

**Decision Maker:** **IMPROVEMENT AND EFFICIENCY SUB-COMMITTEE**

**Date:** **Tuesday, 19 February 2013**

**Decision Type:** Non-Urgent                      Non-Executive                      Non-Key

**Title:** **CARBON MANAGEMENT FUND: PROGRESS REPORT 2011/12**

**Contact Officer:** Alastair Baillie, Environmental Development Manager  
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**Chief Officer:** Nigel Davies, Director of Environmental Services  
Mark Bowen, Director of Resources

**Ward:** (All Wards);

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1. Reason for report

- 1.1 In October 2008, the Executive agreed to establish a ring-fenced Carbon Management Fund to invest in energy efficiency projects with the aim of avoiding unnecessary energy costs and reducing the Council's carbon emissions by 25% over five years.
  - 1.2 The Executive requested that the Improvement & Efficiency Sub-Committee should receive annual reports to monitor the Fund's operation; this is the 2011/12 progress report.
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**2. RECOMMENDATIONS**

That I & E Sub-Committee:

- 2.1 Comments on the progress of the ten invest-to-save projects;
- 2.2 Endorses the contribution of this invest-to-save model in helping the Council reduce its costs;
- 2.3 Notes the scope for further savings made possible both by identifying new projects and accelerating the operation of the existing funds;
- 2.4 Receives a further annual report in one year's time, setting out progress to 2012/13 and beyond.

## Corporate Policy

1. Policy Status: Existing Policy
  2. BBB Priority: Excellent Council; Quality Environment
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## Financial

1. Cost of proposal: Estimated Cost of potential projects £300k
  2. Ongoing costs: Estimated cumulative avoided spend p.a. (see Table 5): 2011/12 - £30k and rising to an estimated £1.1m in 2018/19
  3. Budget head/performance centre: Carbon Management Programme within Capital Programme
  4. Total current budget for this head: £7k current uncommitted balance (see Table 10)
  5. Source of funding: LBB Capital Programme (£250k) and Salix Finance (£250k)
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## Staff

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

## Legal

1. Legal Requirement: Non-Statutory - Government Guidance
  2. Call-in: Applicable
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## Customer Impact

1. Estimated number of users/beneficiaries (current and projected): Not Applicable
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## Ward Councillor Views

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

### 3. COMMENTARY

#### Background

- 3.1 In 2008, the Council established its Carbon Management Fund (CMF). This £500k facility (£250k provided by LB Bromley and £250k by Salix) provides internal loans for investment in proven energy saving technologies, with the twin aims of reducing energy costs and carbon emissions.
- 3.2 The Executive established the principle of using Salix funding to reduce emissions and costs (Executive Report ED08067 – minute 69) on the basis that the approach had been proven elsewhere in the public sector and would contribute to the Council’s future improvement and efficiency agenda.
- 3.3 The decision to establish this invest-to-save fund in advance of the current austerity agenda was particularly far-sighted of Members. And given that cost control, especially in respect of avoidable overheads, will remain a Council priority for the foreseeable future it makes sense to optimise the Fund’s operation.
- 3.4 The Council’s £250k capital is fully protected as each loan is repaid to the internal Fund from savings made to energy budgets, reflecting the reduced energy consumption and costs. In this way, the Council’s Fund is continually replenished for re-investment in new projects: indeed, 146% of the original capital has been invested to date.
- 3.5 Once an individual project has fully paid-back its investment cost to the Fund, the avoided energy consumption and costs then permanently reduces the Council’s revenue spend.
- 3.6 To be considered for funding, projects (energy efficiency or renewable energy) must pay back in fewer than five years and have a long-lasting effect. All projects are scrutinised by Salix and the larger projects (>£100k investment cost) are also scrutinised by engineering consultancy WS Atkins, ensuring the technology is viable and the Council receives good value-for-money.
- 3.7 To date, more than 100 local authorities have used Salix funding to improve their energy efficiency, attaining projected lifetime revenue savings in excess of £180 million.
- 3.8 LB Bromley projects are currently focussed on operational property and street lighting assets. Table 1 highlights some key data which demonstrates the value-for-money this work provides.

