SLOUGH BOROUGH COUNCIL

REPORT TO: Cabinet **DATE:** 14th June 2010

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PART I NON-KEY DECISION

SLOUGH BOROUGH COUNCIL'S CARBON MANAGEMENT PLAN 2009 - 2014

1. Purpose of Report

1.1 To seek approval of the Carbon Management Plan 2009-2014 (attached as an Appendix to this report).

2. Recommendations

- 2.1 The Cabinet is request to resolve:
 - (a) That the Carbon Management Plan (circulated separately to Cabinet Members) be adopted,
 - (b) That the target to reduce CO₂ emissions from the Council's own operations by 40% from a 2008/09 baseline by 2014 be adopted, and
 - (c) That the activities listed in Section 4 of Appendix A of this report be supported.

3. Reason for Recommendation

3.1 The attached Carbon Management Plan outlines the Borough Council's approach and plans for reducing it's carbon emissions to militate against climate change.

4. Timetable for Decisions (including Scrutiny)

4.1 The Carbon Trust's deadline for the production of our Carbon Management Plan was 31 March 2010. An initial draft of our Plan was submitted to the Carbon Trust by this deadline for their endorsement of it - which was received in April 2010. We have also subsequently been advised of the Council's successful completion of the Carbon Trusts Programme.

4.2 Following endorsement and adoption of this Plan by Cabinet on 14 June, we plan to publish it on the Councils internet and make an immediate start on implementation it across the Council.

5. Community Strategy Priorities

5.1 Slough's Carbon Management Plan 2009 – 2014 supports the Council in developing a "Cleaner, Greener place to live, Work and Play".

6. Other Implications

- a) Financial Carbon reduction projects have to date been undertaken using a combination of existing capital and revenue budgets. The Programme will continue to be largely funded by existing resources - although the adoption of an asset management style approach to carbon management across the Council would ensure the efficient, effective and economic use of these budgets across the Programme. The Director of Resources has been consulted on this report and the Carbon Management Plan.
- b) **Risk Management -** Local Authorities are coming under increasing pressure as leaders of the community to demonstrate action on reducing carbon dioxide (CO₂) emissions, the key greenhouse gas implicated in climate change. As a local authority we work with the wider community to encourage a low carbon lifestyle, and must be seen to be doing the same. Additionally, financial benefits can be considerable by taking this route of action.
- c) Human Rights Act and other legal implications The recommendations contained in this report are compatible with the provisions of the Human Rights act 1998. There are currently no direct legal implications to the Council developing a Carbon Management Programme.
- d) **Equalities** An Equalities Impact Assessment has not been undertaken. Climate change is a universal issue and the proposals contained in this paper will not disproportionately impact on any one section of the community.
- e) **Environmental Appraisal** Climate Change is recognised as one of the most important national and international issues. The Carbon Management Plan is intended to ensure that Slough Borough Council makes major progress on reducing its energy consumption and therefore its CO₂ emissions across its own operations.
- f) **Sustainability** The Programme will result in the reduction of the Council's carbon footprint, therefore contributing to the sustainability of the Borough.
- g) **Efficiency** The Programme will result in improved efficiencies through reduced fuel bills for both buildings and fleet vehicles, and has the potential to result in longer term efficiencies, with limited initial financial outlay

h) **Health and Well Being** - The Programme will result in recommendations to improve the energy efficiency of the Council's buildings, which could result in improved working conditions for employees.

