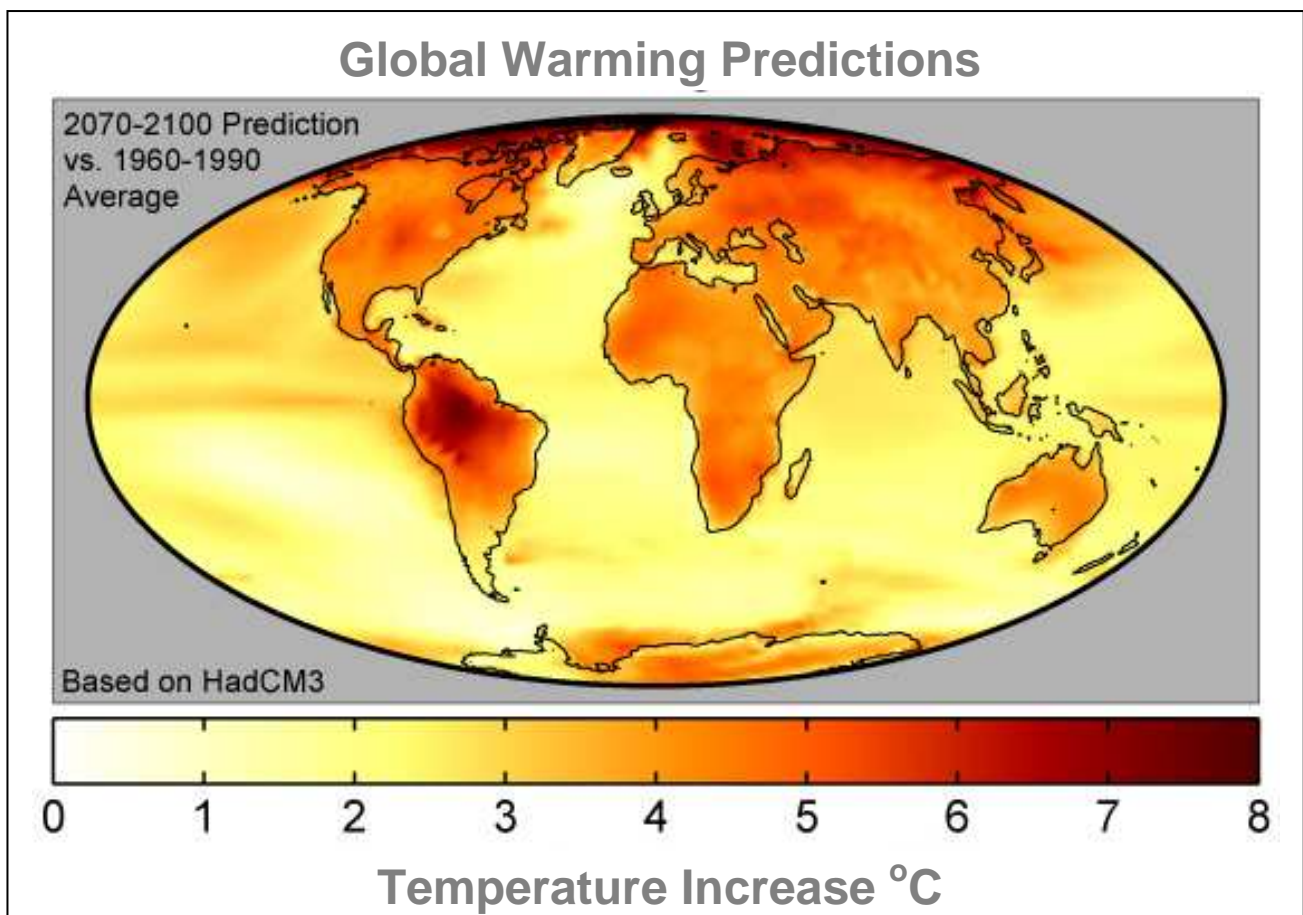


London Borough of Brent

Carbon Management Strategy & Implementation Plan 2006 - 2011



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Approval	Executive



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II. FOREWORD



Cutting carbon emissions as part of the fight against climate change should be a key priority for local authorities – it's all about getting your own house in order and leading by example. The UK government has identified the local authority sector as key to delivering carbon reduction across the UK inline with its Kyoto commitments and the Local Authority Carbon Management programme is designed in response to this. It assists councils like Brent in saving money on energy and putting it to good use in other areas, whilst making a positive contribution to the environment by lowering their carbon emissions.

The London Borough of Brent was selected in 2006, amidst strong competition, to take part in this ambitious programme. As one of the most proactive councils in the UK in responding to the risks that climate change presents Brent has joined the 98 councils across the UK who have to date partnered with the Carbon Trust on this programme in order to realise vast carbon and cost savings.

This Carbon Management Strategy and Implementation Plan commits the council to a target of reducing CO₂ by 20% by 2011 and underpins potential financial savings to the council of £3m.

There are those that can and those that do. Local authorities can contribute significantly to reducing CO₂ emissions. The Carbon Trust is very proud to support LB Brent in their ongoing implementation of carbon management.

A handwritten signature in black ink, appearing to read 'Richard Rugg', is positioned above the printed name.

Richard Rugg
Public Sector Manager
The Carbon Trust



There is now an overwhelming scientific consensus that climate change is a reality and that the rapid change we are experiencing is caused primarily by human activity. In 2006 we saw the debate shift from whether climate change is real to its extent, timing, and impact. The UK is beginning to react with central, regional, and now local government activity increasing.

I'm concerned that as a result of historical emissions of carbon dioxide that society is already committed to around a 2°C rise in temperature. We have built our civilisation and developed our services based on stable weather patterns and we must now rethink their suitability. However, we do know that if we act immediately we can help to stabilise the climate at this temperature and avoid the most severe changes. This involves making real reductions to our emissions of green house gasses, especially carbon dioxide.

When Brent Council signed the Nottingham Declaration on Climate Change in 2003, the council became committed to tackling climate change as a cornerstone of council policy and strategy. Through working with the Carbon Trust and participating in the Local Authority Carbon Management Programme we have taken our first steps towards achieving this commitment.

I am confident that by delivering our carbon emissions reduction and management projects outlined in this plan we can achieve our target to reduce the council's carbon emissions by 20 percent by 2011. This means cutting an enormous 13,000 tonnes off of our annual carbon dioxide emissions, the equivalent of the emissions of around 800 homes, which is a challenging task and one that will require all staff to play a part.

Brent can't be a great place or a green place if we do not act to tackle climate change which threatens our society, environment, and our ability to deliver services. The first step is to improve our own performance, a step that has my full support.

To be signed.

III. EXECUTIVE SUMMARY

Introduction

Throughout 2006-2007 Brent Council participated in the Local Authority Carbon Management Programme facilitated by the Carbon Trust in order to develop this carbon management strategy and implementation plan. This is an internal document, designed to reduce the council's own contribution to climate change. Further work is planned to develop a borough wide response encompassing businesses, residents, and education from 2007-2008 onwards.

Scope

The scope of this carbon management strategy and implementation plan (CMS&IP) can be defined as including any activities that cause the release of green house gases that the council has a strong degree of influence or direct control over. Therefore the scope is:

- Buildings, including schools, offices, leisure centres and the housing stock
- Transportation, including fleet, business travel, and commuting
- Internal waste
- Water consumption
- Street lighting
- Tree planting and removal

Case for Action

Brent's Corporate Strategy, Corporate Environmental Policy, and the Nottingham Declaration on Climate Change commit the council to take action to reduce its own contribution to climate change by reducing the emissions of green house gases from its activities. In addition, prices for electricity and oil are increasing, and are expected to continue to increase, making action to tackle climate change cost effective. Finally, the UK is also experiencing a rapid increase in the volume of policy and legislation driving change, to which Brent Council has a duty to comply with or enforce.

Brent Council, Schools, and Brent Housing Partnership spend £5.8 million on energy each year. This is set to increase if the business as usual scenario is continued as a result of a steady increase in demand and energy prices. However, research shows that by taking the reduced emissions scenario route, Brent can ensure that cost increases are contained to achieve a cumulative saving between 2006-2011 of over £3 million.

Vision and Targets

As a result of delivering this carbon management strategy and implementation plan, Brent Council will:

'be a showcase of best practice, having risen to the challenge to reduce its contribution to climate change, leaving the Council in a position to lead others by example.'

