managed and budgeted for. This would be more clearly seen to be a carbon tax (and raising revenue for the Treasury) and would reduce administrative burdens, but may not result in reductions in emissions – which was the CRC scheme’s original purpose.

5. FINANCIAL IMPLICATIONS

5.1 The potential financial impact of the CRC has been reported to the Executive since 2009 (ES10189, ES09101 and ES12005) and is being factored into the 2013/14 budget and four-year forecast. While CRC costs are significant (£278,820 in 2011/12), it is important to keep matters in perspective: the financial impact of our energy use is much greater than that of the CRC. A simple way of considering the CRC is to think of it as the equivalent of approximately a 6% tax applied to energy costs. Continuing management action to reduce energy consumption and carbon emissions is the key to controlling financial impacts as this helps to reduce both energy bills and CRC liabilities. More generally, carbon costs associated with Council assets and contracts need to be continually addressed to ensure such consumption and costs are identified and allocated appropriately.

Financial Modelling

5.2 The model used to calculate the Council's carbon and costs continues to develop and is becoming increasingly comprehensive and sophisticated. However, accurate forecasting is complicated due to a range of variables including; energy consumption, allowance prices, carbon factors, treatment of academies, weather, behaviour, carbon management activity, property portfolio acquisition / disposal, and changes to street lighting inventory etc.

5.3 To reduce this complexity, officers assumed an increasing carbon price of £12/t in 2012/13, rising by £4/t biennially thereafter.

Table 4: Forecast Emissions

Tonnes CO_2	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Operational Property	8,089	8,020	7,950	7,882	7,814	7,747
Maintained Schools	7,999	8,159	8,322	8,489	8,658	8,832
Academy Schools	10,089	10,290	10,496	10,706	10,920	11,139
Unmetered Consumption (Street Lighting and CCTV)			7,385	7,385	7,385	7,385
Heating Oil	1,030	1,030	1,030	1,030	1,030	1,030
Total Carbon Emissions	**27,207**	**27,499**	**35,183**	**35,492**	**35,807**	**36,133**

5.4 DECC/Environment Agency continue to consider major changes to the scheme (e.g. treatment of academies, abolition of the *de minimis* rule, and reintroduction of street lighting in Phase 2) but officers have anticipated these changes and factored them into the model where possible.

5.5 The model is derived from data provided by the LASER Bureau Service (see 3.25). The service, which includes the web portal and data reporting, has a cost of £25k p.a. from 2013/14.

5.6 A 10% uplift is payable on estimated data. It has been assumed that this uplift will fall by 1% per annum (in all scenarios) from 10% (2011/12) to 5% (2016/17) as the Laser Bureau Service takes increasing effect and data becomes more accurate.

5.7 Table 5 is derived from the model and shows how the Council's carbon emissions relate to allowance costs and makes the following assumptions.

- Some Operational property emissions (Civic Centre, Community and Youth Centres, Day Centres, Depots, Libraries and 'Other – Walnuts etc') are forecast to reduce by 1% per annum to reflect the Carbon Management Programme

- Other Operational property emissions (Car Parks, Investment property, Markets, Public Toilets and Parks and Pavilions) are expected to remain the same, due to the limited control the council has over their emissions.
- Maintained schools emissions are forecast to increase by 2% per annum, to reflect the fact that schools are being increasingly energy intensive (use of IT etc)
- Unmetered consumption is forecast to remain static as lighting standards and new developments off-set reduction measures
- The *de minimis* rule is applied to these totals which essentially means that LBB is allowed to reduce our emissions by 10%
- Unmetered consumption (Street Lighting) returns to the footprint in 2014/15
- The *de minimis* rule no longer applies from 2014/15 – and then LBB will have to purchase allowances for 100% of its carbon emissions

Table 5: Detailed Carbon Emissions and Allowance Cost Forecast

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Operational Property Cost	£ 97,073	£ 128,313	£ 127,207	£ 157,639	£156,283	£ 185,928
Operational Property (tCO_2)	8,089	8,020	7,950	7,882	7,814	7,747
Maintained Schools Cost	£ 95,989	£ 130,544	£ 133,155	£ 169,773	£173,169	£ 211,958
Maintained Schools (tCO_2)	7,999	8,159	8,322	8,489	8,658	8,832
Academies Schools Cost	£ 121,062	£ 164,645	£ 167,938	£ 214,121	£218,403	£ 267,325
Academies Schools (tCO_2)	10,089	10,290	10,496	10,706	10,920	11,139
Unmetered Consumption –Street lighting and CCTV Cost	-	-	£ 118,161	£ 147,701	£147,701	£ 177,242
Unmetered Consumption –Street lighting and CCTV (tCO_2)	-	-	7,385	7,385	7,385	7,385
Heating Oil Cost	-	-	£16,478	£20,597	£20,597	£24,717
Heating Oil (tCO_2)	1,030	1,030	1,030	1,030	1,030	1,030
Cost of total carbon emissions	£ 314,124	£ 423,502	£ 562,939	£ 709,831	£716,153	£ 867,170
Total Carbon Emissions (tCO_2)	27,207	27,499	35,183	35,492	35,807	36,133
Total Carbon *(post 10% de minimis until 2013/14)*	**24,486**	**24,749**	**35,183**	**35,492**	**35,807**	**36,133**
Total Cost *(post 10% de minimis until 2013/14)*	**£ 293,834**	**£ 395,982**	**£ 562,939**	**£ 709,831**	**£716,153**	**£ 867,171**
Predicted Uplift Costs	**£ 2,645**	**£ 3,168**	**£ 3,941**	**£ 4,259**	**£ 3,581**	**£ 3,469**
Total Allowance Purchase Cost	**£ 296,479**	**£ 399,150**	**£ 566,880**	**£ 714,090**	**£719,734**	**£ 870,640**

5.8 This scenario is based on officers' best estimate; a forecast of what we think is most likely to happen based on a combination of trend analysis, active carbon management and officers' professional judgement. Based on this scenario, the cumulative cost impact of purchasing CRC allowances over the next five years (2012/13 to 2016/17) is forecast to be £3,566,973.