**Table 1: Key Project Data**

10	Projects to date (9 funded by Salix-CMF and 1 by Salix-SEELS)
£731k	Salix spend to date (from original £500k CMF investment)
146%	Percentage of the original investment which has been invested
£532k	Additional spend from one-off, interest fee, SEELS loan
£331k	Annual avoided energy spend when all projects are Commissioned
£203k	Cumulative avoided energy spend (at 31 March 2012)
£396k	Cumulative avoided energy spend (projected to 31 March 2013)
£2.38m	Projected cumulative avoided energy spend (2012/13 - 2018/19)
£138k	Projected cumulative avoided CRC carbon tax (2012/13 - 2018/19)
22 / 148	LBB’s ranking amongst 148 Salix participants for ‘use of available funds’

## Project Descriptions

3.9 Table 2 provides a non-technical description of the various projects, whether completed (fully paid back), current (paying back), committed (being implemented), or potential (future plans).

**Table 2: Project Description**

Name	Commissioned*	Description
<b>COMPLETED PROJECTS</b>		
Street-signage (Phase 1)	October 2009	Photoelectric cell units have been fitted to lit street signs, enabling the lamps to sense when there is sufficient light for them to automatically switch off (rather than being lit 24hrs a day).
Voltage Optimisation	February 2009	Optimising voltage remedies the discrepancy between the Civic Centre's supply voltage (207–253 volts) and the optimum voltage required by lighting and computing etc (220 volts). The result is that equipment runs at peak efficiency and energy is not wasted.
<b>CURRENT PROJECTS</b>		
Street-signage (Phase 2)	November 2010	Phase 2 of the October 2009 street signage project but for a different class of road sign.
Central Island Columns	January 2011	Photoelectric cell units are fitted to the lit columns on pedestrian road-crossing islands, so that lamps automatically switch off when it's light.
Electronic gear for MI26 Lanterns	November 2011	MI26 lanterns are used in street lighting for minor roads. Control gear starts and runs lamps. The lamps were previously controlled by mechanical gear but electronic control gear allows them to operate more efficiently.
Crossing Bollards	February 2012	Photoelectric cell units have been fitted to lit crossing bollards so that the lamps automatically switch off when it's light.
Evaporative Cooling	April 2012	This project replaced the former energy-intensive air-conditioning system in the Civic Centre computer server room. Evaporative cooling combines the natural process of water evaporation with an 'air-moving' system. In practice, large volumes of outside air are drawn through moist pads where it is cooled by evaporation and circulated through the room by a fan, cooling the servers.
North Block Lighting	December 2011	This project installed high-efficiency fluorescent luminaires (and some LED lighting) with daylight and motion sensor controls, consuming about half the energy of the lighting it replaced.
<b>COMMITTED PROJECTS</b>		
SON lamp replacement	December 2012	This CMF and SEELS-funded project involves replacing ~1,500 high-pressure sodium ('SON') street lights with LED lighting, which is much more efficient and can be dimmed as appropriate.
<b>POTENTIAL PROJECTS</b>		
St Blaise / Rochester Block Lighting	TBC	Rochester Block's lighting is inefficient by modern standards (cf the refurbished North Block). LED lighting technology has now matured sufficiently to be a cost-effective solution and is being investigated, along with high-frequency fluorescent lighting.
Widmore Centre Opportunities	TBC	An energy survey has been conducted which identified several opportunities. These are being appraised (for return on investment) and will subsequently prioritised for implementation.

\* 'Commissioned' means when a project has been completed and starts to pay back to the Fund

- Completed Projects: have fully paid-back their capital investment and are now permanently saving energy, money and carbon emissions
- Current Projects: have been commissioned (installed) and are currently repaying their capital investment (back into the Fund for further reinvestment)
- Committed Projects: have been approved and are in the process of being implemented
- Potential Projects: are being assessed, prior to being Committed

## Projects at-a-Glance

3.10 Table 3 provides an overview of the various projects detailing their:

- Commissioning dates: when projects were completed and started repaying the Fund
- Investment costs: the capital cost (paid from the Fund)
- Avoided spend: annual energy saving (kWh x energy unit price agreed with budget holder)
- Carbon savings: amount of carbon no longer emitted (tonnes of CO<sub>2</sub>)
- Payback: period taken to repay a project's investment cost (from energy savings)