Brent will:

'Reduce the council's carbon dioxide emissions by 20% from the 2005/6 baseline of 60,619 tonnes, achieving a total carbon dioxide saving of at least 12,123 tonnes by April 2011'

Strategy

Brent Council has set six strategic priorities to deliver this vision:

- CC1 Review carbon emissions data and prioritise areas for action based on feasibility and carbon dioxide emissions reduction potential
- CC2 Take account of the energy hierarchy to firstly avoid the need to use energy, improve energy efficiency, meet energy needs from renewables, and then procure green and clean energy.
- CC3 Increase climate change awareness within the council, public, community and business sectors and empower these groups to take action.
- CC4 Strengthen leadership and senior management involvement in climate change issues across all areas of the authority.
- CC5 Integrate predicted climate changes and service effects into service planning and risk assessments.
- CC6 Refrain from decision making that increases emissions of carbon dioxide, and where unavoidable, take appropriate mitigating action.

A number of tools, such as management systems, monitoring processes, and standards will be utilised to implement these strategic priorities.

Implementation Plan

The implementation plan consists of embedding projects to improve carbon management, facilitation projects to enable other projects to achieve direct emissions reductions, direct emissions reduction projects, and feasibility studies to provide us with the information to develop embedding or emissions reduction projects. We can also off-set some emissions of carbon dioxide by increasing the amount of trees currently in the Borough.

The plan begins with 37 projects in total, as some are completed others shall take their place, those with the most significant contribution to achieving the carbon dioxide emissions reduction target (over a 5% contribution) are listed below:

- Embedding projects such as e-Learning training, the going green campaign, and energy efficiency accreditation will together reduce energy use by 5%.
- Staff travel plan implementation and internal travel policy and standards will together reduce commuting and fleet emissions by up to 20%.
- The energy efficiency fund, value £600,000, will provide the finance upfront to facilitate invest to save energy use reduction projects to reduce emissions by up to 10% in schools and council buildings.
- Boiler replacements, upgrades, and insulation in the council's housing stock will improve standard assessment procedure ratings.
- The internal recycling and waste minimisation project to increase internal recycling rates to 60% and save 2,000 tonnes of emissions from waste decomposing in landfill sites.

Costs of the implementation plan:

Total Estimated Capital Expenditure	£986,000
- Provided internally	£574,000
- Grant / external funding	£421,000

- This will achieve an approximate £3million in savings between 2006-2011. These savings will arise from cuts in energy, water, and waste.

Project Management

This carbon management strategy and implementation plan will be managed and delivered by two key groups. The first is the Carbon Management Steering Group that shall oversee, and in some cases directly deliver, the implementation plan, review and report project progress, and deal with any significant risks and issues. The second group is the Carbon Management Working Group made up of the individual project owners from across the council. This group shall report progress with projects every six months to the Carbon Management Steering Group and attend an annual opportunities workshop.

Overall progress shall be reported annually after the council's latest annual carbon emissions have been audited. Progress shall also be reported against the individual objectives and targets of each project where quantification is possible.

1 Carbon Management Strategy

1.1 INTRODUCTION

Uncertainty over the local effects of climate change, the escalating costs of energy, and the new political and media focus on climate change are encouraging the public and private sectors to act to cut their emissions of green house gasses (see information box 1).

Brent Council has taken the first steps by developing this carbon management strategy and implementation plan (CMS&IP). This is an internal document, designed to reduce the council's own contribution to climate change. Further work is planned to develop a borough wide response encompassing businesses, residents, and education from 2007.

Brent Council has been supported by the Carbon Trust, a government funded organisation that provides advice, guidance, and funding to reduce the nation's carbon dioxide emissions. One of the products offered by the Carbon Trust is the Local Authority Carbon Management Programme (LACMP) which Brent has taken advantage of. The programme is a step by step process that leads an organisation through setting up a project working group and identifying opportunities for reducing emissions, to the final development of this CMS&IP.

This strategy is based on Brent Council's emissions baseline which covers the council's activities with a carbon footprint that are under the council's direct control such as energy use in buildings, or where the council has a strong influence such as housing and Schools. The strategy will be implemented between April 2007 and March 2011.

This strategy affects the operations of the whole council. Each service unit, department, staff member and those working on Brent's behalf have a responsibility to help the council to achieve the aims of this strategy. The implementation plan details the method for achieving these aims and reporting performance.

This CMS&IP arrives at a good time for Brent Council. A new and exciting Corporate Strategy commits the council to making Brent a great and a green place, and includes within it a corporate commitment to reducing CO₂ emissions. In addition, this CMS&IP will contribute to the council's forthcoming corporate environmental strategy and project to certify the council's management system to an environmental management standard, ISO14001.

What is Climate Change?

As part of the natural processes of the planet and human activity, green house gasses (GHGs) are released into the atmosphere. These GHGs blanket the planet and trap the sun's energy at the surface which warms the earth. Without GHGs the earth would have an average temperature of -20°C, but GHGs allow life to thrive on a planet with an average global temperature of 14 °C.

Climate change has arisen as a problem because of the burning of fossil fuels. Fossil fuels are trapped sources of carbon which when burned to create energy release a GHG known as carbon dioxide (CO₂) into the atmosphere. The result is that the blanket around the planet thickens and traps more heat, warming the earth more than would have occurred naturally. A warmer planet has more energy trapped within it and this energy in turn disrupts the global climate system causing it to change (hence the term climate change). Other GHGs include methane, ozone, nitrous oxide and water vapour.

How the climate will change as a result of this warming is the hard part to determine. If GHGs release continues to be uncontrolled, they may act as a catalyst releasing vast quantities of naturally stored GHGs removing the ability to control global warming out of our hands. However, if we act now, we can avoid this happening.

1.2 SCOPE

The full scope of this CMS&IP is as described in the bullet points below, and expanded upon in the implementation plan. Where quantifiable data was available it is included in the council's CO₂ emissions baseline (section 6) calculated to the year 2005-2006:

- Buildings that are occupied in order to deliver Brent council's services: electricity, gas, oil, and water.
- All non-private schools: electricity, gas, oil, and water.
- The council's public housing stock, managed by Brent Housing Partnership, an arms length management organisation: electricity and gas extrapolated from average Standard Assessment Procedure ratings.
- Street-lighting: electricity.
- Transport including: policy, travel plans, work travel activities, fleet operations, and commuting: fuel usage or mileage.
- Procurement and contracts, including: equipment, contract vehicle use, and building works: fuel use or mileage.
- Internal council waste including that recycled, incinerated, and disposed to landfill.
- Policy including planning policy, energy policy, environmental policy.
- Technology including: IT equipment rationalisation and use, telecommunications and home working, technical building controls over heating and cooling.
- Communication of the Carbon Management Strategy and implementation plan to all stakeholders through corporate communication channels.

The scope of this strategy reflects its purpose to 'get the council's own house in order' and seeks to achieve a reduction in the council's own emissions of carbon dioxide. The wider Borough Environmental Strategy shall encompass adaptation to the changing climate and reductions in carbon dioxide emissions from other contributing areas within Brent.

1.3 EXTERNAL DRIVERS AND INCENTIVES

1.3.1 FOSSIL FUEL PRICE INCREASES

Brent Council negotiated contracts for energy derived from fossil fuels in 2006 to last from October 2006-October 2008. These negotiated prices saw an average 16% increase in prices from the previous period. By 2008, energy prices are expected to be higher for electricity but lower for gas. Electricity is about three times more expensive than gas.

The Department for Trade and Industry have projected that electricity prices will increase significantly:

	Change between 2003 and 2010	Change between 2005 and 2010
Low Case	+14%	+8%
Base Case	+18%	+10%
High Case	+36%	+26%

Table 1 Changes in electricity prices between 2003-2010 and 2005-2010

But now that gas prices have risen recently, the DTI projects that the prices will now decrease:

	Change between 2003 and 2010	Change between 2005 and 2010
Low Case	-4%	-14%
Base Case	+2%	-10%
High Case	+12%	-4%

Table 2 Changes in gas prices between 2003-2010 and 2005-2010

The implications of this are that projects to reduce electrical energy consumption shall prove more attractive in terms of financial gain (they are already more attractive in terms of carbon saved as electricity has a higher carbon footprint than gas) than those to reduce gas. It also means that electricity bill 'top-up' funds will need to be provided by the council to those units whose energy bills increase. These 'top-up' funds may provide an opportunity to invest money in preventing increased bills by installing energy saving measures.

1.3.2 POLICY AND LEGISLATION

Local Government White Paper: Empowering Communities

The 2006 white paper on empowering communities included a chapter on climate change. The paper sets out a framework for local authorities to be both visibly leading by example to tackle climate change and empowering the community through consultation and action.

Energy Performance Commitment

The Department for the Environment, Food, and Rural Affairs (DEFRA) is working on behalf of the government to develop statutory mechanisms that encourage energy efficiency and reduction in the large non-energy intensive sector. This sector includes local authorities such as Brent. The purpose of these mechanisms is to make energy improvements more cost effective by putting a value to carbon emissions. Currently, DEFRA is considering an Energy Performance Commitment in the form of an emissions trading scheme.

