

PART 1 - PUBLIC

Decision Maker: **Executive**
For pre-decision scrutiny by Environment PDS (11th January 2011) and Executive & Resources PDS (5th January 2011)

Date: 12th January 2011

Decision Type: Non-Urgent Executive Non-Key

Title: **CARBON REDUCTION COMMITMENT (CRC) SCHEME:
2010 ANNUAL REPORT**

Contact Officer: Alastair Baillie, Environmental Development Manager
Tel: 020 8313 4915 E-mail: alastair.baillie@bromley.gov.uk

Chief Officer: Paul Dale: Deputy Chief Executive and Director, Resources
Nigel Davies: Director, Environmental Services

Ward: All

1. Reason for report

- 1.1. The Executive received a report (ES 09101) on the Carbon Reduction Commitment at its December 2009 meeting. The report identified significant corporate implications, including financial liabilities.
- 1.2. The Executive endorsed the need for sustained action to reduce the Council's carbon emissions and requested that annual progress reports should be submitted to ensure the Council, as a whole, was kept informed of developments and performance.
- 1.3. The coalition government no longer intends to redistribute allowance revenue among participants but will retain the revenue to support the public finances. The scheme has effectively become a carbon tax and this has significantly increased the Council's projected financial liabilities.

2. **RECOMMENDATIONS**

That the Executive:

- 2.1 Notes the statutory duty on LB Bromley to comply with the CRC scheme, the likely costs arising from this 'tax', and the potential for civil and criminal penalties;
- 2.2 Endorses the need for sustained action to reduce energy use and carbon emissions and improve data management to minimise the Council's financial liabilities under the scheme;
- 2.3 Receives a further report setting out the Council's progress under the scheme and a forecast of its future financial liabilities in one year's time.

Corporate Policy

1. Policy Status: New policy.
 2. BBB Priority: Quality Environment.
-

Financial

1. Cost of proposal: Estimated cost £353,743 in 2011/12
 2. Ongoing costs: Recurring cost. Rising by more than £100k per annum (see para 5.14 for future costs)
 3. Budget head/performance centre: Central Contingency
 4. Total current budget for this head: £ None at this stage
 5. Source of funding: To be determined in setting 2011/12 budget
-

Staff

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

Legal

1. Legal Requirement: Statutory requirement.
 2. Call-in: Call-in is 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? N/A.
2. Summary of Ward Councillors comments: N/A

3. COMMENTARY

Background

- 3.1 The Carbon Reduction Commitment (CRC) scheme remains central to the Government's strategy for delivering the targets set out in the Climate Change Act 2008. The CRC, which started in April 2010, is a statutory carbon emissions reduction and energy efficiency scheme regulated by the Environment Agency.
- 3.2 All central government departments and the NHS, police, colleges, larger companies and local authorities are required to register. About 3,000 organisations are currently (December 2010) registered with the Environment Agency, of which about 200 are local authorities.
- 3.3 The scheme was first reported to the Executive in December 2009 (ES 09101) and preparations continue to be made to ensure compliance. Because the Council has an active energy demand management programme (Executive report ES 10188: January 2011), measures are already being taken to reduce our carbon emissions and hence our projected financial liabilities.
- 3.4 It should be noted that the scheme has turned out to be a major work commitment and proved much more complex and time-consuming than anticipated in the government's October 2009 regulatory impact assessment.
- 3.5 As a result of the Council's existing Carbon Management Programme (CMP), it is possible to estimate the amount of carbon to be reported under the scheme. Based on our CMP data, the Council's 2009/10 CRC footprint would be 31,952 tonnes. Using a Council model (see para 5.4) developed for the purpose, we have projected this data and calculated a 2011/12 CRC footprint of 32,152 tonnes.