7. Supporting Information

- 7.1 The UK's direct emissions of carbon dioxide (CO₂) are known to be in the region of 560 million tonnes per annum, 8% (45million tonnes) of which are from the public sector. The Government's target is to reduce the UK emissions by 34% by 2020 and 80% by 2050.
- 7.2 As one of the largest employers in Slough, the Council's activities result in significant carbon emissions. By tackling carbon emissions arising from its own activities, the Council is setting an example and showing leadership to the rest of the community and businesses in Slough, as well as contributing to the delivery of national carbon reduction targets.
- 7.3 Slough Borough Council is committed to tackling climate change and has the aspiration of becoming climate neutral by 2020. The Council has also signed the Nottingham Declaration on Climate Change and is developing Climate Change Strategy in collaboration with Slough Forward (Slough's Local Strategic Partnership) for publication later this year. As an Authority we are particularly keen to move carbon reduction up the political agenda and make a real difference to residents and the local community.
- 7.4 The mechanism through which we propose to deliver our energy saving commitments is the Carbon Trust's Carbon Management Programme Phase 7 (LACM7). This is a well established national scheme which presents a structured programme for identifying projects and delivering energy savings at a local level. In addition the Carbon Trust has also provided us with much needed technical and project support to help develop our Carbon Management Programme.
- 7.5 The Councils Carbon Management Programme Board and Project team have worked together since May 2009 to prepare the attached Carbon Management Plan 2009 2014 which sets out the Councils 2008/09 baseline position (the most recent year for verifiable data) and our plans for implementing energy saving projects across the Council's estate.

8. Drivers for Carbon Management within Slough Borough Council

8.1 Policy Obligations and Drivers

a) **The Carbon Reduction Commitment (CRC):** A mandatory scheme designed to raise awareness and encourage changes in behaviour, performance and infrastructure of large industrial and commercial organisations¹ who used more

¹ The CRC includes emissions from Council offices, state-funded schools (including academies) and street lighting but excludes transport, contracted-out services, PFI & private schools emission. **State funded** means includes Maintained, Foundation, Voluntary Aided, Voluntary Controlled, City Technology Colleges, Academy and Trust schools. However in the case of PFI schools, where the PFI company is the counterparty to the energy supply contract, the energy use will be attributed to the PFI company. Independent schools will be required to enter into the carbon reduction commitment if their highest parent organisation consumes

than 6,000 MWh of electricity in 2008. Participating organisations will have to purchase and surrender allowances for the energy they estimate they will consume on an annual basis. The first sale of allowances starts in April 2011 with organisations having to purchase sufficient allowances to cover their forecast emissions for 2010/11. At the end of 2011 (and each scheme year thereafter), sufficient allowances are surrendered back in to CRC reserve to cover an organisations CO₂ output, and all of the revenue raised through the sale of allowances is recycled back to participants, proportional to their actual emissions that year. Those organisations who perform well and use less energy than at the start of the scheme will rank at the top of the national league table to be introduced, and will be awarded a recycling payment proportional to their actual emissions savings - a % of the total fund of revenue with a bonus of up to 10% in the first year of the scheme², based on their *league table* position. Those organisations who perform badly will rank at the bottom of the league table and will receive a recycling payment and **penalty** of up to 10% based on their league table position.

Implications of CRC

- In 2008/9, the Council's "qualifying" CRC electricity consumption was over 10,000 MWh - meaning that we shall have to participate in CRC from April 2010.
- An immediate effect on cash flow for the Council in 2011, although potentially no net cost in the longer term as the funds used to purchase allowances in the first years sale will be recycled back to the Council according to how well we perform, thereby potentially making the scheme revenue neutral to the Council.
- We shall have to buy licenses at start of 2011 at a cost of £12 per tonne to cover the amount of CO₂ we estimate we will use in 2011/12. Assuming our CRC relevant emissions remain relatively static between 2008/9, 2009/10 and 2010/11, we estimate that the Council will need to budget £198,924³ for the purchase of licenses before April 2011 (this is based on the following assumptions: estimated CRC relevant CO₂ emissions in 2008 = 16,577 tonnes x £12 = £198,924). This figure will rise after three years as the allowances price per tonne fluctuates on the open market and could go as high as £60 - £70 a tonne, increasing the Council's projected CRC commitment to £994,620 (16,577 tonnes x £60 = £994,620)
- The Council's CRC financial commitment will rise year on year if we fail to reduce our energy usage and emissions over time. Significant savings could however be achieved under the scheme (and revenue generated through good performance in the league table) through a combination of financial, environmental and reputational incentives and the implementation of a long term carbon reduction plan.

Penalties for non-compliance

more than 6000 MWh of half hourly metered electricity per year. Electricity consumption within private schools will not be included in any local authority involvement in the carbon reduction commitment.