Home Energy Conservation Act

The Home Energy Conservation Act 1995 required Brent Housing Partnership to prepare, publish and submit to the Secretary of State an energy conservation report identifying practicable and cost-effective measures to significantly improve the energy efficiency of all residential accommodation in their area; and to report on progress made in implementing the measures.

The Mayor's Energy Strategy: Green Light to Clean Power 2006

The Mayor's energy strategy is driving the development of renewable energy in London and seeks to ensure that each local authority has one carbon neutral building by 2010.

EU Energy Performance of Buildings Directive (2002/91/EC)

As a requirement of the EU Energy Performance of Buildings Directive (2002/91/EC) the council must display energy performance certificates in buildings over 1000m² that are used to provide a public service. The current energy efficiency benchmarking of buildings indicates that these certificates will provide poor ratings. Displaying an energy performance certificate

is intended to encourage public pressure on building occupiers to modify their behaviour in order to make energy performance transparent.

It is the intention of the government that this directive shall encourage the public sector to only procure or lease buildings in the upper quartile of energy performance.

Anticipated Energy End-use Efficiency and Energy Services Directive

The Energy End-use Efficiency and Energy Services Directive aims to introduce mandatory targets within the public sector for the annual reduction of energy use. A 1.5% annual reduction target has been proposed.

Climate Change and Sustainable Energy Act 2006

The Act places a duty on local authorities, when exercising their functions, to have regard to a report published by the Secretary of State on ways in which they might improve energy efficiency, increase micro generation, reduce greenhouse gas emissions and alleviate fuel poverty.

Part L Building Regulations

The 2006 revision to Part L of Building Regulations in England and Wales applies to non-domestic buildings. The regulations apply to extensions and refurbishments and require minimum proportions of the investment to be spent on energy efficiency measures.

CPA: Anticipated Performance Assessment Alterations from 2008

The Government wants to see a significant increase in the level of engagement by local government in climate change issues. It is intended that a new performance framework will be introduced post 2008 and the government is considering how to ensure that this includes an appropriate focus on action on climate change, sufficient to provide incentives for more authorities to take action.

Climate Change Bill - forthcoming

The draft Climate Change Bill will enable the setting of statutory carbon dioxide emissions reduction targets, and the development of domestic emissions trading schemes – see Energy Performance Commitment above.

Mayor of London's Climate Change Action Plan

The climate change action plan 2007 covers climate change mitigation in a number of sectors relevant to Brent; local authority buildings, ground based transport, housing, new buildings, renewable energy development and off setting. The plan is in support of action on procurement, thermal efficiency of buildings, building use, behavioural change, efficient technology, decentralised energy and so on. The Mayor's target for the Local Authority sector is a 20% reduction of 1990 levels of CO₂ by 2025. This is comparable to the target set out in section 1.6 of the CMS&IP.

Freedom of Information Act, Environmental Information Regulations

Brent must proactively and progressively improve the amount of environmental information available to the public. Our contribution to climate change is expected to be a popular topic for requests for environmental information and the data required to monitor the performance of this CMS&IP will provide this information.

Local Government Act 2000

The Local Government Act 2000 states that every local authority has the power to do anything which they consider is likely to achieve any one or more of the following objectives-

- promotion or improvement of the economic well-being of their area,
- promotion or improvement of the social well-being of their area, and
- promotion or improvement of the environmental well-being of their area.”

It goes on to place a duty on Local Authorities to produce sustainable community strategies for economic, environmental and social well-being.

ODPM Circular 03/2003

ODPM Circular 03/2003 on Best Value and Performance Improvement reiterates that sustainable development and equity are fundamental to the Best Value regime. This approach enables sustainability and quality to be taken into consideration when considering best value.

EU Landfill Directive (99/31/EC)

Costs to dispose of waste will increase due to the EU Landfill Directive (99/31/EC). The tax stands at £24 per tonne of general waste and will rise from April 2008 by £8 annually to £48/tonne by 2010

Brent currently sends the vast majority of its own waste and the waste of its residents, to disposal via landfill.

Waste and Climate Change

Waste is included in this Carbon Management Strategy because waste has a significant carbon footprint. When waste breaks down in landfill sites methane is released which is 23 times more powerful than carbon dioxide. In addition, the products made from recycled materials are far less energy intensive than those made from new materials, cutting the green house gas footprint further.

This all means that by recycling or reducing a tonne of waste, we may prevent the release of a much greater tonnage of green house gas emissions, making projects to reduce waste very important.

Info Box 2 Waste and Climate Change

1.4 INTERNAL DRIVERS AND INCENTIVES

1.4.1 COSTS OF INACTION

Including the costs of electricity, gas, and fuels such as heating oil and vehicle fuel, the council's energy bill was approximately £5,404,000 in 2005-2006. This includes schools, council buildings, street lighting, and internal transport (including through contracts where known). We already know that between 2006-2008 these costs will rise as the new contracts have been already negotiated.

The consumption figures collected for buildings, transport, and street lighting have been run through a 'value at stake' calculation process designed by the Carbon Trust. This process supplies standard assumptions to the expected use and price increases of:

- Petrol
- Diesel
- Electricity – buildings
- Electricity – street lighting
- Gas
- Oil

A cost curve over time is produced as a result (figure 1). The curve shows that, if Brent Council does not act to reduce its energy use, the costs accumulated in extra energy spend

over the next four years will reach **£3,117,543**, this is the value at stake. This will result in an energy bill in 2011 of approximately **£7,169,000**, set to rise further to **£7,810,000** in 2013.

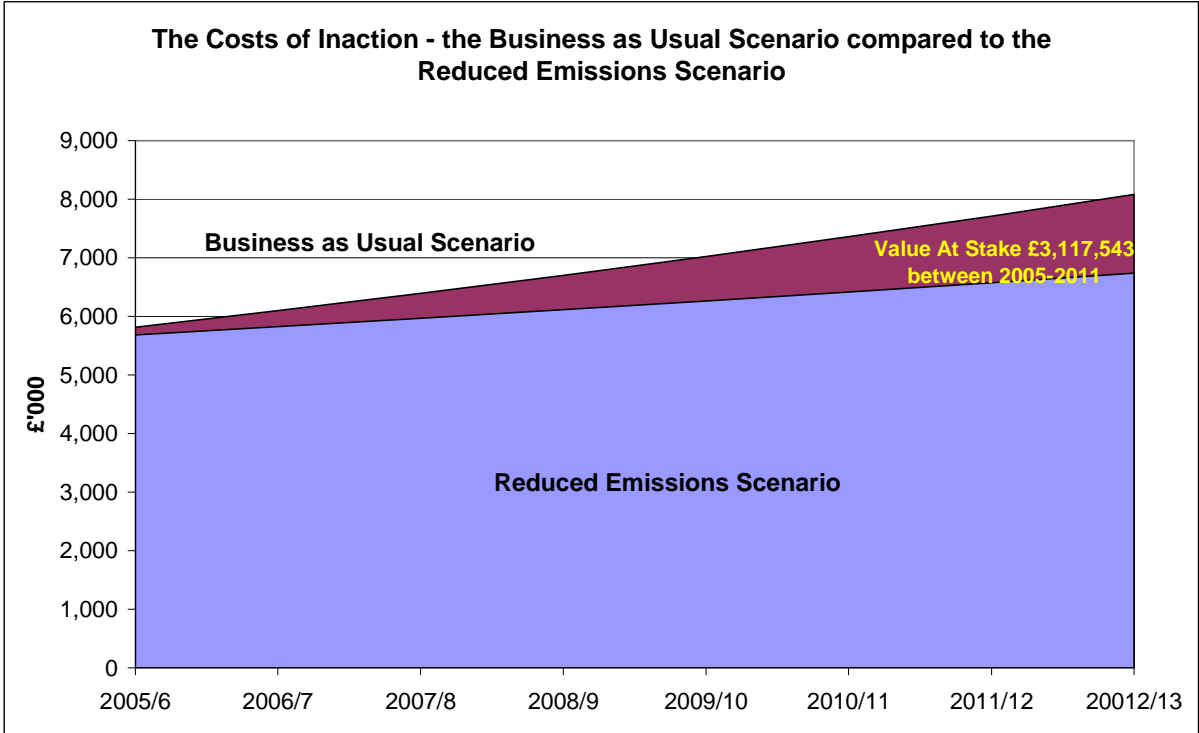


Figure 1 Cost comparison between Brent’s two possible courses of action. The business as usual scenario assumes no action is taken to curb fossil fuel consumption, whereas the reduce emissions scenario shows the cost situation after implementing this carbon management strategy and implementation plan. The red area on the graph illustrates in volume the value of the savings that can be made by implementing the CMS&IP. It is a significant slice of the graph.

