

Executive 19 October 2009

Report from the Director of Environment and Culture

Wards Affected: All

Carbon Management Strategy – Second Review

Forward Plan Ref: E&C-09/10-13

1.0 Summary

1.1 The Council's Carbon Management Strategy and Implementation Plan (CMS&IP) was approved in June 2007. This report seeks approval to set a new baseline using National Indicator 185, in line with recommendations made by the Carbon Trust; to agree revised targets; and to approve a new programme of projects and budgets to achieve the targets. It also includes a number of measures that are the council's initial actions to implement the borough's Climate Change Strategy and in particular sets out what the council will do to mitigate climate change. In addition the report outlines progress to date in achieving the target of cutting the Council's carbon dioxide (CO₂) emissions by 20% by 2011, using 2005/06 as the baseline year. Finally, the report proposes that the Council signs up to the 10:10 climate change commitment.

2.0 Recommendations

- 2.1 The Executive is asked to agree to:
 - (a) Set a new carbon baseline using 2008/09 data (which will be in accordance with the improved measuring system under National Indicator 185) as explained in paragraph 4.1.
 - (b) Set new targets for the council's carbon reductions as set out in paragraph 5.1.
 - (c) Agreement in principle to the setting of departmental carbon targets as explained in paragraph 4.3.
 - (d) Support a programme containing a number of projects as set out in the report that are intended to achieve technical and behavioural change within both schools and the Council, with full delivery of projects subject to the necessary finance being available

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(e) Agree that the Council should sign up to the 10:10 climate change commitment discussed in paragraph 5.3.

3.0 Detail

- 3.1 Introduction
- 3.1.1 In June 2007 the Executive adopted a Carbon Management Strategy and Implementation Plan (CMS&IP), which solely focused on the council's own emissions of CO₂ arising from its services and operations. The CMS&IP detailed how the Council sought to reduce its carbon dioxide emissions by 20% by 2011.
- 3.1.2 With the introduction of National Indicator 185 and its adoption of this as the basis for a target in the Council's Local Area Agreement, and preparations currently being made for the forthcoming national Carbon Reduction Commitment, there is a need to review the CMS&IP and, on the basis of experience set new targets.
- 3.2 Background
- 3.2.1 A review has been undertaken of the CMS&IP, called the Carbon Management Plan Revisited (CMPR), and this focuses on the management and reduction of emissions of green house gases, more specifically CO₂, from the council's own operations and services.
- 3.2.2 To develop this CMPR Brent Council participated in a pilot scheme which the Carbon Trust funded as part of their continued support and improvement programme for Local Authorities. This resulted in the council working with consultants who reviewed the CMS&IP and proposed a way forward to bring it into line with recent Government, regional and local policies, and changes in legislation. The details of these recommendations are set out below.
- 3.3 Key Drivers
- 3.3.1 The original CMS&IP identified key policies and legislation many of which are still relevant. However the CMPR incorporates the recent changes in national, regional and corporate legislation and policies, such as: the introduction of the national performance indicators (particularly NI 185, NI186 and NI188); the Climate Change Act (which introduces the Carbon Reduction Commitment from April 2010); and, the council adopting a Climate Change Strategy for the borough. Display Energy Certificates (DECs) are required to be displayed in all Public Sector Buildings over 1,000m². Based on the energy consumption of the building as recorded by gas, electricity and other meters, they show the actual energy usage of a building. The results of this exercise illustrate that the Council has significant room for improvements across all its building stock and in particular schools.