Table 1: Projected LB Bromley CRC Emission (tonnes CO₂)

Year	2009/10	2010/11	2011/12
Schools' Emissions (tCO ₂)	17,222 (54%)	17,394 (54%)	17,568 (55%)
Street Lighting Emissions (tCO ₂)	7,389 (23%)	7,389 (23%)	7,389 (23%)
Operational Property Emissions (tCO ₂)	7,341 (23%)	7,268 (23%)	7,195 (22%)
Total LBB Emissions (tCO₂)	31,952 (100%)	32,051 (100%)	32,152 (100%)

'Carbon dioxide' may be termed 'carbon' or 'CO₂' for brevity in this report (and expressed in tonnes as tCO₂)

- 3.6 The scheme requires carbon data to be accurately recorded and reported, and allowances to be purchased (initially at £12/tonne CO₂) retrospectively to cover the carbon emissions associated with the Council's operational property, schools and street lighting. A cost of £353,743, rising by more than £100k per annum, is currently being projected (see para 5.14).
- 3.7 Maintained schools are projected to be the largest single element of the Council's carbon. As matters currently stand, the Council is required to both administer the scheme and to purchase allowances on schools' behalf (also see para 3.27).
- 3.8 The CRC, which was initially designed as a 'cap and trade' scheme, has been radically altered by the Comprehensive Spending Review. The scheme will continue as a key plank of government policy but it is now more akin to a tax and changes have also been made to the timetable. Further changes may be proposed to simplify the scheme.

Recent Changes

- 3.9 The October 2010 Comprehensive Spending Review (CSR10) announced that:
- revenue raised from the sale of CRC allowances will not be recycled back to participants but will be used to support the public finances;
 - the first sale of CRC allowances, accounting for 2011/12 emissions, is to be held in July 2012 rather than in April 2011;
 - the requirement to report on 2010/11 emissions remains.
- 3.10 The removal of the Recycling Payment element of the scheme significantly increases the Council's costs. In addition, the Early Action Metrics (such as meeting the Carbon Trust Standard or installing monitoring systems) no longer attract a CRC financial benefit, though they will still be used in the league table and can have benefits in their own right.

Current Consultation

- 3.11 The government is currently consulting on delaying Phase 2 to consider how to simplify the scheme. The consultation proposes an additional year (2013/14) at the end of the Introductory Phase and that the Phase 2 registration period and footprint year is put back from 2011/12 to 2013/14.








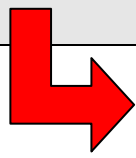
Possible Future Changes

- 3.12 The issues in this section are under consideration but may not take effect until Phase 2.
- 3.13 The scheme, as currently constituted, is rather onerous. Considerable amounts of data acquisition and reporting are required and significant penalties apply to data errors and omissions, and for failing to report on time. It is anticipated that proposals will be made to simplify the scheme to concentrate effort on carbon reduction.
- 3.14 The Government's independent advisor on the CRC scheme (the Committee on Climate Change) recommended that Government scrap the proposed emissions cap which is supposed to start in Phase 2. The future of this cap is currently under review, as is the trading system element. It therefore remains unclear what price allowances will be in future phases of the CRC, and how prices will be determined.
- 3.15 In the medium term the CRC could become less complex. For instance, if the trading element is removed, the risks associated with purchasing allowances will reduce. However, forecasting the levels of likely emissions would remain essential for budgeting purposes.
- 3.16 The requirement to produce Footprint Reports, Annual Reports and Evidence Packs is unlikely to be scrapped; however, it is to be hoped that they will be simplified. A consultation is due to be announced before the 31st December 2010.
- 3.17 The scheme assigns liability for school academies to the Council. This may be reviewed.

Scheme Timetable

3.18 The table below shows the post-CSR10 timetable, including the delay in the first sale/purchase of allowances (now July 2012) and the extension of each phase of the scheme by one year.