1.5 CORPORATE CONTEXT

1.5.1 CORPORATE STRATEGY

Our headline emissions reduction target to reduce emissions of carbon dioxide by 20% by 2011 is included within our Corporate Strategy. This CMS&IP details how the council will achieve this target.

In addition, the UK Climate Impacts Programme has identified a number of significant ways that climate change is likely to affect the services of local authorities. Climate change puts our services, and therefore our ability to deliver our corporate strategy in the medium and long term, under threat.

1.5.2 ENVIRONMENTAL STRATEGY

Brent’s Environmental Strategy will be developed during 2007-2008. This strategy will have four main subsections:

- Greening our organization
- Working with our businesses
- Supporting our residents
- Investing in future generations

This CMS&IP is the core document under the first section, greening our organization. This is because by tackling climate change, we tackle the majority of our major environmental impacts. The strategy shall deliver the community elements within Brent's Corporate Environmental Policy.

1.5.3 CORPORATE ENVIRONMENTAL POLICY

Our Corporate Environmental Policy commits Brent Council, with regards to its own performance, to:

'Maintain and continually improve the environmental wellbeing of Brent; and address the environmental impact of how we deliver our Services by:

- integrating environmental considerations into all Council procurement;
- improving resource use and waste management by encouraging waste minimisation, reuse, and recycling;
- responding to Climate Change by cutting emissions from our buildings and vehicles, by promoting the use of renewable energy, and by adapting our services;
- motivating and training our staff, especially through our Going Green campaign; and
- Integrating environmental considerations into all decision making considered to have significant environmental implications.'

There are projects included in the implementation plan that help to achieve all of these commitments. In addition, this policy is the driving force behind all work, including this CMS&IP, to make Brent Council and environmentally sustainable organisation.

1.5.4 ENVIRONMENTAL MANAGEMENT STANDARD

Brent Council is seeking to ensure that its management system is compliant with the ISO14001 standard for excellent environmental management. The implementation plan includes a series of environmental improvement projects spanning all council departments helping the council to ensure that it complies with the environmental subject specific requirement of the standard to:

'have in place objectives, targets, and improvement programmes to govern its significant environmental impacts as identified and included within the environmental policy statement.'

1.5.5 OTHER

Work that has already been conducted to implement this Carbon Management Strategy fully within all council departments means that there are now a number of strategies and plans linking from this document:

- Corporate Asset Plan and Property Management Manual
- Schools Asset and Development Plan
- Anti Poverty Strategy – Brent Housing Partnership
- Environmental Policy – Brent Housing Partnership
- Information Technology Strategy
- Local Implementation Plan
- Local Development Framework
- Sustainable Procurement Strategy
- Waste Management Strategy
- Internal Environmental Audit Programme
- Sustainable Community Strategy

- Department Service Plans and Performance Management Framework

1.5.6 DELIVERY OF INTERNAL COMMITMENTS

A number of the key internal documents and commitments that this CMS&IP will help to deliver were covered in section 1.5 above, which set out the position of the CMS&IP within the council. Below are the other key internal drivers which have not been covered:

Nottingham Declaration on Climate Change

The Nottingham Declaration was launched in October 2000. The Declaration is a voluntary pledge to address the issues of climate change, and was signed in 2002 by the Leader and Chief Executive of Brent Council. In signing it, Brent committed to tackling climate change as a cornerstone of the council's strategy. Brent was one of the first authorities to sign the declaration which requires the council specifically to:

- Work with central government to contribute, at a local level, to the delivery of the UK climate change programme 2006.
- Prepare a plan with local communities to address the cause and effects of climate change.
- Publicly declare within the plan the commitment to achieve a significant reduction of greenhouse gas emissions from its own operations.
- Encourage all sectors in the local community to take the opportunity to reduce their own greenhouse gas emissions.
- Work with key partners to assess the potential effects of climate change on the Brent community, and to identify adaptation opportunities.
- Provide opportunities for the development of renewable energy generation within the Borough.
- Monitor the progress of the plan against the actions needed and publish the results.

Section 2.4 details the progress to date with meeting these commitments.

The Mayor of London's Green Procurement Code

This code is another voluntary agreement and was signed by the council in 2002. It originally committed the council to consider the environmental impacts of its procurement activities and to investigate the procurement of products with a recycled material content. The Code has recently evolved to provide local authorities with an environmental performance monitoring framework covering a wider range of environmental impacts. Its core focus remains on procurement and Local Authority uptake of the Government's sustainable procurement flexible framework.

1.6 **VISION, OBJECTIVES, AND TARGETS**

1.6.1 VISION

Corporate Strategy

The corporate strategy sets out a vision statement for Brent:

'A Great Place

Brent will be a great place to live in and to visit. It will be safe, clean, green and lively. It will be the daily experience of local people that our streets and open spaces are safe places to be and that our green spaces and leisure facilities will be worth visiting. Residents will care for their surroundings, appreciate where they live and enjoy what Brent has to offer.'

'A Green Place – Our Priorities for 2006-2010:

Make Brent Council an exemplar of environmental practice and performance on sustainability issues.'

Carbon Management Strategy:

As a result of delivering this carbon management strategy and implementation plan, Brent Council will:

'be a showcase of best practice, having risen to the challenge to reduce its contribution to climate change, leaving the Council in a position to lead others by example.'

1.6.2 TARGET

Our Target:

'To reduce the Council's carbon dioxide emissions by 20% from the 2005/6 baseline of 60,619 tonnes, achieving a total carbon dioxide saving of at least 12,123 tonnes April 2011'

Subject specific targets have been included in the relevant sections in the implementation plan.

Brent Council has a long term aspirational target to reduce 2005-2006 carbon dioxide emissions by 60% by 2050.

1.6.3 STRATEGIC OBJECTIVES

In order to achieve Brent's vision and headline target, the following strategic objectives have been set. These objectives form a key part of the Energy Policy Statement endorsed by the Council's Executive in 2005. They have been amended to reflect recent developments as a result of Brent undertaking the Local Authority Carbon Management Programme.

All objectives should have been achieved by April 2011. Progress with achieving these objectives shall be measured through 2 internal environmental audits, one in 2009 and another in 2011.

- CC1 Review carbon emissions data annually and prioritise areas for action based on feasibility and carbon dioxide emissions reduction potential
- CC2 Take account of the energy hierarchy to firstly avoid the need to use energy, improve energy efficiency, meet energy needs from renewables, and then procure green and clean energy.
- CC3 Increase climate change awareness within the council, public, community and business sectors and empower these groups to take action through the successful delivery of a climate change communications programme.
- CC4 Strengthen leadership and senior management involvement in climate change issues across all areas of the authority.

CC5 Integrate predicted climate changes and service effects into service planning and risk assessments.

CC6 Refrain from decision making that increases emissions of carbon dioxide, and where unavoidable, take appropriate mitigating action.

This is a carbon management strategy and not a climate change strategy and therefore will not be able to fulfil all of the above by itself. Further work will be required in order to address carbon emissions and climate change adaptation and mitigation in the community and business sectors.

1.6.4 TOOLS

The table below is a list of the tools that will be employed and are already being employed through our implementation plan to achieve our strategic objectives:

Tool	Description
Steering Group and Project Management Process	See section 8 Project Management
Data collection procedure	See section 3.3.5 in Project Management
Energy management system	Procure remote energy monitoring capability and data reporting for key sites and sites where investment into energy efficiency is being made.
Energy efficiency fund	See appendix section 4.5.1
Opportunity assessment and criteria	Ensure that a process exists for the assessment of opportunities. Brent can use the Local Authority Carbon Management Programme's tools for this.
Going green campaign	See appendix section 4.4.1
E-Learning training	See appendix section 4.10.2
Departmental carbon reduction action plans	All departments to have a carbon dioxide reduction action plan, utilising existing opportunities (such as the energy efficiency fund and e-learning course) and quick win measures.
Service Plans	Service plans to include key corporate targets to reduce and recycle waste, and to reduce emissions of carbon dioxide
Performance Management Framework	Ensure that targets are included within performance plus.
ISO14001	Use ISO14001 as a driver for reducing the environmental risks associated with unmitigated emissions from our actions. Roll out ISO14001 across the council to facilitate the agreed development of departmental action plans for waste minimization and recycling and energy reduction.