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- 3.3.2 The European Union put forward a far-reaching package of proposals that will deliver the EU's commitments to fight climate change and promote renewable energy up to 2020 and beyond. Central to the strategy is a strengthening and expansion of the Emissions Trading System (EU ETS), the EU's key tool for cutting emissions cost-effectively. Emissions from the sectors covered by the system will be cut by 21% by 2020 compared with 2005 levels. The Climate Change Act calls for an overall CO₂ reduction of 80% by 2050, with a milestone target of 34% by 2020. It also introduces the mandatory Carbon Reduction Commitment (CRC) which tackles organisations' emissions which fall outside of the EU ETS. From April 2010 the council will be required to report its CO₂ emissions which will then be recorded in a league table. A poor position within this table will mean a financial penalty for the Council; however a good position could see the Council receive revenue from the scheme.
- 3.3.2 In London the Mayor's draft Climate Change Adaptation Strategy was released in August 2008 and sets out a programme for making the capital resilient to future climate over the coming years. The document sets out the key risks to London posed by a changing climate and promotes a vision for adaptation that relies to a large extent on the London Boroughs acting as strategic partners with the GLA in order to achieve adaptation on the ground. The Mayor of London has committed to go beyond the original target of 30% by 2025 and commits to a 60% CO₂ target by 2025.
- 3.3.3. The Corporate Strategy aims to improve the opportunities available to residents and reduce the disadvantages experienced by the most vulnerable people in our communities. The council has a duty to promote the social, economic and environmental well-being of all communities and this underpins the council's approach to developing policy and service planning.
- 3.3.4 Brent's Local Strategic Partnership (Partners for Brent) has produced the Community Strategy which sets out how the needs of residents will be met. Key objectives include working with local people to protect our environment, reducing the amount of waste our borough sends to landfill, encouraging greater biodiversity and minimising our contribution to climate change.
- 3.3.5 Brent Council recently adopted a Climate Change Strategy for the borough. The strategy highlights the need for mitigation, adaptation and dealing with severe weather events. It helps to address adapting to climate change in the borough and sets out the key groups within Brent who will help deliver the strategy. It highlights the importance of leadership, public services, the private sector, residents and community groups working together to adapt to and mitigate climate change. This Executive report sets out the council's initial response to this Strategy by outlining the measures the council will take to mitigate climate change with a focus on reducing carbon emissions.
- 3.3.6 Brent Council's Travel Plan adopted in November 2008 focuses upon staff travel to and from work and on council business travel. The main aim of the Travel Plan is to promote the sustainable delivery of council services, to reduce carbon emissions from the council's own activities and estates, and to minimise the environmental impacts of all aspects of the council's activities.

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3.3.7 The current Environmental Policy is being updated in order to reflect better the internal and external policies and strategies and to meet the requirements of the ISO 14001 environmental management system. A separate report is on the Executive's agenda proposing a revised version.

4.0 A new programme

4.1 In order to meet the requirements set out above and in particular to achieve the desired aims of National Indicator 185, to prepare for the Carbon Reduction Commitment, to ensure the effective use of resources and to use an improved measuring system, there is a need to set a new carbon baseline. Together with a set of revised targets the Carbon Trust has encouraged the council to focus on NI 185 and to set new targets based on this more reliable and more accurate data. It has encouraged a move away from using 2005/06 as the council's baseline. It is recognised that continuing a parallel system to measure and monitor NI 185 and the CMS&IP would be a waste of resources, especially as the council now needs to concentrate on reporting on NI185 and NI188 as part of the Local Area Agreement. NI 185 targets are outlined in table 1. The original CMP&IP baseline covers similar areas to the new NI185 baseline. The fundamental difference with the NI 185 baseline is that housing stock is excluded and all large council contracts are included. The proposed changes are explained in more detail below.

Table 1

Council Local Area Agreement Target

Year	Baseline	Annual CO ₂ emission percentage reduction target
2008/2009	43,602 (to be agreed by the Department of Energy and Climate Change)	
2009/2010		3%
2010/2011		3%

- 4.2 To meet the new requirements, it is proposed that a new programme of work is agreed based on experience gained in order to have a realistic chance of reducing carbon emissions.
- 4.3 It is also proposed that each Directorate would set its own targets, based on the current baseline and the proposed reduction for the Council's carbon emissions. Officers will seek to design a scheme which will replicate the CRC Scheme (Appendix A is a London Councils' document outlining the CRC Scheme). This internal scheme may also include rewards and penalties. The consequences of the external scheme for the Council will be clearly explained in the report to the Executive in November 2009. The CRC is subject to formal ministerial approval in autumn 2009. Officers will consult internally on ways to

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incentivise Directorates and Services to achieve the targets. Performance will be monitored against the targets as part of the council's performance management system.

- 4.4 As part of improving general awareness and promoting more environmentally friendly behaviour, it is proposed to establish a staff Green Champion Network this year. More details are set out in section 6 below.
- 4.5 Due to the importance of schools taking action, it is proposed that a Schools Programme is implemented, as outlined in section 6 below.
- 4.6 The proposed implementation of the Council's Carbon Reduction Programme is outlined in section 6 below.
- 4.7 The council's Property and Asset Management Service has made a commitment to the green agenda with renovation works that are increasingly sustainable in both design and construction. The service actively encourages the use of renewable and energy efficient resources that minimise waste. A draft Energy Statement for the Council and a draft Energy Strategy for Council Buildings are pending approval. The documents implement a hierarchical principal of "Be Lean, Be Clean, Be Green" and provide a framework for achieving these objectives within the Council's own buildings.