**Table 3: Project Overview**

<b>Completed Projects (fully paid back)</b>					
<b>Project</b>	<b>Commissioning Date</b>	<b>Investment Cost (£)</b>	<b>Avoided Spend (£ p.a.)</b>	<b>Savings (tCO<sub>2</sub> p.a.)</b>	<b>Payback (years)</b>
Street-signage: (Phase 1)	October 2009	43,482	26,862	124	1.62
Voltage Optimisation	February 2009	89,827	30,703	141	2.93
<b>TOTAL</b>		<b>133,309</b>	<b>57,565</b>	<b>265</b>	
<b>Current Projects (currently paying back)</b>					
<b>Project</b>	<b>Commissioning Date</b>	<b>Investment Cost (£)</b>	<b>Avoided Spend (£ p.a.)</b>	<b>Savings (tCO<sub>2</sub> p.a.)</b>	<b>Payback (years)</b>
Street-signage: (Phase 2)	November 2010	49,385	14,434	95	3.42
Central Island Columns	January 2011	17,920	7,197	47	2.49
Electronic gear for MI26 Lanterns	November 2011	93,436	20,784	87	4.50
Crossing Bollards	February 2012	19,928	11,631	53	1.71
Evaporative Cooling	April 2012	29,843	21,192	142	1.4/1.87*
North Block Lighting	December 2011	83,920	17,000	77	4.94
<b>TOTAL</b>		<b>294,432</b>	<b>92,238</b>	<b>501</b>	
<b>Committed Projects</b>					
<b>Project</b>	<b>Commissioning Date</b>	<b>Investment Cost (£)</b>	<b>Avoided Spend (£ p.a.)</b>	<b>Savings (tCO<sub>2</sub> p.a.)</b>	<b>Payback (years)</b>
SON lamp replacement (CMF)	December 2012	303,069	65,848	276	4.6
SON lamp replacement (SEELS)	December 2012	531,700	115,523	484	4.6
<b>Potential Projects</b>					
<b>Project</b>	<b>Commissioning Date</b>	<b>Investment Cost (£)</b>	<b>Avoided Spend (£ p.a.)</b>	<b>Savings (tCO<sub>2</sub> p.a.)</b>	<b>Payback (years)</b>
St Blaise / Rochester Block Lighting	2013	TBC ~£100k	TBC	TBC	<5.0
Widmore Centre Opportunities	2013	TBC ~£200k	TBC	TBC	<5.0

\*The technical payback is 1.4 years but the loan payback is 1.87 years as it was agreed with the budget holder to only pay back 75% of the savings each year. This slightly extends the payback period but offers the budget holder more protection against energy price rises and/or increased consumption elsewhere on the Civic Centre site

## Headline Tables

3.11 Table 4 shows the benefit attributable to each project if none of the savings were returned to the ring-fenced fund or SEELS for reinvestment (i.e. if the investment capital was written off).

**Table 4: Carbon Management Fund Avoided Costs (without reinvestment)**

PROJECT	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>Completed Projects</b>	£	£	£	£	£	£	£	£	£	£	£
Street-signage (Phase 1)	0	13,431	26,862	26,862	26,862	26,862	26,862	26,862	26,862	26,862	26,862
Voltage Optimisation	4,133	30,703	30,703	30,703	30,703	30,703	30,703	30,703	30,703	30,703	30,703
<b>Current Projects</b>											
Street-signage (Phase 2)	0	0	4,811	14,434	14,434	14,434	14,434	14,434	14,434	14,434	14,434
Central Island Columns	0	0	1,200	7,197	7,197	7,197	7,197	7,197	7,197	7,197	7,197
Electronic gear for MI26 Lanterns	0	0	0	6,928	20,784	20,784	20,784	20,784	20,784	20,784	20,784
Crossing Bollards	0	0	0	969	11,631	11,631	11,631	11,631	11,631	11,631	11,631
Evaporative Cooling	0	0	0	0	19,426	21,192	21,192	21,192	21,192	21,192	21,192
North Block Lighting	0	0	0	4,250	17,000	17,000	17,000	17,000	17,000	17,000	17,000
<b>Committed Projects</b>											
SON lamp replacement (CMF)	0	0	0	0	10,975	65,848	65,848	65,848	65,848	65,848	65,848
SON lamp replacement (SEELS)	0	0	0	0	28,881	115,523	115,523	115,523	115,523	115,523	115,523
<b>Total Avoided Spend</b>	<b>4,133</b>	<b>44,134</b>	<b>63,576</b>	<b>91,343</b>	<b>187,892</b>	<b>331,174</b>	<b>331,174</b>	<b>331,174</b>	<b>331,174</b>	<b>331,174</b>	<b>331,174</b>
<b>Total Cumulative Avoided Spend</b>	<b>4,133</b>	<b>48,267</b>	<b>111,843</b>	<b>203,186</b>	<b>391,079</b>	<b>722,253</b>	<b>1,053,427</b>	<b>1,384,601</b>	<b>1,715,775</b>	<b>2,046,949</b>	<b>2,378,123</b>