Phase 2 costs

5.9 The arrangements for the second phase, starting in 2014/15, have yet to be finalised. It is assumed that the *de minimis* rule will be removed and that participants will be required to purchase allowances for all (rather than 90%) of their carbon and that street lighting will no longer be allowed to be excluded. It is now expected that allowances will not be auctioned in Phase 2: instead, there will be will two fixed-price sales each year (a cheaper forecast/forward sale and a more expensive retrospective sale). Costs may be expected to rise significantly.

Allowance Purchasing and Accrual

5.10 2011/12 allowances were purchased retrospectively in July 2012 and an accrual was made in 2011/12 to account for the estimated cost in the correct year.

Budgeting and Forecasting

5.11 The 2011/12 total scheme cost was estimated at £299k in Executive Report ES12005 (March 2012), due to officer action excluding street lighting emissions and costs. Furthermore, it was noted that allowance purchasing costs would be divided between the Central Contingency (for operational property) and the Dedicated Schools Grant (for schools). In the event, the 2011/12 allowance purchase costs were £278,820 with £193,556 being paid from the DSG and £85,264 being met from an accommodation under-spend. This meant that no Central Contingency funds were required for 2011/12 allowance purchasing though this is unlikely to be the case in future.

5.12 The future contribution from the DSG will depend on what the government decides to do about who is responsible for meeting the cost of both academy and maintained schools' allowances.

5.13 The forecast includes a sum to meet the estimated costs of the scheme for future years: however this will need to be revised following latest cost projection calculations and is also dependent on the DSG funding schools allowance costs (Table 5).

5.14 There is so much uncertainty (e.g. scheme changes and weather) that it is not possible to be categorical about whether the financial provision made will be sufficient.

Summary of Financial Costs

5.15 Table 6 summarises the CRC scheme's estimated total costs and available resources and is based on current knowledge. It is exclusive of staff costs and any possible fines (which cannot be calculated in advance but can be mitigated through good management).

Table 6: Finance Summary

	2012/13	2013/14	2014/15	2015/16	2016/17
	£	£	£	£	£
LBB Allowance costs (exc. schools)	98,488	130,312	261,846	325,937	324,581
Schools' Allowance costs	195,346	265,670	301,093	383,894	391,572
Predicted uplift cost for estimated data	2,645	3,168	3,941	4,259	3,581
London Energy Project Costs	9,500	9,500	9,500	9,500	9,500
EA Annual Subsistence Fee	1,290	1,290	1,290	1,290	1,290
EA Registration Fee (Phase 2)		1,000			
Laser Bureau Service cost	20,783	24,971	24,971	24,971	24,971
Total Scheme Costs	**328,052**	**435,911**	**602,641**	**749,851**	**755,495**
Sum held in Central Contingency	166,000	166,000	166,000	166,000	166,000
Additional resources identfied in four year forecast		100,000	234,000	294,000	354,000
Dedicated Schools Grant	195,346	265,670	301,093	383,894	391,572
Current Available Resources	**361,346**	**531,670**	**701,093**	**843,894**	**911,572**
Variation	**(33,294)**	**(95,759)**	**(98,452)**	**(94,043)**	**(156,077)**

5.16 It should be noted that the costs set out in the table above:

- relate solely to the CRC scheme and are in addition to energy bills
- are being used to inform the 2013/14 budget and four year financial forecast
- assume that the cost of the carbon allowances for all schools will be fully met by the DSG

The earmarked funding included in the four year forecast could be reduced to reflect the variations shown in Table 6 above. However, it would be wise to retain some of this funding because of the uncertainty relating to variables in forecasting carbon emissions and prices.

6. LEGAL IMPLICATIONS

6.1 The CRC is a statutory scheme introduced under the Climate Change Act 2008 to help give effect to the government's national carbon plan targets. LB Bromley is a full participant and is legally responsible for data reporting and purchasing carbon allowances to cover its carbon emissions, including those from maintained and academy schools (but not from Bromley Mytime).

6.2 This statutory duty is externally audited and enforced by the Environment Agency through:

- criminal penalties (imprisonment and fines) for falsification of data and non-compliance
- civil penalties (fines) for late or inaccurate reporting

Non-Applicable Sections:	Personnel Implications
Background Documents: (Access via Contact Officer)	• Carbon Reduction Commitment (Executive Report, ES09101, December 2009) • Carbon Reduction Commitment Scheme 2010 Annual Report (Executive Report, ES10189, January 2011) • Carbon Reduction Commitment Scheme: 2010/11 Annual Report (Executive Report, ES12005, March 2012)