5.0 <u>New targets</u>

5.1 This report also proposes that the Council sets new carbon reduction targets and, that the council sets long term stringent milestone targets which are in line with national indicators, as set out below:

 $\begin{array}{l} 2011-6\%\ CO_2\ reduction\ (Local\ Area\ Agreement\ target)\\ 2016-12\%\ CO_2\ reduction\\ 2020-34\%\ CO_2\ reduction\\ 2025-43\%\ CO_2\ reduction\\ 2050-80\%\ CO_2\ reduction \end{array}$

- 5.2 The above targets will be more challenging for the council as the percentage reduction will be based on 2008/09 baseline data whereas the Government CO₂ targets are based on a national 1990 baseline. The council will continue to review its CO₂ reduction targets in particularly in view of the Mayor of London's 60% CO2 reduction target by 2025 (set against a 1990 baseline) and future Government policy.
- 5.3 The 10:10 campaign, the idea of the film-maker behind <u>The Age of Stupid</u> and launched in partnership with the Guardian, is designed to encourage individuals and organisations to cut their CO₂ emissions by 10% by the end of 2010. It is proposed that the council signs up to the 10:10 commitment to highlight the organisations obligation to reduce its CO₂ emissions from their operations. The 10:10 campaign commitment will apply only to the council, however, it will provide a sound basis for encouraging schools and residents to make a similar commitment. Influencing schools will be important to achieving

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NI 185 and significant in connection with the CRC Scheme. Reaching a 10% CO₂ reduction in 2010 will be challenging and will be reliant on behavioural change amongst staff and management. Success will be based on explanations and persuasion and some technical measures on buildings. The scheme recognises that large organisations may not be completely successful in reaching the ambitious target in such a short space of time and, nevertheless, encourages all organisations to sign up.

6.0 Carbon Reduction Projects

- 6.1 The original CMS&IP included 37 projects which covered buildings, transport, waste, street lighting, water, management, policy, training and raising awareness in order to facilitate behaviour change. These projects if delivered, were expected to achieve the Council's 20% CO₂ emissions target.
- 6.2 Since 2007 the Implementation Plan has delivered 8 projects with deliverable CO₂ savings of 3048 tonnes. There are 8 which are still in the early stages of being delivered and therefore there is no recordable percentage reduction. Eight of the 37 projects are related to behaviour change and therefore there has been some difficulty in recording the savings data. Seven projects have not progressed due to changes in circumstances or a lack of finance. Six projects currently are currently having data verified. It is proposed to continue with 19 projects as, 6 have been complete and 8 are unfeasible within current budgets and 4 have been amalgamated see Appendix B. None of the original list of projects tackles the issues with schools; however the new project plan addresses this issue.
- 6.3 The work carried out by the Carbon Trust identified projects that would not deliver significant CO₂ reduction within a short period of time. The Carbon Trust suggested that the CMPR should identify a mixture of short term and medium term projects. The Carbon Trust identified 67 projects which over a two year period would potentially save the Council 21% CO₂ emissions but the current limited resources available for these mean that this cannot be achieved in the short term. The majority of these projects have targeted schools and potential schools projects make up 78% of the total projects identified by the Carbon Trust. Schools have a considerable role to play in reducing the Council's carbon foot print.
- 6.4 The projects have been categorised into the following areas.

Schools

Schools lighting upgrades – 24 projects Schools behavioural change – 2 projects Building management upgrade and installation for schools – 5 projects Heating/boiler upgrade for schools – 13 projects Insulation measures for schools – 11 projects

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Building management upgrade and installation for council buildings – 9 projects Council behavioural change – 3 projects

- 6.5 As part of this work, the Schools Forum agreed to top slice the schools budget by £45,000 in order to pay for an assistant to the Council's Energy Manager who would provide support on energy matters in individual schools. The money to fund this post will be made available from April 2010. However given the urgent need to tackle energy use and carbon emissions in schools, funds have been identified to pay for this post with effect from 1st October 2009.
- 6.6 Another feature of the programme is a proposal to establish a staff Green Champion Network in the autumn of 2009. The network will have staff representatives from service units across the council who will actively promote and support their staff colleagues in behaviour change and moving to a 'greener lifestyle' in the work place. The network will meet on a quarterly basis and will be updated on the progress of current and forthcoming green initiatives. The Green Champion Network will require staff representatives to commit their time on a voluntary basis, on top of their day-to- day roles.