² 2nd year of scheme the % will be 20%, 3rd year 30%, 4th year 40% etc.
³ A mechanism to apportion the Councils CRC annual 'bill' across Directorates (and possibly to individual schools comprising our CRC baseline) using the polluter pays principle is currently being investigated.

- Due to the highly regulated nature of the CRC, strict penalties will be applied for non-compliance within the scheme. The key requirements for CRC participants (the failure to comply with which will be the subject of penalties) are registration/information disclosure; reporting and record keeping and surrendering sufficient allowances.
- Depending upon the offence, there are also a range of civil and criminal penalties. Civil penalties include fines and publication of the name of the CRC participant that is not in compliance. Criminal penalties include fines and/or imprisonment. To ensure compliance and adherence to the self certification regime, a risk based audit of 20% of CRC participants will also take place each year.
- b) National Indicator 185 Percentage CO₂ reduction from LA operations:

 The public sector is in a key position to lead on efforts to reduce CO₂ emissions by setting a strategic example to the private sector and the communities they serve. Measurement against this indicator requires local authorities to calculate their CO₂ emissions from an analysis of the energy and fuel used in their relevant buildings (including schools), street lights, business travel and across their transport fleet, including where these services have been outsourced. Slough submitted its NI185 baseline to Defra in August 2009.
- c) NI186 per capita CO₂ emissions in the LA area: Local authorities are uniquely placed to provide vision and leadership to their local communities by raising awareness and by influencing behaviour change. The percentage reduction in CO₂ per capita in each LA is being reported annually. Local authorities are uniquely placed to provide vision and leadership to local communities by raising awareness and influencing behavior change. NI 186 measures the percentage reduction in CO₂ per capita from business (including public sector), domestic housing and road transport across the whole LA area. These reductions will be produced by Central Government based on CO₂ emissions in the Local Area from business and Public Sector, domestic housing, and road transport. A separate Action Plan⁴ is being prepared to coordinate CO₂ reduction activity across the Borough and meet NI 186 targets. The Council's Carbon Management Plan is an important component of the Council's overall Climate Change Strategy and its delivery plan for NI 186.
- d) Display Energy Certificates: All public sector buildings with a floor space over 1,000 m² are legally required, from 1st January 2009, to show a Display Energy Certificate (DEC) in a prominent position, usually in the foyer. DECs rate a building's energy efficiency from A to G and usually include a recommendation report suggests how a buildings ratings may be improved. Slough Borough Council has produced DECs for 43 buildings over 1000 m² (including 33 schools).

⁴ NI 186 is part of Slough's Local Area Agreement and commits the Borough to a 9% reduction in CO₂ emissions by 2011 off a 2005 baseline year. The most recent data shows a 3% reduction in CO₂ emissions between 2005 and 2007. Data is produced two years in arrears, and is calculated by central Government. Slough has amongst the lowest per capita emissions in the UK from transport and housing, but high emissions from business due to the concentration of businesses in the area.

8.2 Slough Borough Council's own drivers

- a) Slough's Sustainable Community Strategy and its Strategic Plan for 2009 2012 express the need to use Slough's planned future growth to benefit local people by improving the quality of life, raising aspirations and narrowing the gap between the most affluent and the most deprived parts of the Borough. The 'Environment theme' of our Community Strategy specifically commits Slough to reducing the Borough's CO₂ emissions by 20% and having public transport and the Council vehicles running on cleaner fuel by 2028. One of the aims of our Carbon Management Plan is therefore to help meet these broader sustainability targets. Our Carbon Management Plan will also contribute to Slough Forward's the overall Strategy for Climate Change (which is presently in development) and the Council's commitments under the Nottingham Declaration.
- b) As an organisation, the Council recognises that it's decisions can have a direct impact on the environment and its sustainable development, both locally and globally. Many of the goods and services we buy can cause damage to the environment or public health through the use of raw materials, the manufacture of goods and their distribution, use and disposal.
- c) To achieve the Council's objectives relating to environmental sustainability, we recognise that we have a moral obligation to take a positive lead in reducing our impact on the environment, by taking measures to increase our energy efficiency, which will in turn help us reduce our energy costs. This is particularly important for the future given the predicted increases in energy prices. Energy and fuel costs have seen a dramatic rise in recent years, with energy prices increasing by well over 50% since 2004. This trend is not expected to change *in the long term* and we must accept that the price we pay for our energy is likely to increase in the coming years. For this reason cost is one of the Council's own key drivers; cost savings will mean greater efficiency in the use of the Council's public funding.