3.12 Table 5 shows the savings once the projects have fully paid back their investment costs to the ring-fenced fund or SEELS for reinvestment. This is what happens in practice and, although the savings are delayed, more money is made available for reinvestment and hence more savings will be made in future.

**Table 5: Carbon Management Fund Avoided Costs (with reinvestment)**

PROJECT	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>Completed Projects</b>	£	£	£	£	£	£	£	£
Street-signage (Phase 1)	23,673	26,862	26,862	26,862	26,862	26,862	26,862	26,862
Voltage Optimisation	6,415	30,703	30,703	30,703	30,703	30,703	30,703	30,703
<b>Current Projects</b>								
Street-signage (Phase 2)	0	0	0	13,162	14,434	14,434	14,434	14,434
Central Island Columns	0	0	4,871	7,197	7,197	7,197	7,197	7,197
Electronic gear for MI26 Lanterns	0	0	0	0	0	17,412	20,784	20,784
Crossing Bollards	0	0	4,303	11,631	11,631	11,631	11,631	11,631
Evaporative Cooling	0	4,857	5,919	21,192	21,192	21,192	21,192	21,192
North Block Lighting	0	0	0	0	0	5,330	17,000	17,000
<b>Committed Projects</b>								
SON lamp replacement (CMF)	0	0	0	0	0	0	37,146	65,848
SON lamp replacement (SEELS)	0	0	0	0	0	0	65,169	115,523
<b>Total Avoided Spend</b>	<b>30,088</b>	<b>62,422</b>	<b>72,658</b>	<b>110,747</b>	<b>112,019</b>	<b>134,761</b>	<b>252,118</b>	<b>331,174</b>
<b>Total Cumulative Avoided Spend</b>	<b>30,088</b>	<b>92,510</b>	<b>165,168</b>	<b>275,915</b>	<b>387,934</b>	<b>522,695</b>	<b>774,813</b>	<b>1,105,987</b>

3.13 It is salutary to consider that these significant sums would have been unnecessarily paid to energy suppliers through the energy bills – had not this demand management action been taken – which would have had the effect of denying the Council's budget of these resources.

## **Governance & Scrutiny Arrangements**

- 3.14 Protocols exist for the operation of both the CMF and SEELS and senior officer oversight is provided through the Environmental Management Programme Board.
- 3.15 Individual projects are scrutinised internally by Environmental Services Finance, the budget holders, and officers from the Property and Highways teams.
- 3.16 All projects are scrutinised by technical experts at Salix to ensure they will achieve the forecast energy reduction. Furthermore, projects with an investment cost of more than £100k require submission of a business case for third-party audit and verification (by WS Atkins).
- 3.17 I&E sub-committee scrutinises the Fund's operation and also has an input into project identification. When considering Report ES12006 ([Minute 29](#)) at the 18 January 2012 meeting, Councillors Bennett and Evans encouraged the increased exploration of LED lighting technology and tangible progress has since been made with this technology for street lighting.

## **Invest-to-Save Options for Schools**

- 3.18 Unlike some other councils, LB Bromley does not use its CMF to finance energy efficiency projects in schools. LB Bromley has no clear plan for delivering energy efficiency measures in schools (other than as a co-benefit of planned maintenance activity) and it is unlikely that schools will be able to self-fund to any significant extent in the foreseeable future.
- 3.19 Officers have, therefore, investigated the two existing schemes (RE:FIT & Salix) which have been recently been adapted for schools and a Schools Circular will be produced. The Council will need to decide to what extent, if any, it wishes to encourage schools to take advantage of these opportunities.