Tool	Description
Environmental assessment methodology	An environmental assessment methodology of key corporate plans, programme, projects, and strategies will ensure that the Corporate Environmental Policy is integrated throughout the council and decisions are taken to protect the environment, or mitigating measures included.
Internal audit programme	Use the internal environmental audit programme or corporate audit and investigations team to audit progress against planned carbon dioxide reduction actions.
Energy training needs assessment and programme	See appendix section 4.10.1
Property standards	Property standards in the property management manual to include guidance on sustainable housekeeping, including energy, water, monitoring, and recycling.
Electrical equipment use policy	See appendix section 4.5.3 & 4.5.4
Partnership – Energy Solutions North West London	Work with Energy Solutions North West London through the existing service level agreement to spend the energy efficiency fund and deliver climate change action plans.
External support	Take advantage of external support offered by organizations such as the Carbon Trust and Energy Saving Trust to facilitate the realization of ideas and opportunities.
Energy contract management	Centralise the procurement of energy to negotiate lower prices for clean and green energy and provide better energy use data.
Contract environmental assessments	Continue to identify key contracts and conduct environmental assessments to reduce environmental impact.
Communication plan	See appendix 4.4 Communication. The communication plan will help Brent Council achieve strategic objective CC3 by communicating its own successes to businesses and the community. Direct working with these groups is outside the scope of this strategy and the Council's carbon emissions.
Opportunities workshop	Hold an annual opportunities workshop to develop the implementation plan.
CMT Endorsement	<p>The Corporate Management Team have agreed to:</p> <ul style="list-style-type: none"> • Undertake the actions required to achieve the carbon emissions reduction target. These are: • Support project delivery in their departments • Support project implementation in their departments • Take responsibility for the corporate carbon reduction target

Tool	Description
	<p>and develop carbon emissions reduction plans</p> <ul style="list-style-type: none"> • Refrain from making decisions that increase carbon dioxide emissions, and where decisions are unavoidable offset emissions by formulating and funding action elsewhere, and • Submit all decisions with significant energy implications to the Carbon Management Steering Group for review.

Table 3 Tools to be employed to deliver Brent's vision, target, and strategic objectives

2 Emissions Baseline

2.1 QUALITY OF THE BASELINE

2.1.1 DATA SETS

The scope of the baseline was covered in section 1.2

Accurate datasets to cover all of the activities included within the scope either did not exist at the start of the Local Authority Carbon Management Programme, or were incomplete or in an unsuitable format. This is because local authorities are in the early stages of carbon dioxide emissions management, and partly due to a lack of attention in the statutory performance assessment methodology to date.

The following datasets were used to compile the emissions baseline:

Dataset	Provider
Council building energy use and water	Property and Asset Management BACES LASER data
Schools energy use and water	Achievement and Inclusion
Fleet fuel use or mileage where available	Brent Transport Services Cemeteries and Mortuary Parks Highways
Mileage claims	Finance / payroll
Commuting	Transportation Unit
Internal waste	Environment and Culture Directorate
Street lighting	StreetCare
SAP ratings of housing stock	Housing and Community Care
Contracts	StreetCare

Table 4 Datasets and data owners

2.1.2 DATA GAPS

The following are areas of the baseline that currently are absent or incomplete:

- Absent
 - Taxi use
 - Net annual tree gain or loss
- Incomplete
 - Internal waste baseline
 - Contract CO₂ emissions
 - Full picture of the council's commuting CO₂ emissions

Some datasets have undergone quality checks to improve the data reliability. This is important as the extent of the success of this CMS&IP depends on good information on which it can be certain that real emissions savings have been made. The following quality checks were conducted:

- Comparison of energy data for schools and council buildings with that provided by Laser, Brent's key energy provider.
- Comparison of data for schools and council buildings with typical benchmarks of performance which highlights unusual figures

Finally, the baseline tool currently in use does not differentiate between Euro categories for vehicles if the data format used was mileage.

2.1.3 DATA TRANSFORMATION

Some of the data sets were not in the format required from which carbon dioxide emissions levels could be extrapolated. The following datasets underwent transformations for this purpose:

- Schools data was only available in spend figures
- Commuting data was only available for the staff who took the survey
- Housing data for all energy types was provided as a total but different energy types have different carbon dioxide conversion factors
- Street lighting electricity use is not monitored so the use figure needed to be estimated from bulb numbers and wattage

Green Energy

By procuring green energy provided through the renewables obligation we do not achieve a carbon dioxide emissions reduction, or make our buildings effectively 'carbon neutral'. This is because it is the power stations as the suppliers of the energy that get the carbon reduction credit, not those who buy the energy. If the buyers got the credit too this would be double counting.

The benefit to us is that the carbon dioxide emissions from a kWh of electricity are set at 0.43kgs CO₂ / kWh, as opposed to 0.45kgs CO₂ / kWh.

Green energy can only be claimed as a carbon emissions reduction measure if it comes from a really green source not covered through the renewables obligation, such as a company that has installed wind turbines or our own renewable energy generation.

Info Box 3 Green energy and carbon dioxide savings

2.2 CARBON EMISSIONS BY ACTIVITY

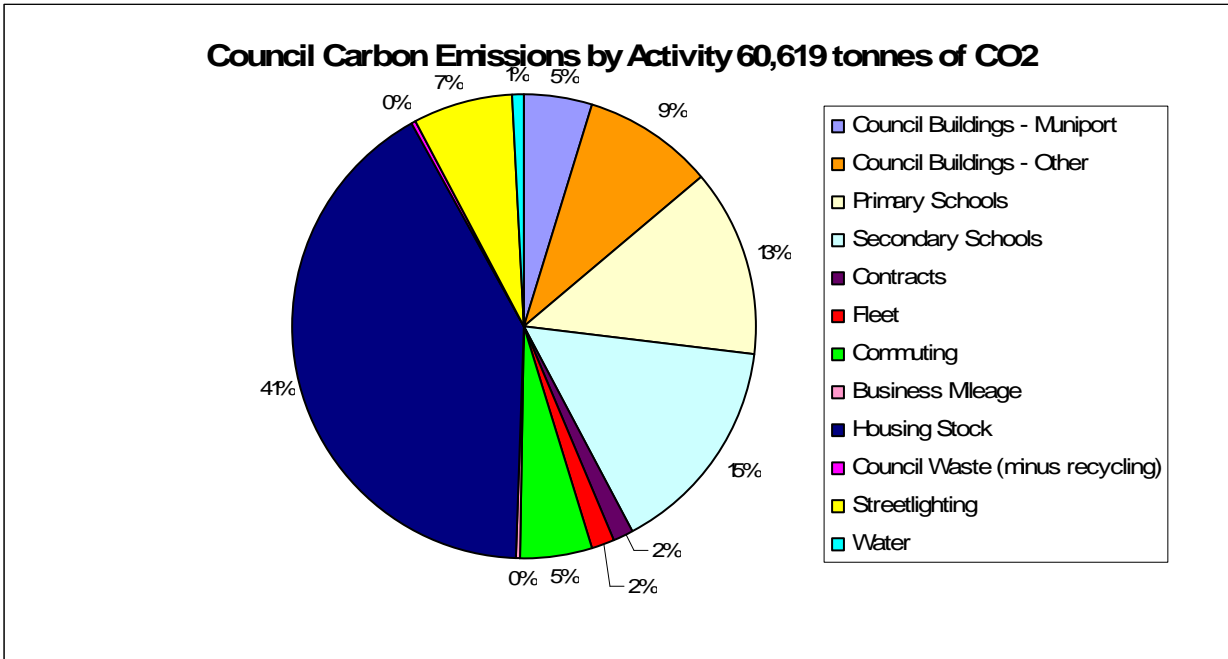


Figure 2 Brent Council's carbon dioxide emissions by activity

The chart above shows that the majority of our CO2 emissions are derived from the power to heat our housing, schools, and council buildings. The council 'muniport' buildings are fifteen key sites, generally large and significant with regards to environmental impact, run by the central facilities management team. All other buildings are managed by individual site managers, often only as a small part of their role. However, all property assets must conform to the direction set by the Property and Asset Management Unit through corporate governance.

2.3 EMISSIONS PROJECTIONS

2.3.1 BUSINESS AS USUAL

The business as usual scenario is a projection of our carbon emissions over the next four years if we fail to act to both reduce, and prevent further, carbon dioxide emissions.

The projected carbon dioxide emissions are based on the following business as usual assumptions:

- 0.7% annual growth in energy use of property due to depreciation of stock (DTi projected growth)
- 2% per annum increase in fossil fuel derived energy in schools, offices, and other buildings from longer opening hours, flexible working, increased power of electrical equipment, and increased technological capacity of schools and use of technology in learning. See appendix section 4.2 for more information on the suspected changes to schools.
- 1.7% increase in business mileage and contract mileage with increased demand on services from a rising population (DTi projected growth)
- 10% increase in fuel use for machinery in natural space management due to longer growing seasons
- 0.5% reduction in water use per annum from drought orders and use restrictions
- Commuting is expected to have no change under the business as usual scenario
- Street lighting 0.7% increase annual from additional lighting columns and aging lighting.