9. Slough Borough Council's Baseline Emissions

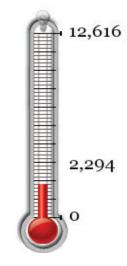
- 9.1 The Council's total emissions for 2008/09 (the most recent year available) were 31,540 tonnes CO₂. We plan to reduce these emissions by 40% by April 2014 and then to be carbon neutral by 2020. As an interim measure we have also committed ourselves to achieving a 10% reduction in our CO₂ emissions (excluding schools and contracted out services) by December 2010 as part of the national 10:10 campaign launched in the summer of 2009.
- 9.2 We plan to achieve these targets by reducing our demand for energy across our operational buildings (including schools and leisure centres), increasing the efficiency of the energy we use and are supplied, maximising the use of renewable energy and where fossil fuels need to be used, use them as efficiently as possible.

10. 'Value at Stake'

10.1 Using the Carbon Trust's LACM7 guidance, the Council has calculated the 'Value at Stake' of the Programme, i.e. the cost to the Council of not doing anything to reduce carbon emissions. The financial value at stake of the Council's Carbon Management Programme is estimated to be £12.3 million - this being the *projected* cumulative saving that could be realised over the period 2009-2014 if our emissions are cut by 40%.

11. Carbon Management Plan 2009 - 2014

- 11.1 Our proposals for reducing carbon dioxide emissions are set out in the attached Carbon Management Plan (see Appendix A). This Plan proposes⁵ the implementation of an impressive portfolio of approx. 93 invest to save projects that could deliver energy savings across a range of Council contracts, services and Directorates (including schools). There is no doubt that some of the projects proposed for implementation in the Plan will be challenging to implement, but equally that we must strive to achieve them if we are to reach full goal of being carbon neutrality by 2020.
- 11.2 The carbon reduction target for the Council is 40%, which is 12,616 tonnes of CO₂ saved by April 2014 against a 2008/09 baseline of 31,540 tonnes of CO₂. To date, a total of 19 projects⁶ have been completed since the Council's baseline year, saving the Council an *estimated* 2,294 tonnes of CO₂. 2,294 tonnes of CO₂ represents 18.18 % of our overall carbon reduction target.
- 11.3 If all of the invest to save projects proposed in section 41 4.4 of the attached Plan are implemented, and perform as anticipated, we estimate that the Council's carbon footprint could be reduced by as much as 8,508 tonnes CO₂ (based on each projects indicative CO₂ savings in year 1 of the Programme), which is approx. 67% of the target leaving a shortfall of approx. 4,108 tonnes CO₂ to identify in later stages of Programme.



- 11.4 Work has already begun on identifying a number of additional carbon reduction opportunities to bring into the Plan over time, which could help contribute towards the Council achieving it's carbon full reduction target by April 2014 (see section 4.5 and appendix D of the attached Plan). These projects will be reflected in future reiterations of the Plan once the potential costs and benefits (financial and CO₂ savings) associated with each have been fully assessed and quantified.
- 11.5 The Plan will be reviewed and revised annually by the Programme Board and Project Team to reflect progress made to date and to take on board any new project opportunities identified in the interim. Achieving the target will therefore require the

⁵ Not all of the projects identified in the current draft of the Carbon Management Plan will necessarily be implemented - some may be superseded by other opportunities/projects identified in later stages of the Programme.

⁶ See section 4.1 of the Plan.