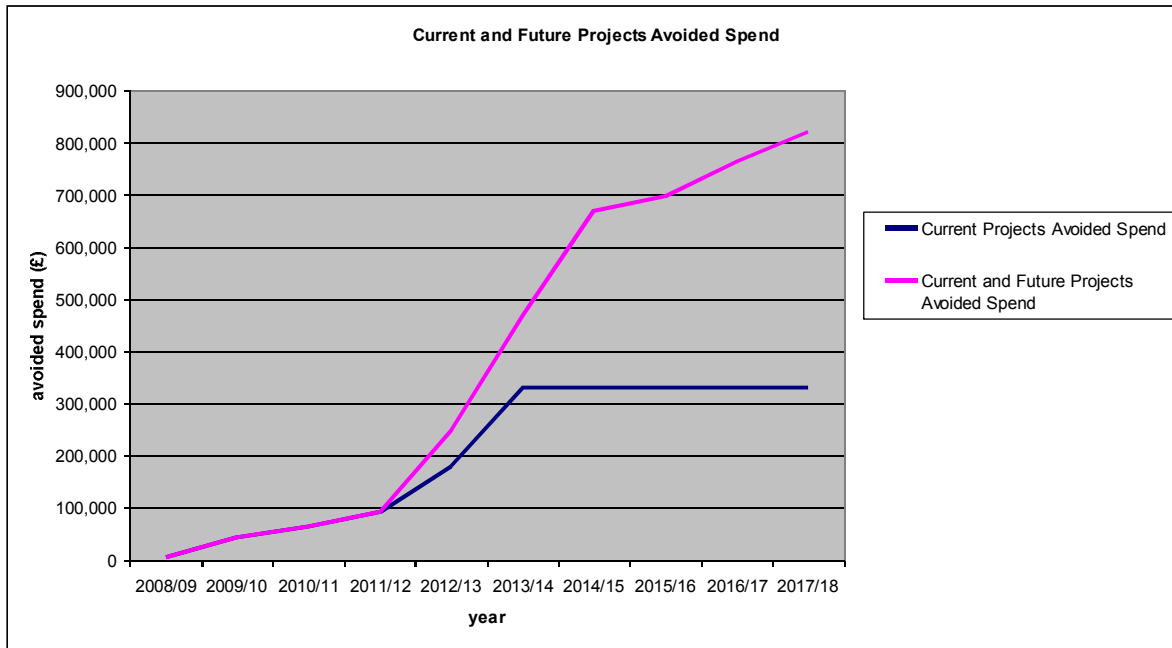
## **Salix Energy Efficiency Loans Scheme (SEELS)**

- 3.20 In addition to the long-established ring-fenced Carbon Management Fund, Salix also provides one-off, interest-free, loans for individual projects known as Salix Energy Efficiency Loans Scheme (SEELS). To date, some 454 public sector organisations have undertaken 2,230 energy efficiency projects, with an investment cost of £93m.
- 3.21 Projects funded through SEELS undergo exactly the same rigorous assessment as traditional CMF projects and are repaid from Council energy budgets (over a four-year period) directly to Salix rather than being returned to the Council's own ring-fenced fund for further reinvestment.
- 3.22 LB Bromley used a SEELS loan of £532k (see Table 8 for repayment schedule) for the first time in 2012 to speed up delivery of the SON replacement Street Lighting project by adding another 1,000 lamps to the original CMF phase of 570 lamps.
- 3.23 As with the smaller CMF phase of this project, the replacement technology uses Light Emitting Diode (LED) and dimming technology to achieve a 70% reduction in energy use over the existing lanterns. Each new lamp will save £116 a year in electricity costs and the project is projected to avoid ~£115k per annum in energy spend.

## **Future Opportunities**

- 3.24 This work programme has been successful both in reducing energy consumption and avoiding costs. However, it is important that opportunities continue to be identified in order further to insulate the Council against increasing energy prices and the CRC 'carbon tax'.
- 3.25 Figure 1 shows the annual avoided costs attributable to both current and (as yet unidentified) future projects. The lower (blue) line shows the savings associated with the existing projects. The savings plateau in 2013/14 at around £331k p.a. (this assumes energy prices remain as when originally calculated). For illustrative purposes, if a similar number of projects are brought forward in future, at a slightly enhanced rate of delivery, then the higher (magenta) line shows what further savings could be made in future.