The graph shows that if we do not act to reduce our carbon emissions now, we can expect our emissions to increase by 2011 to an extra 4001 tonnes per year:

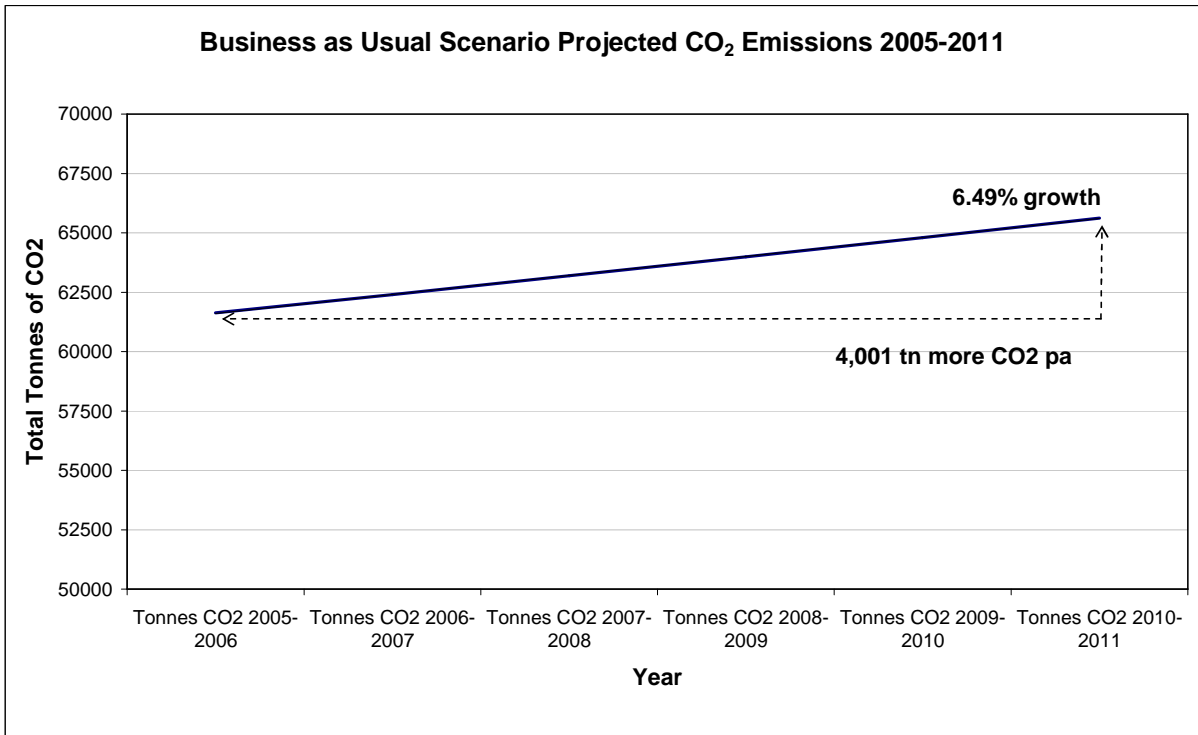


Figure 3 Business as usual carbon dioxide emissions

2.3.2 REDUCED EMISSIONS SCENARIO

Figure 5 below shows a comparison between the business as usual scenario and our carbon emissions in 2011 if we deliver the implementation plan in section 3 and appendix 4.1. The implementation plan must both prevent growth from affecting our carbon emissions baseline or mitigate any affect, and reduce our baseline by 20%.

By delivering our strategic objectives, especially CC4 and CC6 through our projects that embed carbon emissions management throughout Brent, we will be developing the authority in a way that mitigates and curbs carbon dioxide emissions associated with growth, allowing us to implement our carbon dioxide emissions reduction projects and achieve the actual projected savings in table 5, section 3.1.2.

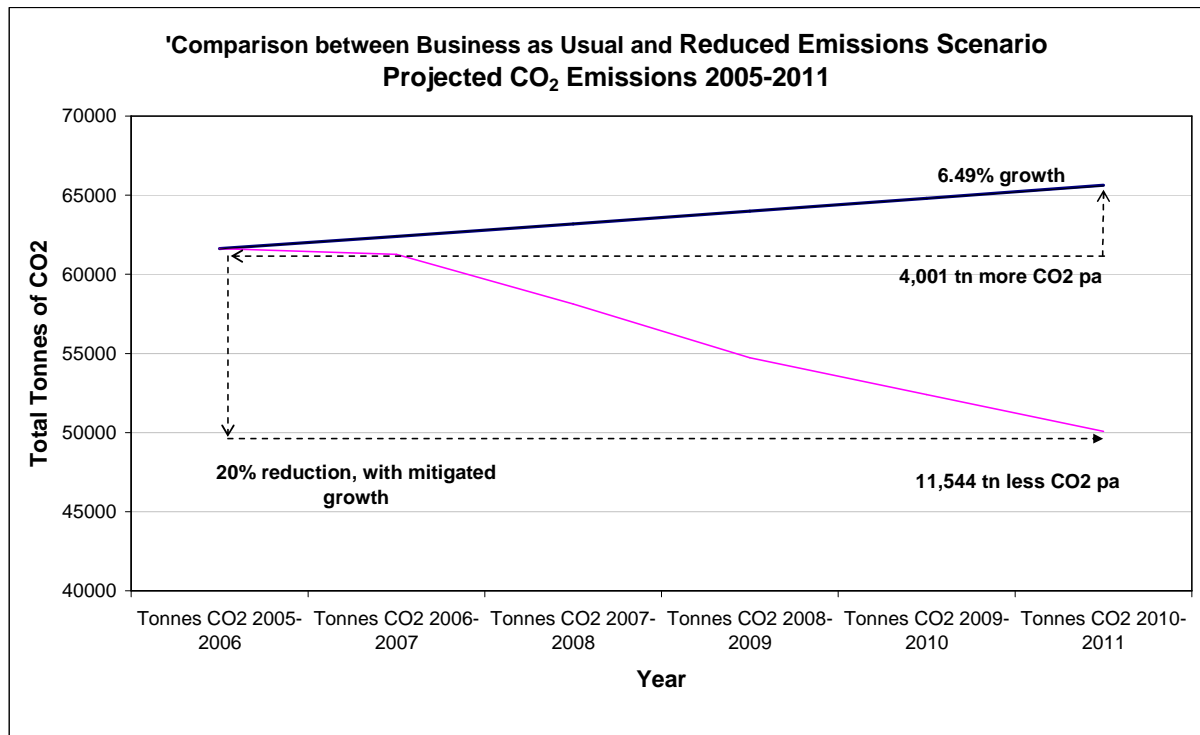


Figure 4 Reduced emissions scenario

2.4 PAST ACTIONS AND ACHIEVEMENTS

Work to achieve our carbon reduction target started throughout 2006-2007. This year has been considered as the first year of implementation and the projects in the implementation plan that have taken place in this year state the timescale as year 1. The past actions and achievements included in this section refer the work undertaken before April 2006.

2.4.1 POLICY

Brent Council introduced a new Corporate Environmental Policy Statement, and an Energy Use Policy to further expand on the commitments of the council under this element of the environmental policy.

2.4.2 PROJECTS

Brent Council initiated an efficiency project related to energy and devised an energy action plan. This CMS&IP has integrated and expanded on this original action plan.

Other specific actions resulting from this plan have included lighting upgrades and sensor lighting installations, and other building improvements as a result of the Capital Asset Plan.

Our adult education centres fully embraced energy efficiency as a core objective in 2005 and have made significant progress. Simple measures, such as radiator flushing, window replacement / refurbishment, lighting re-wiring, and better setting of thermostats have all made a difference.

Brent Transport Services have been working to increase the concentration of bio-diesel within their fuel. The current blend used is 5%, purchased locally from Energy Solutions North West London.

2.4.3 RESEARCH

Brent Council asked the carbon trust to conduct energy audits of ten high carbon producing buildings in October 2005. The recommendations from these audits have been built into the implementation plan and the new energy efficiency fund shall facilitate implementation.

3 Implementation Plan

3.1 INTRODUCTION

This plan is a live document, it will be reviewed and updated as necessary, and annually after an opportunities workshop. The plan includes four main sections covering a summary of the implementation projects (table 5), implementation plan financing, the project management methodology, and communication plan.

More detail on individual projects can be found in the [appendix](#) or accessed via the links below.

3.1.1 PROJECT CATEGORIES

Embedding projects

These are projects that improve carbon emissions management in the authority. They raise awareness, guide decisions through policy and guidance provision, and improve processes and procedures. These projects are about both preventing, and reducing carbon emissions.

Facilitation Projects

These projects enable other projects to work. They provide skills and knowledge, produce revenue, or produce research to better guide other project work. For example, the energy management training course will enable building and site managers to better manage energy efficiency technology purchased through the energy efficiency fund.

Direct Emissions Reduction Projects

These projects directly and quantifiably reduce our carbon emissions levels. These projects are generally based on practice or technology and require investment.

Feasibility Studies

These studies are the pre-requisite to taking the next step to a direct emissions reduction project. They provide us with the information necessary to make decisions and quantify projects.