Table 2: CRC Timetable (reflecting changes)

Year	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Phase	Phase 1 (Introductory phase: 2010/11 2013/14)			Phase 2 (2014/15 to 2018/19)		
Registration	Phase 1 Registration (April-Sept 2010)			Phase 2 Registration (April-Sept 2013)		
Footprint Year (baseline for phase)	Phase 1 Footprint Year 	Submit Phase 1 Footprint Report (July 2011)		Phase 2 Footprint Year 	Submit Phase 2 Footprint Report (July 2014)	
Annual Reporting	Annual Report 10/11	Annual Report 11/12  (Submitted July 2011)	Annual Report 12/13  (Submitted July 2012)	Annual Report 13/14  (Submitted July 2013)	Annual Report 14/15  (Submitted July 2014)	Annual Report 15/16  (Submitted July 2015)
Original Allowance Purchase Schedule		April 2011 for (2011/12)	April 2012 for (2012/13)	April 2013 for (2013/14)	April 2014 for (2014/15)	April 2015 for (2015/16)
New Allowance Purchase / Surrender Schedule			Purchase & Surrender of Allowances for 2011/12 (July 2012)	Purchase & Surrender of Allowances for 2012/13 (July 2013)	Purchase & Surrender of Allowances for 2013/14 (July 2014)	Purchase / Surrender of Allowances for 2014/15 (July 2015)

Most aspects are now retrospective e.g. allowances are purchased in July 2012 in respect of 2011/12 emissions

3.19 Certain tasks still have to be completed in preparation for each scheme phase. For the Introductory Phase, the relevant dates are:

- Qualification period (2008): organisations establish whether they meet the qualification criteria (Bromley does)
- Registration period (April to Sept 2010): organisations register as a scheme participant (which LBB has done)
- Footprint year (April 2010 to March 2011): participants calculate and report on their baseline emissions.

3.20 For each compliance year participants must have monitored their energy use during the preceding year and:

- produce an annual emissions report to the Environment Agency and
- purchase and surrender sufficient allowances to cover their previous year's carbon emissions.

Scheme Compliance

3.21 The Council's approach has been to establish the CRC Scheme as a formal programme comprising several projects. This was to enable an overview at the programme level and effective management at the project level. The Programme Plan was developed in the early stages of the scheme's introduction. It has been amended to reflect changes to the scheme in accordance with Environment Agency guidance. The most recent amendments reflect the

changes made by the Comprehensive Spending Review in October 2010. Draft project plans are being produced for Compliance, Finance, the Carbon Trust Standard, and Schools. The Council will be audited at least once in the scheme's first five years, so evidence of sound governance will benefit the Council and also help to mitigate the risk of significant fines.

Data Management

- 3.22 The Council does not currently have an energy management system and the lack of a central system meant that information about meters, locations and consumption had to be obtained from a variety of sources including Property records, the Oracle financial system, schools, energy suppliers and energy agencies. This initial work will now enable the LASER Bureau Service develop a comprehensive database of the entire energy meter estate. This will hold historic information to enable trends and forecasts in energy use to be established. The service will allow regular energy meter reads to be uploaded by schools and other consumers, and will also allow data validation at this input stage, greatly improving the data captured. The key benefit of the Bureau Service will be its ability to produce the full estate meter dataset ('Source Tool') for the Annual Report. Another benefit of the system is the auditable maintenance of energy meter consumption and billing information, which is necessary to comply with the Council's statutory obligations and, in particular, to mitigate potential penalties and fines.

Evidence Pack

- 3.23 A key element of the CRC Scheme is the Evidence Pack. This is the comprehensive collection of all information and data on the scheme, including the participants' organisational structure, energy consumption, meter and property information, landlord/tenant agreements, exclusions and supplier contract information. It must be ready for audit from August 2011.
- 3.24 Concerns have been raised by councils that the Evidence Pack is unnecessarily burdensome, especially given diminishing resources. Furthermore, the level of reporting on exclusions and individual meter estimation techniques is such that it will significantly divert effort away from the business of carbon and cost reduction.
- 3.25 For Bromley, the accommodation review will involve significant work as we must detail all elements of the refurbishment, including consumption relating to building works and recording changes to properties being sold, vacated and temporarily occupied. There will also need to be copies of landlord/tenant agreements made with partners using Council sites. Ideally these agreements should incorporate the cost of associated carbon allowances, including increases in the allowance costs over time. Similarly much work must be done to document all agreements regarding shared occupancy sites and clubs, to ensure Bromley is not paying the cost of allowances for other users.