**Figure 1: Existing and Possible Future Savings**



**4. POLICY IMPLICATIONS**

- 4.1 The Quality Environment section of the Building a Better Bromley 2020 Vision states that ‘we are also determined to work together in reducing energy consumption’, and ‘reducing energy use’ is also identified as both an issue to be tackled and a measure of success.
- 4.2 A key aim of the 2012-15 Environment Portfolio Plan is: “Reducing energy costs and emissions”.
- 4.3 The continuation of this work will place the Council in an improved position with regard to compliance with the Carbon Reduction Commitment Scheme: see Executive report ES12123.

**5. FINANCIAL IMPLICATIONS**

- 5.1 The term ‘avoided spend’ may be used in this report rather than ‘savings’ to describe the financial benefit to the Council. This is because future price changes, factors such as weather (which impacts heating / cooling costs) and the adequacy of budgets will all affect the level of true saving. Nevertheless, these invest-to-save initiatives will always avoid unnecessary energy consumption and spending.
- 5.2 The projects benefit the Council financially irrespective of energy price changes:
  - if energy prices rise, then the avoided spend will be even greater than projected
  - If energy prices fall, the avoided spend will be less but energy bills will be lower too, making for even greater energy budget savings
- 5.3 This finance section sets out information tables relating to:
  - Completed CMF projects (Table 6)
  - Current and Committed CMF repayment schedule (Table 7)
  - SEELS SON lamp replacement repayment schedule (Table 8)
  - CRC tax benefit (Table 9)
  - 2011/12 Salix Statement (Table 10)
- 5.4 Table 6 describes the first two projects to have completed the whole Salix process; that is they have fully paid-back their investment costs and are now permanently benefitting the Council by avoiding unnecessary energy use and spend. The table shows the initial investment cost and carbon and energy savings as already reported to I & E Sub-Committee.



**Table 6: Completed Projects**

Project Description	Commission Date	Investment Cost (£)	Avoided Spend (£ p.a)	Savings (t CO2 p.a.)	Payback (years)
Street-signage: (Phase 1)	October 2009	43,482	26,862	124	1.62
Voltage Optimisation	February 2009	89,827	30,703	141	2.93
<b>TOTAL</b>		<b>133,309</b>	<b>57,565</b>	<b>265</b>	

5.5 Table 7 shows the Salix Fund repayment schedule for Current and Committed projects.

**Table 7: Fund Repayment Schedule (current and committed projects)**

Project Description	2010/11 £	2011/12 £	2012/13 £	2013/14 £	2014/15 £	2015/16 £	2016/17 £	2017/18 £
<b>Current Projects</b>								
Street-signage (Phase 2)	4,811	14,434	14,434	14,434	1,272	0	0	0
Central Island Columns	1,200	7,197	7,197	2,327	0	0	0	0
Electronic gear for MI26 Lanterns	0	6,928	20,784	20,784	20,784	20,784	3,372	0
Crossing Bollards	0	969	11,631	7,328	0	0	0	0
Evaporative Cooling*	0	0	14,570	15,274	0	0	0	0
North Block Lighting	0	4,250	17,000	17,000	17,000	17,000	11,670	0
<b>Committed Projects</b>								
SON lamp replacement (CMF)	0	0	10,975	65,848	65,848	65,848	65,848	28,702
<b>TOTAL</b>	<b>6,011</b>	<b>33,778</b>	<b>96,591</b>	<b>142,995</b>	<b>104,904</b>	<b>103,632</b>	<b>80,890</b>	<b>28,702</b>

\*The technical payback is 1.4 years but the loan payback is 1.87 years as it was agreed with the budget holder to only pay back 75% of the savings each year. This slightly extends the payback period but offers the budget holder more protection against energy price rises and/or increased consumption elsewhere on the Civic Centre site

5.6 Table 8 shows the repayment schedule for the SEELS loan (described in 3.20-23).

**Table 8: SEELS SON Lamp Repayment Schedule**

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Repayment (£)	19,254	115,523	115,523	115,523	115,523	50,354	0
Avoided Spend (£)	0	0	0	0	0	65,169	115,523

## Carbon Reduction Commitment

- 5.7 The Carbon Reduction Commitment (CRC) scheme (Executive Report ES 12123) attaches a significant and increasing cost on avoidable carbon. The projects set out in this report will not only reduce the Council's energy bills but they will also reduce LB Bromley's CRC tax bill (as the demand management measures mean less CO<sub>2</sub> is emitted) so there is a double benefit.
- 5.8 Table 9 shows that the 360t of carbon emissions saved annually from the three operational property projects will avoid £4,320 in CRC allowance costs in 2012/13 alone.
- 5.9 This financial benefit increases as allowance prices increase and more projects are undertaken. The savings become much more significant when Street Lighting becomes subject to the tax in 2014/15. For example these projects should reduce the Council's CRC tax bill by £24,416 in 2014/15 and by £27,483 in 2018/19.
- 5.10 Cumulatively, the projects are projected to avoid nearly £140k in CRC tax by 2018/19.