Offsetting

These projects do not directly reduce carbon emissions, but instead find carbon emissions savings from another source to mitigate those elsewhere. It may be necessary to off set emissions in this way when other solutions can not be found and essential decisions may increase emissions.

3.1.2 IMPLEMENTATION PLAN SUMMARY

Due to uncertainties surrounding the data and its accuracy, for the purposes of assessing project risk and the proportion of carbon dioxide savings required in order to meet the 20% reduction target, the baseline shall be rounded up to a more conservative figure of 65,000 tonnes and the emissions reduction required at this time calculated to be 13,000 tonnes. As information improves over time historical data may be reviewed to gain a better perspective on performance.

Projects	Department	Year	Resource	CO ₂ Saving	% assist target
Embedding Projects:					
Energy Efficiency Accreditation	E&C / F&CR	3	£10000 Property	622 tonnes	5.13%

Projects	Department	Year	Resource	CO ₂ Saving	% assist target
Scheme			and Asset Management – Incls costs for first three years.		
Going Green intranet resource	E&C	1-5	Officer time		
Brent Green Network	E&C	2-5	Officer time		
Poster Campaign (and other awareness work)	E&C	2-5	ECD Budget £5000 for initial work. Annual budget to be agreed.		
WHEEC	E&C	2	Lottery / ESNWL £87,000		
Property Management Standards	F&CR	2	Officer time		
Essential User Permits	E&C	2	Officer time		
BHP Environmental Policy Implementation	BHP	2-5	Officer time	NA	NA
Green Procurement Policy	E&C / F&CR	2-5	Officer time	NA	NA
Tree Policy	E&C		Officer time		
Switch Off Policy	F&CR	2	Officer time	72.8	0.6%
Facilitation Projects:					
Building Energy Audit Programme	F&CR / C&F	2-5	Integrated into property management standards as a requirement	NA	NA
Staff Travel Plan	E&C	2-5	TFL £20,000 / Parking Revenue, approx	600	5%
Parking Policy	E&C / F&CR	2	Will provide revenue for other projects	NA	NA
Green Fleet Review (an recommendation implementation)	E&C / C&F	2-3	Free from Energy Saving Trust. Costs of measures TBD.	NA	NA
Energy Management Training	F&CR	2	P&AM £7,000	NA	NA
E-Learning	E&C	2-5	ECD £11,000	NA	NA
Direct Emissions Reduction:					
Civic Centre	Central	5-6	Central – Costs specifically for energy requirements unknown. To achieve BREEAM excellence an increase between 4-7% likely.		
Energy Efficiency Fund	F&CR	2-5	Salix Finance Prudential Borrowing	3959	32.6%

Projects	Department	Year	Resource	CO ₂ Saving	% assist target
			£600K		
Electrical Equipment Rationalisation	F&CR	2-5	Unit budgets	20.1	0.16%
Move to Data Centre	F&CR	2	ITU budget £500K (uncertain of budget element for energy efficiency)	?	?
Bio-diesel	C&F	1-2	TBD	109.11	0.9%
Euro Standards	C&F	2	TBD		
BHP Boiler Replacement	BHP	2-5	TBD	1500	12.37%
BHP Insulation Programme	BHP	2-5	TBD	1714.7	14.1%
Energy Quick Wins	F&CR / E&C	3	Officer time	NA	NA
Internal Waste Reduction	E&C / F&CR	2-5	£80,000	160	1.3%
Internal Waste Recycling	E&C / F&CR	1-5		2225	18.35%
Water Action Plan	E&C	2-5	Officer time initially / seek external grant funding	87.8	0.72%
CHP MGH	F&CR	2-3	Third party finance - £65,000	93	0.76%
Feasibility Studies:					
LED Lighting Trial	E&C	2-5	PFI bulb replacement budget	106	0.87%
Energy Park	E&C	2	PFR / London Green Fund	TBD	TBD
Energy Efficiency Improvements: Leisure Centers	E&C	2	–energy efficiency fund and / or party finance £100,000	400	3.2%
Wind Turbine(s) (Small Scale)	F&CR / ESNWL	2-5	TBD – potential part of new civic centre	TBD	TBD
Bio-mass burner	F&CR / ESNWL	2-5	TBD	TBD	TBD
Solar panels / water heating	F&CR / ESNWL	2-5	TBD – potential part of new civic centre	TBD	TBD
Offsetting:					
Tree Planting	E&C	2-5	£200,000, £150,000 for street trees, £50,000 for trees in parks	TBD	TBD
Total				11865.31	91%

Table 5 Project Summaries

The summary table above indicates that if we are successful in delivering the climate change projects we have outlined, that we will be close to meeting our target. However, there are still significant uncertainties surrounding data reliability and projections so new project ideas, commitment to delivering projects, and good risk and issue management is essential. In addition, there are areas of suspected growth (such as schools) which will be expected to add to the carbon dioxide emissions levels for Brent.

3.2 IMPLEMENTATION PLAN FINANCING

There are risks associated with increased prices for energy as discussed in section 1.3.1. The Brent specific value at stake is discussed in section 1.4.1.

The table below shows the summary cost and funding estimated in the implementation summary table above (table 5).

Total Estimated Capital Expenditure	£986,000
- Provided internally and through Prudential borrowing	£574,000
- Grant / external funding	£421,000

Table 6 Summary cost of implementation plan

Total Annual Carbon Reductions Projections				
	07/08 savings	08/09 savings	09/10 savings	10/11 savings
Carbon Reduction (tonnes)	3477.4	6861	9168	11865.31

Funding shall be mainly provided out of existing budgets for staff time or projects, however, a significant step forward was made when Brent successfully secured a £300,000 Salix Finance grant which has been match funded by the Council. This funding, which forms a ring fenced fund for energy savings projects, over comes the initial barrier of where will the money come from to fund invest to save projects. The funding has helped to maintain internal momentum with the carbon management process.

3.2.1 PROJECTS WITHOUT FUNDING

A number of the projects above have 'TBD' – to be determined – in the resource column of table 5. This indicates our level of project delivery risk relating to resources. A number of funding streams are available to reduce this risk. Some of these are listed in section 3.2.2, other financial options include:

- Third party finance
- Increasing the value of the energy efficiency fund
- Local environmental network projects (Creative Environmental Networks, London Sustainability Exchange)
- Redirection of existing budgets
- Capital programme

		% of total projects	Contribution to target
Total number of projects	37	100	/
Total number funded fully	19	51.35	38.58%
Total number funded partly	8	21.62	26.1%
Total number unfunded	10	27	29.85%

The responsibility for securing funding to enable projects to be a success will in the first instance lie with the project manager and department. Should funds be difficult to obtain then the issue shall be escalated to the Carbon Management Project Sponsor.

3.2.2 FINANCIAL ENABLERS

London Green Fund

The London Energy Partnership estimated that significant investment is needed in London if the city is to meet its carbon reduction targets. A London Green Fund has been proposed as a possible mechanism and proposals for projects are being sought. This fund is a real incentive for Brent to put forward ambitious projects in the region of £5m.

Low Carbon Buildings

The Government has provided £20m funding to support local authorities to develop low carbon buildings. Authorities can bid for funds sufficient to cover 40% of the costs of a renewable energy technology installation.

DfES Building Schools for the Future

The aim of the building schools for the future programme is to rebuild or renew every secondary school in England over a 10-15 year period. Combined with the requirements of Part L and Brent's sustainable planning policy, all new or refurbished secondary schools in Brent can achieve significant energy efficiency improvements.

Commercial arms of the Carbon Trust

An incentive, that Brent has already taken advantage of, is the provision of grants for local authorities to overcome the initial barrier of where does the initial money for 'invest to save' projects come from. The Carbon Trust's Salix Finance organisation provides grants that are match funded for proven energy efficiency technology installation.

Other commercial arms of the Carbon Trust include the Partnership for Renewables that provides finance for large scale renewable energy projects on Local Authority land.

3.3 PROJECT MANAGEMENT

3.3.1 PROJECT MANAGEMENT TEAM

The Project Management Team is known as the Carbon Management Steering Group. The work of this group is managed through the intranet Groups and Projects page, see [Carbon Management Steering Group](#) on Groups and Projects on the intranet.

TERMS OF REFERENCE

Scope:

The Carbon Management Steering Group acts internally to reduce Brent Council's own contribution to climate change.

Purpose:

- To meet the [strategic objectives](#) outlined in section 1.5.1
- To develop and deliver the Carbon Management Strategy and implementation plan, including:
 - To achieve the strategic objectives

- To deliver the climate change communications plan and raise the awareness of all staff working for, and on behalf of, the council.
 - To review the progress of climate change projects across the Council and provide guidance, leadership, and resources to ensure that these projects are a success.
 - To address any risks and issues arising throughout the course of the Carbon Management Strategy implementation.
 - To pilot and sponsor new initiatives and roll out best practice across the Council and the Borough.
 - To apply for financial resources internally and externally to deliver projects and ensure that projects are fully funded.
- To promote adherence and to ensure compliance with the corporate standards relating to environmental management, particularly energy efficiency and waste recycling.