Performance League Table

- 3.26 The scheme, as originally devised, would have rewarded or penalised participants according to their relative performance and presented in a league table. This league table will be retained but will no longer be used for the purpose of revenue recycling, since the scheme is now effectively a tax. The league table will now function principally as a reputational driver. Being the worst performer would widely signal a failure to take effective action and poor financial management (paying inflated energy bills and purchasing unnecessary CRC allowances).

Maintained Schools

- 3.27 The CRC scheme applies to all maintained schools irrespective of whether they make their own energy procurement arrangements. The scheme currently includes Academy schools, which raises the issue of cost apportionment and energy efficiency investment.
- 3.28 Schools are under a duty to provide reasonable assistance to the Council. In practice, schools need to provide regular, accurate, energy consumption data. The Council will be fined if inaccurate data is submitted and a 10% 'uplift' is applied to allowance purchase costs if estimated data is used. The LASER Bureau Service will include a facility to allow schools to upload their data directly.
- 3.29 LB Bromley's 2009/10 CRC-related carbon emissions show that maintained schools currently account for 54% of CRC emissions. The table below models estimated emissions and costs for maintained schools.

Table 3: Schools' Carbon and Costs

Year	2011/12	2012/13	2013/14	2014/15	2015/16
LBB Schools CO₂ (t)	17,568	17,744	17,922	18,101	18,282
LBB Schools Cost (£)	210,816	283,904	358,440	434,424	511,896

- 3.30 The Council is required to bear the cost of administering the scheme and purchasing the carbon allowances on behalf of maintained schools. Under the scheme as originally developed, the draft Schools Finance Regulations 2011 proposed a mechanism for passing on the schools' share of any penalty cost – either at the level of the overall Schools' Budget or at an individual school level.
- 3.31 As the law currently stands the Council cannot pass on the cost of purchasing allowances to schools. However, the Department for Energy and Climate Change is in discussions with the Department for Education and it is possible that councils will be allowed to use their Dedicated Schools Grants to fund the purchase of carbon allowances.
- 3.32 Every tonne of CO₂ which a Bromley school emits costs about £150: the price of buying the electricity and gas from the supplier. The CRC scheme will initially add another £12/tonne to this cost. Action needs to be taken to reduce energy consumption and hence ongoing costs. However, there is no dedicated budget to install energy efficiency / carbon reduction measures in schools. A number of options are currently under investigation.

4. POLICY IMPLICATIONS

- 4.1 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 ES 10188) has helped with preparations for the CRC by defining the Council's carbon footprint and in reducing costs through a successful programme of energy projects.
- 4.2 It is likely that climate change mitigation and adaptation will be retained in some form in the new national indicator set.

5. FINANCIAL IMPLICATIONS

- 5.1 Since 2006/07, LB Bromley has been taking concerted action on energy demand management (see January 2011 Executive Report ES10188 'Carbon Management Programme Annual Report 2009/10') because reducing energy consumption reduces revenue costs. The Carbon Management Programme has proved useful in developing the performance management systems necessary for complying with the CRC scheme and also in reducing carbon emissions and hence the Council's potential CRC financial liabilities.

Changes to CRC Scheme

- 5.2 Executive Report ES 09101 (9 December 2009) projected costs (Table 4) based on the scheme rules then proposed. Under the original proposals, allowance costs would be offset against a returned share of the national pot (the money used to purchase allowances) based on performance relative to that of other participants. The cost projection was the difference between the cost of purchasing allowances and the anticipated worse case recycling payment.

Table 4: Cost Projections

Year	2011/12	2012/13	2013/14	2014/15
Reported to Executive: 9 December 2009	£77,472	£116,208	£154,944	£193,680
Reported to Executive 8 December 2010: Update on Council Financial Position	£400,000	£400,000	£500,000	£600,000

- 5.3 However, the 2010 Comprehensive Spending Review fundamentally changed the scheme's rules. It effectively turned the scheme into a tax on carbon emissions – the proceeds being retained by the government. The cost projection Table 4 (bottom row) shows the general financial impact of Government retaining the recycling payment and was reported to the Executive on 8 December 2010.