**Table 9: CRC Scheme Avoided Allowance Costs**

Project Description	Savings (tCO <sub>2</sub> p.a.)	2012/13 @£12/t	2013/14 @£12/t	2014/15 @£16/t	2015/16 @£16.48/t	2016/17 @£16.97/t	2017/18 @£17.48/t	2018/19 @£18.01/t
Street-signage (Phase 1)	124			£1,984	£2,044	£2,104	£2,168	£2,233
Voltage Optimisation	141	£1,692	£1,692	£2,256	£2,324	£2,393	£2,465	£2,539
Street-signage (Phase 2)	95			£1,520	£1,566	£1,612	£1,661	£1,711
Central Island Columns	47			£752	£775	£798	£822	£846
Electronic gear for MI26 Lanterns	87			£1,392	£1,434	£1,476	£1,521	£1,567
Crossing Bollards	53			£848	£873	£899	£926	£955
Evaporative Cooling	142	£1,704	£1,704	£2,272	£2,340	£2,410	£2,482	£2,557
North Block Lighting	77	£924	£924	£1,232	£1,269	£1,307	£1,346	£1,387
SON lamp replacement (CMF)	276			£4,416	£4,548	£4,684	£4,824	£4,971
SON lamp replacement (SEELS)	484			£7,744	£7,976	£8,213	£8,460	£8,717
<b>TOTAL (per annum)</b>	<b>1,526</b>	<b>£4,320</b>	<b>£4,320</b>	<b>£24,416</b>	<b>£25,149</b>	<b>£25,896</b>	<b>£26,675</b>	<b>£27,483</b>
<b>TOTAL (Cumulative)</b>		<b>£4,320</b>	<b>£8,640</b>	<b>£33,056</b>	<b>£58,205</b>	<b>£84,101</b>	<b>£110,776</b>	<b>£138,259</b>

Note that Street Lighting related carbon is not expected to be taxed until 2014/15

### Salix Finance Summary

- 5.11 Due to how the Fund operates, £731k has been invested in energy saving projects, which is 146% of the original £500k investment. This capital recycling feature makes the Salix model much better value than traditional invest-to-save schemes where the capital is spent and savings are not ring-fenced for reinvestment.
- 5.12 The Council's £250k capital contribution to the Fund is entirely protected and can be recovered when there are no more projects to be done. This is not an imminent prospect as projects continue to be identified and there is a continuing need to control overheads.
- 5.13 Table 10 shows a summary of the Fund for financial year 2011/12 and also the position as at 31.12.12 (when this report was drafted).

**Table 10: Carbon Management Fund Financial Summary**

Carbon Management Fund	£'000
Funding Received to date as at 31.3.2012	
LBB Capital Programme	250
Salix Finance	250
Total funding received to date	500
Less expenditure to 31.03.12	(427)
Add back loan repayments to 31.03.12	173
<b>Balance as at 31.03.12</b>	<b>246</b>
Less actual spend 2012/13 as at 31.12.12	(150)
Less commitments as at 31.12.12	(153)
Add back loan repayments 2012/13	64
<b>Uncommitted balance as at 31.12.12</b>	<b>7</b>

<b>Non-Applicable Sections</b>	<ul style="list-style-type: none"> <li>• Legal Implications &amp; Personnel Implications</li> </ul>
<b>Background Documents: (Access via Contact Officer)</b>	<ul style="list-style-type: none"> <li>• <a href="#">I &amp; E Report ES 08185</a> (17/12/08): Carbon Management Programme: First Tranche Projects</li> <li>• <a href="#">I &amp; E Report ES 09102</a> (17/12/09): Carbon Management Fund: Progress Report 2009</li> <li>• <a href="#">I &amp; E Report ES 10198</a> (19/01/11): Carbon Management Fund: Progress Report 2010</li> <li>• <a href="#">I &amp; E Report ES 12006</a> (18/01/12): Carbon Management Fund: Progress Report 2010/11</li> </ul>