- on going commitment off members, the Carbon Management Programme Board, the Project team and senior officers throughout the life of the Programme.
- An early draft of the Plan was submitted to the Carbon Trust (on 24 December and 31 March), the Carbon Management Programme (on 25 January and 22 March), Overview and Scrutiny Panel (on 25 February), Corporate Management Team (25 March and 27 May) and Commissioners and Directors (2 June) for scrutiny and initial approval. Comments and feedback from all of these groups have been incorporated into the latest draft, which can be found at Appendix A to this paper.
- 11.7 Implementation of the Plan will commence in early June 2010. The Council's Carbon Management Programme Board, in close collaboration with the Corporate Management team and the Capital and Assets Group will oversee the Programme and assess the viability of future projects to be implemented under the Plan. The Programme will be managed on a day to day basis a dedicated Programme Manager, who will coordinate all of the activities and projects approved for implementation using Slough's Project Management (PRINCE 2) Framework. Respective Project Team members will manage there individual projects identified for implementation on a day to day basis, reporting progress made to the Programme Manager at agreed intervals throughout the life of each project. The Programme Manager will in turn report progress against the Programme targets to the Carbon Management Programme Board, the Climate Change Partnership Delivery Group (PDG) of Slough Forward, the Corporate Management Team and elected members at fixed points throughout the Programme. This will ensure that each of the projects conceived and undertaken during the Programme are effectively planned, prioritised, financed, managed, documented and assessed at each stage in their delivery.
- 11.8 An annual Carbon Management Report will be prepared for endorsement by the Carbon Management Programme Board, the Climate Change Partnership Delivery Group (PDG) of Slough Forward, the Corporate Management Team and elected members at the end of each financial year, up to and including April 2014.

12. Financial Costs of the Programme and sources of funding

12.1 The total *provisional* estimated amount of capital, revenue and external investiment needed to realise the Plan's current carbon reduction and financial savings is summarised below:

Total Provisional Estimate of Funding needed for the Plan: 2009 - 2014⁷

	2009/10	2010/11	2011/12	2012/13	2013/14	Total
Estimated capital cost	£747,416	£439,301	£672,485	£1,145,677	£954,366	£3,959,245
Estimated revenue cost	£16,125	£35,627	£259,106	£7,000	£410,635	£719,493

⁷ These figures are indicative only – the full cost of the Programme can not be determined until each of the projects listed at sections 4.3 and 4.4 of the Plan are confirmed and the monies needed to finance them have been quantified, prioritised, secured and ring fenced form Directorates, schools and contractors budgets.

External funding already secured	£0	£5,000 ⁸	£0	£188,000 ⁹	0	£193,000
Total required by year	£763,541	£479,928	£931,591	£2,272,268	£1,364,971	£4,871,738

Of the 93 projects provisionally indentified in the Plan, 31 are *existing* projects (see sections 4.1 and 4.2 of the Plan) and as such do not require any additional resources to be found as they were/are already being serviced from *existing* Departmental, Schools, Contractors and Slough Community Leisure's capital and /or reserve budgets, where applicable.

Funding Schedule for existing projects

	2009/10	2010/11	2011/12	2012/13	2013/14	Total
Estimated capital cost to date	£747,416	£68,531	0	0	0	£815,947
Estimated revenue cost to date	£16,125	£17,355	£2,375	£0	£0	£45,875
External funding secured to date	£0	£5,000 ¹⁰	£0	£188,000 ¹¹	£0	£193,000

Provisional estimates of the outstanding amounts of capital, reserve and external funding needed to implement the remaining 62 projects in the Plan are provided below.

Provisional costs and sources of funding for the remainder of the Plan 12

	2009/10	2010/11	2011/12	2012/13	2013/14	Total
Estimated provisional capital cost	£0	£307,770	£672,485	£1,145,677	£954,366	£3,143,298
Estimated provisional revenue cost	£0	£18,252	£237,731	£7,000	£410,635	£673,618
External funding sources secured thus	£0	£0	£0	£0	£0	£0

⁸ LSP Grant

⁹ LSP Grant

¹⁰ LSP Grant

¹¹ LSP Grant

¹² These figures are indicative only – the full cost of the Programme can not be determined until each of the project listed at sections 4.3 and 4.4 of the Plan are confirmed and the monies needed to finance them have been quantified, prioritised and secured form Directorates, schools and contractors budgets.