7.0 <u>CO₂ emission reduction achieved since 2005/06</u>

7.1 The CMS&IP states that in 2005/06 60,619 tonnes of CO_2 was produced by the council as the original baseline. The council has reduced by 7.3% in reporting year 2006/07, increased by 2.8% in reporting year 2007/08 leading to an overall reduction of 4.6% on the baseline year (table 2). 2008/2009 NI 185 data is yet to be approved by the Government therefore we are unable to formally report. Current experience and looking at previous trends over the past three years, it appears that the council will have some difficulty in meeting its 20% CO_2 reduction target by 2011. If current trends continue the council will also not be on track to meet the requirements of the Local Area Agreement target of achieving a 3% CO_2 reduction by 2010 or a 6% reduction by 2010/2011.

Table 2	
CMS&IP cumulative CO ₂ percentage change 2005 - 2008	

Year	CO2 emissions (tonnes)	Annual % change on baseline 2005/06	
2005/06	60,619		
2006/07	56197.7	-7.3% 7.2	
2007/08	57786.7	+2.8%	
Total % reduction on baseline year		-4.6%	

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From the data available it appears that only two Directorates, Finance and Corporate Resources and Housing and Community Care have reduced their CO₂ emissions from 2005/2006 to 2007/2008. Finance and Corporate Resources have shown a consistent reduction, reducing their emissions year on year from the baseline. Housing and Community Care increased their emissions in the first year of reporting but in the following year demonstrated a significant reduction on the baseline. The main causes for concern are schools with a percentage increase of 27% since the baseline year. Schools increased by 9% during reporting year one and 16% during reporting year two (table 3). This is felt to reflect additional buildings and opening hours, coupled with greater usage of P.C.s.

Table 3

Schools cumulative CO₂ percentage change 2005 - 2008

	Year	CO2 Emissions (tonnes)	Difference CO2 (tonnes)	% Change	% Change on base line
All Schools	2005 - 2006	12690			
	2006-2007	13826	1136	9	
	2007-2008	16077	2251	16	27

Comparable 2008/2009 NI 185 data for schools has yet to be approved by the Government however it is expected to show a marked increase on the previous year. Based on the original 2005/06 baseline schools contribute approximately 28% to the total CO_2 emissions for the Council. Schools' CO_2 emissions are a serious cause for concern especially as under the NI 185 baseline schools contributes towards 49% of the Council's CO_2 emissions.

7.3 With the availability of an improved measuring system under NI185 it is proposed that a new CO₂ baseline of 43,602 tonnes is set (to be agreed by the Department of Energy and Climate Change). The consultants, who undertook a separate review of Brent's carbon emissions since 2005/6, both recommended this course of action.

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7.4 However, under NI 185 the Council is not required to report on CO₂ emissions from its social housing stock. It is therefore recommended that this data collection continues as measuring CO₂ emissions from this housing stock is extremely important in reducing the borough's overall CO₂ emissions and mitigating climate change and especially for understanding performance locally under National Indicator 186.

8.0 Financial Implications & Risk

- 8.1 The overall restraint of resources and conflicting priorities, have limited the Council's ability to invest directly in projects which reduce the Borough's carbon dioxide emissions. The original CMS &IP contained various projects, which it was estimated required £1.56m of investment. £574k of this has currently been secured.
- 8.2 The Council has successfully bid for an Energy Efficiency Fund (Salix) worth £420,000 (The Council has provided 50% of the funding). The fund provides interest free loans for the installation of proven energy saving technologies in council buildings and schools. Examples of projects which have been delivered with the aid of Salix funding are lighting and boiler upgrade at Oakington Manor Primary school, Town Hall Lighting upgrade and Swimming Pool Covers at Vale Farm Leisure centre. The loan is repaid to the fund through the savings made in energy bills and subsequently reinvested in other projects. This fund has been used successfully since 2006/7. In order to utilise this funding, schools must agree in advance to the repayments. In some cases, this has been difficult to secure.
- 8.3 In order to deliver the agreed targets, significant investment is required. Much of this is incorporated in projects or programmes already agreed within the Capital Programme, such as the Civic Centre, and Schools rebuilding. The taking out of use of old offices and schools, to be replaced with new energy efficient sites, with high environmental standards, will have a large impact on CO² emissions. However, many of these projects will not be completed for a number of years. The Council must then consider other more current initiatives to help meet the targets. Appendix B sets out potential projects, including micro-renewables such as solar thermal water heating and panels, wind turbines, and biomass burners, improvements to the social housing stock, and improvements to the fleet, the provision of bio-diesel from used cooking oil, and implementing fully the council's travel plan.
- 8.4 The total gross cost of these projects is estimated to amount to up to £10m. The Council's Capital Programme will not have the capacity to provide a significant contribution to this in the medium-term. Therefore, other forms of funding will need to be found:
 - (a) From existing agreed schemes within the Capital Programme
 - (b) The current total annual Salix fund stands at £420,000 which can be used to help fund new CMS&IP projects.
 - (c) From other funding regimes that may become available

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- (d) From robust invest-to-save schemes, where the payback period from energy cost savings are able to finance the investment.
- (e) From a switch of resources from other programmes in the Capital Programme, as part of the 2010/11 budget process.