Financial Illustration

- 5.4 A new financial model has been developed and Table 5 (below) shows projected carbon emissions and associated costs for the Council's:
- operational property (23% of our CRC emissions)
 - maintained schools (54% of our CRC emissions) and
 - street lighting (23% of our CRC emissions).

The current model allows for a number of variables and the figures in Table 5 are based on the following assumptions:

- our 2009/10 CRC footprint of 31,952t will grow to 32,152t by 2011/12 as:
 - operation property consumption/emissions reduce by 1% per annum (due to the CMP)
 - schools consumption/emissions increase by 1% per annum (due to more electrical equipment being used)
 - street lighting consumption/ emissions remaining constant (and is included)
- 2011/12 price of carbon being £12/t (known)
- 2012/13 price of carbon being £16/t (known) and
- the price of carbon thereafter increasing by £4/tonne per year (this is unknown)

Table 5: Detailed Tonnage and Cost Projections post-CSR10

Year	2011/12	2012/13	2013/14	2014/15	2015/16
Operational Property CO₂ (t)	7,195	7,123	7,052	6,981	6,911
Operational Property Cost (£)	£86,340	£113,968	£141,040	£167,544	£193,508
Schools CO₂ (t)	17,568	17,744	17,922	18,101	18,282
Schools Cost (£)	£210,816	£283,904	£358,440	£434,424	£511,896
Street Lighting CO₂ (t)	7,389	7,389	7,389	7,389	7,389
Street Lighting Cost (£)	£88,668	£118,224	£147,780	£177,336	£206,892
Total LBB CO₂ (t)	32,152	32,256	32,362	32,471	32,582
Total LBB Cost (£)	£385,824	£516,096	£647,240	£779,304	£912,296

- 5.5 The data used in this report is based on operational property, schools and street lighting being included in our reporting and liabilities. However, we are waiting for clarification from the Environment Agency concerning the position regarding both schools and street lighting.
- The issue relating to schools is that the council must purchase the allowances on schools' behalf but it is possible that we will be allowed to use the Dedicated Schools Grant
 - The issue relating to Street Lighting is that by changing from dynamic to passive supply it may be possible to remove street lighting-related carbon liabilities entirely.
- 5.6 Under the scheme's current rules, participants are allowed (provided certain mandatory emissions are reported) to remove 10% of their emissions under a *de minimis* rule (e.g. from low-consuming meters presenting data collection issues). If this were the case, the figures shown in bold in Table 6 would represent the Council's likely financial liability. It should be borne in mind that the scheme's rules continue to change and at least two further consultations are expected.

Table 6: Tonnage and Cost Projections post-CSR10: *de minimis* applied

Year	2011/12	2012/13	2013/14	2014/15	2015/16
Total LBB CO ₂ (t)	32,152	32,256	32,362	32,471	32,582
Total LBB Cost (£)	£385,824	£516,096	£647,240	£779,304	£912,396
CO ₂ post-10% <i>de minimis</i> (t)	28,937	29,031	29,126	29,224	29,324
Cost post-10% <i>de minimis</i> (£)	£347,244	£464,496	£582,520	£701,376	£821,072

- 5.7 Looking forward, it is not possible to be certain about the financial impact of the CRC scheme after 2012/13. The post-2012/13 costs (above) are an assumption based on modelling a £4 per tonne per annum increase but there are a number of other possibilities including:
- the price remaining fixed at £16/tonne
 - the price increasing
 - a trading system being introduced and the price of carbon floating
 - the CRC scheme becoming more closely aligned with the EU Emissions Trading Scheme

Second 'capped' phase costs

- 5.8 It is not clear how the changes introduced in the CSR will affect the second phase (now proposed to start 2014/15). In particular, it is not known whether, the scheme might revert to its original intention of being a 'cap and trade' scheme with a limit (cap) being put on the availability of carbon allowances and the price floating reflecting trading. Nor is it clear whether in 2014/15 the council would have to purchase two lots of allowances: for the year past and the year to come.