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The above figures are *indicative* and will depend on the actual funding streams for each project being identified, prioritised and secured by Directorates, schools and contracted out service providers¹³ from the following sources and over the life of the Programme¹⁴:

- Directorate's existing capital and reserve budgets
- The Council's routine planned maintenance and repair budgets
- The Council's Capital and Assets programme (where the project has successfully bid for and secured funds)
- External grant aid where applicable
- Dedicated schools grants
- Schools budgets
- Capital Primary Programme where applicable

Other sources of external funding will also be explored throughout the life of the Programme to help supplement the Council's existing capital resources and enable us to fulfil both our corporate priorities and our commitment to reducing carbon emissions.

Given the current uncertainty over the status and viability of a number of the projects included in the Plan (see sections 4.3 and 4.4 of the Plan) it has not been possible to pinpoint the exact funding stream or current availability of funds for each of these project at the present time. This work is in hand and a more detailed report is being complied for Carbon Management Programme Board and Capital and Assets Group members, Corporate Management team and Cabinet's consideration shortly¹⁵.

16. Benefits and Savings from the Programme

- 16.1 If all of the projects identified in the Plan are implemented and perform as anticipated, we estimate that the Council's carbon footprint could be reduced by as much as 8,508 tonnes CO₂ (based on each projects projected CO₂ savings in year 1 of the Programme) which is approximately 67% of the target leaving a shortfall of approximately 4,108 tonnes CO₂ to make up in later stages of Programme.
- 16.2 The following table shows the predicted financial and CO₂ savings for each year of the Carbon Management Programme. These savings estimated are a mixture of direct and indirect energy savings some of which will accrue directly to the

¹³ Contracted out service providers (including Slough Community Leisure) will be expected to finance their projects from within their delegated budgets.

¹⁴ If funding for a particular project cannot be found in the year specified, it may be necessary to postpone delay the provisional start date of the project until a later point in the Programme and until sufficient resources can be found to fund it.

¹⁵ We intend presenting this detailed analysis at the Councils Cabinet meeting on 14 June 2010.

Council and others which will be secured by contractors and schools who undertake the projects where applicable.

Estimated Annual Cost and CO₂ Savings

	2009/10	2010/11	2011/12	2012/13	2013/14	Total
Estimated annual estimated cost saving	£381,413	£179,024	£436,261	£206,744	£532,334	£1,711,786
Estimated annual estimated CO2 saving (tonnes)	2,226	1,106	1,794	1,104	2,276	8508
% estimate of target achieved	18%	9%	14%	9%	18%	68%

As the Programme's provisional list of projects lists increases so too will the estimated savings from the Programme as a whole increase, thereby helping us achieve our targets.

The unquantified benefits to Slough Borough Council of pursing this Plan include:

- Supporting our performance on NI 185 Reducing carbon emissions from Local Authority operations
- Supporting our performance on NI 186 Reducing carbon emissions from Local Authority area
- Fulfilling the obligations of the Nottingham Declaration
- Reducing our reliance on fossil fuels and improving our energy security
- An improved reputation with staff
- Early preparation for the Carbon Reduction Commitment and increasing the amount of allowances that are recycled
- Providing leadership to our communities and partners
- Providing a systematic approach to understanding our environmental risks and impacts and developing a pragmatic response.

17. Comments of other Committees

17.1 Overview and Scrutiny Panel and the Carbon Management Programme Board have approved the Plan and the list of activities summarised in Section 4 of Appendix A, subject to relevant Director providing clarification in writing to the Panel concerning the long term financing of the Programme.

18. Conclusion

- 18.1 The Carbon Management Plan is the mechanism through which the Council will deliver on its commitments in its Sustainable Community Strategy and Strategic Plan, to reduce energy use, through a programme of energy saving projects. In addition, it presents an opportunity to save revenue costs on future energy bills.
- 18.2 Commissioners and Directors are asked to endorse the Plan, including a target to reduce CO₂ emissions by 40% by 2014.

19. Appendices Attached

Appendix A – Draft Carbon Management Plan 2009 – 2014 (Final version) - Circulated separately to Cabinet Members and Available on request from Democratic Services (01753875120)