It must be recognised that should external funding sources be withdrawn as a result of public spending pressures, the Council's ability to make the necessary investment and achieve its targets will be limited.

- 8.5 The reason why a number of projects never began is due to other pressing priorities and the lack of resources to plan the projects and provide a justifiable business case.
- 8.6 However, the 2009/10 revenue budget was increased by £155,000 in order to support the work on NI 185 and to implement the Climate Change Strategy. These funds have been used to appoint two staff, to fund the energy advisor post for six months and to support the implementation of the new Climate Change Action Plan.
- 8.7 The Council also secured £45,000 from the Schools Forum for a post to help deliver energy advice to schools. However, this is not sufficient to provide full coverage to the large number of schools in the Borough. Additionally, schools cannot be compelled to fund environmental schemes from their own resources.
- 8.8 The Carbon Reduction Commitment would also mean significant financial penalties for the Council from poor performance in the league table (see Appendix A) in future years. However a good position within the table could mean the council benefiting financially with extra funds being made available.
- 8.9 A further risk is that failure to meet National Indicator 185 targets will mean that performance reward grant will be lost under the Local Area Agreement.
- 8.10 An additional risk is that energy inefficiency will continue to waste council valuable resources as the cost of energy is predicted to rise. This will add further financial pressures on the council's overall budget.

9.0 Legal Implications

- 9.1 The Council has power under section 2 of the Local Government Act 2000 to do anything which it considers likely to promote the environmental well-being of its area. In exercising this power the council is required to have regard to its Community Strategy (known as the Community Plan).
- 9.2 Furthermore, ODPM Circular 03/2003 on Best Value and Performance Improvement reiterates that sustainable development and equity are fundamental to the Best Value regime. It states that the Government's definition of Best value is the optimum combination of whole life costs and benefits to meet the customer's requirements'.

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9.3 In addition, the council has a duty to report on the national indicators, particularly 185 and 188, to participate in the Carbon Reduction Commitment and to ensure the transparent display on public buildings of Display Energy Certificates.

10.0 Diversity Implications

- 10.1 Climate change affects everyone and particularly those who are physically vulnerable the elderly and the young as they will be exposed to greater temperature extremes and potentially new or increased threats of disease.
- 10.2 Climate change is predicted to be felt most acutely in areas of the world where communities are less able to adapt. These areas include countries in sub-Saharan Africa, Bangladesh, India, Indonesia, and Australia. A number of council staff and residents have strong ties with these nations.
- 10.3 The Council's climate change strategy for the borough, which was recently adopted by the Executive, places emphasis on mitigating climate change; adapting to changes that are predicted for the future; and responding to severe weather events. The measures in this report set out the steps the council will be taking to mitigate climate change. It will be the council's staff that will mostly be affected and it is expected that this will be equitable across the whole council.

11.0 Environmental Implications

11.1 The overall recommendation to reduce the Councils CO_2 emissions will have a positive effect on the environment. Reducing CO_2 emissions (one of the main green house gasses which contribute to global warming) will help mitigate the effect of climate change at both a local and global level. It is expected that the environment will benefit in the long term by the council taking this action.

12.0 Staffing/Accommodation Implications

12.1 The Council, as part of its budget making process agreed funding for a Data Collection Officer (NI 185) and a Climate Change Officer and these have been accommodated within existing office space. The energy advisor to schools post can also be accommodated within existing facilities.

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Background Papers

- 1. Carbon Management Strategy and Implementation Plan 2007 <u>http://intranet.brent.gov.uk/Groups.nsf/0/afe93f4488b0b8648025728300</u> <u>42c348?OpenDocument</u>
- 2. National Indicators for Local Authorities and Local Authority Partnerships 2008 <u>http://www.communities.gov.uk/localgovernment/performanceframework</u> <u>partnerships/nationalindicators/</u>
- 3. Climate Change Strategy 2009 http://www.brent.gov.uk/cmin.nsf/reports/LBB-5663

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