Allowance Purchasing and Accrual

- 5.9 CSR10 altered the timing of allowance purchasing. The first allowances will now be purchased in July 2012 retrospectively for financial year 2011/12. CIPFA advises that although the cost occurs in 2012/13, an accrual needs to be made in respect of 2011/12 and therefore the cost needs to appear in the 2011/12 budget. This will also apply to subsequent (Phase 1) years.

Non-compliance Penalties

- 5.10 There are significant fines for non-compliance and also penalties for poor data reporting. The scale of the data-related penalties varies according to the tonnage of 'missed carbon' and the length of time the error existed. In practice, it is likely that costs will be imposed on a case-by-case basis.

Table 7: Non-compliance penalties

Non compliance	Penalty
Failure to register	£5,000 + £500 per day
Failure to disclose information	£500 per settled half-hour meter
Failure to provide annual or footprint report	£5,000 + £500 per day (max 40 days after due date) or £45,000 (more than 40 days late or not provided)
Incorrect reporting	£40/tCO ₂ for emissions incorrectly reported
Failure to keep adequate records	£40/tCO ₂ for emissions in most recent reporting year
Falsification, deception and non-compliance with enforcement	Criminal penalties

- 5.11 Fines for incorrect reporting and failure to keep adequate records can be backdated for a maximum of five years.
- 5.12 It should be noted that the Evidence Pack requires continuous and extremely detailed reporting, not only on energy consumption of individual meters but also property maintenance records, financial records, organisational changes and responsibilities, supplier changes and exemptions and exclusions. Maintaining the Evidence Pack is an on-going requirement of the scheme and adequate resource to ensure compliance, data accuracy, and timely-reporting of data will be needed to avoid any financial penalties.
- 5.13 Adding the CRC Scheme to the LBB internal audit schedule would help to ensure the robustness of the data reported and minimise the Council's exposure to any fines or penalties.

Summary of Financial Costs

- 5.14 The table below summarises the scheme's estimated total cost and is based on current knowledge and is exclusive of preparatory costs already incurred, annual subsistence fee (already budgeted), staff costs, and any possible fines (which cannot be calculated in advance but can be mitigated).

Table 8: Finance Summary

Activity	2011/12	2012/13	2013/14	2014/15	2015/16
	£	£	£	£	£
Allowance purchase costs*	£347,244	£464,496	£582,520	£701,376	£821,072
Predicted 'uplift costs'**	£5,209	£4,645	£2,913	£2,805	£2,463
Subsistence costs (EA fee)	£1,290	£1,290	£1,290	£1,290	£1,290
Total Costs	£353,743	£470,431	£586,723	£705,471	£824,825

* based on Table 6 de minimis costs (i.e. 90% of emissions)

** additional allowances that must be purchased if estimated data rather than actual meter reads are used

- 5.15 It should be noted that the costs detailed in the tables above:
- relate solely to the cost of the CRC scheme and are in addition to energy bills
 - are being used to update the 2011/12 budget and financial forecast

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 targets. LB Bromley is a full participant in the scheme and is responsible for data reporting and purchasing carbon allowances to cover its carbon emissions, including from maintained schools but not from parties such as Bromley Mytime.
- 6.2 This statutory duty will be enforced through:
- criminal penalties (imprisonment and fines) for falsification of data and non-compliance
 - civil penalties (fines) for late or inaccurate reporting
- 6.3 A consultation is currently underway in relation to changing the implementation timetable. A further consultation may be expected when the government has determined what further changes it considers necessary to simplify the scheme.
- 6.4 The nominated Senior Officer (Nigel Davies) for the CRC Scheme must sign-off all components of the Evidence Pack in an annual audit certificate.

Non-Applicable Sections:	Personnel Implications
Background Documents: (Access via Contact Officer)	<ul style="list-style-type: none">• ED08067 Carbon Management Programme (Executive Report, October 2008)• ES09100 Carbon Management Programme (Executive Report, October 2009)• ES10188 Carbon Management Programme (Executive Report, January 2011)• ES09101 Carbon Reduction Commitment (Executive Report, December 2009)• Regulations / Formal Guidance: see annexe to this report