Other:

- The group will work with supporting projects and groups to address the wider impacts of climate change to the borough and opportunities for adaptation.
- The group will meet bi-monthly

Members

Name	Title	Department	Role
Duncan McLeod	Director of Finance and Corporate Resources	Finance and Corporate Resources	Project Sponsor
Michael Read	Assistant Director of Environment and Culture	Environment and Culture	Project Sponsor
Claire Smith	Principal Environmental Projects and Policy Officer	Environment and Culture	Project Leader – project management
Roger Kelly	Director – Energy Solutions North West London	Energy Solutions North West London	Project Leader – technical
James Young	Deputy Head of Property and Asset Management	Finance and Corporate Resources	Energy Efficiency Fund manager
John Bowtell	Asset Manager – Schools	Children and Families	Energy efficiency - Schools
Suraj Shah	Asset Management Officer	BHP	Housing and environmental policy implementation
Rachel Smith	Environmental Projects Officer (temp)	Environment and Culture	Project Support

Table 7 Project management team

3.3.2 PROJECT WORKING GROUP

The project working group is comprised of the individual project owners. This group will meet annually during an opportunities workshop and consult on the implementation plan which will be updated annually. Electronic updates will share best practice and a networking event will be held annually.

See appendix 4.3 for a full list of the group members.

3.3.3 PROJECT REPORTING PROCESS

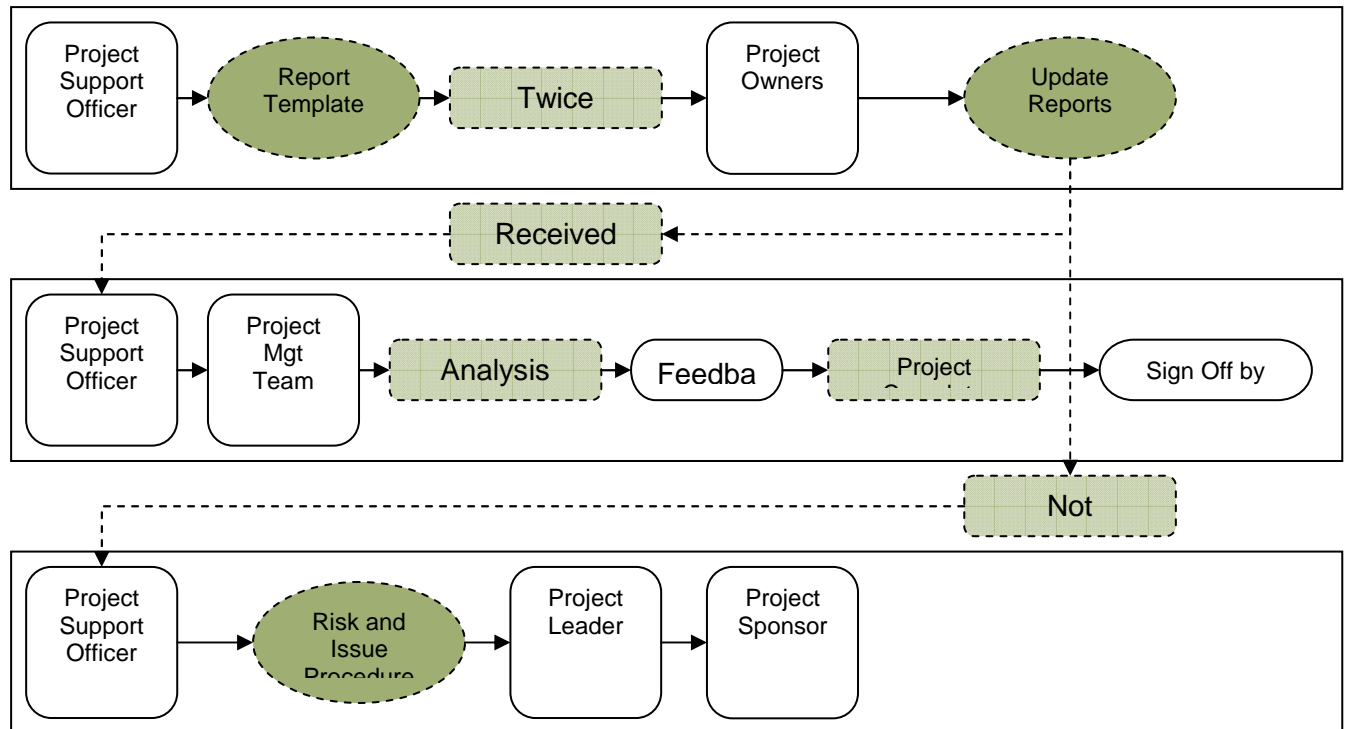


Figure 5 Project reporting process

The project reporting template is available in appendix 4.5.

3.3.4 PERFORMANCE REPORTING

Reporting performance against this strategy and implementation plan is a key part of the project, ensuring that we are on course, and meet, our carbon reduction target. Performance will be reviewed quarterly by the Carbon Management Steering Group when the data is available and progress reports are completed.

The performance of the council in this area will be reported on in Brent Council’s annual environmental performance report. This report brings together all of the council’s performance indicators relating to environmental sustainability into one document for review. The performance indicators are managed through the council’s performance plus performance management software.

TARGETS

The performance of some of the projects in the implementation plan can be usefully quantified to determine performance levels. The quantifiable targets are included in the table below, along with the named staff with responsibility for meeting a target, and / or reporting performance against this target:

Target	Responsibility for Meeting Target	Responsibility for Reporting Performance
'To reduce the Council's carbon dioxide emissions by 20% from the 2005/6 baseline of 59,000 tonnes, achieving a total carbon dioxide saving of at least 11,800 tonnes April 2011'	All departments, project owners, and the project management team	Project Support Officer
Civic centre to achieve BREAM Excellence	Anna Woda	Anna Woda
No renewables target yet decided. 10% will be the minimum required to progress through planning applications	Anna Woda	Anna Woda
300 staff on Brent Green Network by April 2008	Claire Smith	Project Support Officer
To reduce the overall carbon dioxide emissions from council buildings by 10% by 2011 (Salix)	James Young	James Boampong / Peter Balham
To reduce the overall carbon dioxide emissions from schools by 10% by 2011 (Salix and School Capital Programme investment)	Nitin Parshotham	John Bowtell
To have achieved energy efficiency accreditation by April 2009	James Young	Property and Asset Management
To have conducted an energy audit of all council buildings by April 2011	James Young	Property and Asset Management / Roger Kelly / ESNWL
20% reduction in proportion of fleet CO ₂ emissions from BTS	Alex Connell	EP&P
Target Standard Assessment Procedure ratings for BHP housing stock - to be added	Gerry Doherty	Suraj Shah
E-learning TBD	Claire Smith	Project Support Officer
Conduct environmental assessments of 100% of contracts with significant environmental implications by 2011	Claire Smith / Rachel Smith	Project Support Officer
Double spend on products offering an environmental sustainability benefit by April 2011	Claire Smith	Project Support Officer
Reduce waste by 20% by 2011	All departments	EP&P
Recycling facilities in place in all offices by April 2008	Claire Smith	Project Support Officer
Recycle on average 60% of waste by 2011	All departments	Project Support Officer
Reduce water consumption by 20% by 2011	Michael Read	Project Support Officer
Target for renewable installation	TBD	TBD
To plant 750 new trees in the borough by 2010	Graeme Maughan	Keith Ellis, StreetCare

Table 8 Targets and responsibilities

3.3.5 DATA

Improving the quality and reliability of the data is the responsibility of the dataset owners named in section 2.1.1.

ENERGY MONITORING

Brent Council is currently undertaking two initiatives to improve the energy data for buildings:

- Moving all council controlled contracts onto the same energy supplier – LASER. Through this contract the council has access to half hourly and monthly data for sites that exceed 100KVA and 50KVA respectively. For smaller sites the data must be read manually
- Installing automatic meter reading facilities and monitoring these remotely on line.

Refer to the procedure in the Property Management Manual for more information.

FLEET MONITORING

The 'grey fleet' is made up of the vehicles that staff use for work purposes. We know little about this fleet beyond engine size and annual mileage claimed. We will seek to add items on the mileage claim form asking for claimants to add the age of their vehicle and its gCO2/km.

In addition, as standard, we shall seek to obtain all fleet data in terms of litres of fuel used, as opposed to any mileage or estimated mileage data.

3.3.6 RISK MANAGEMENT

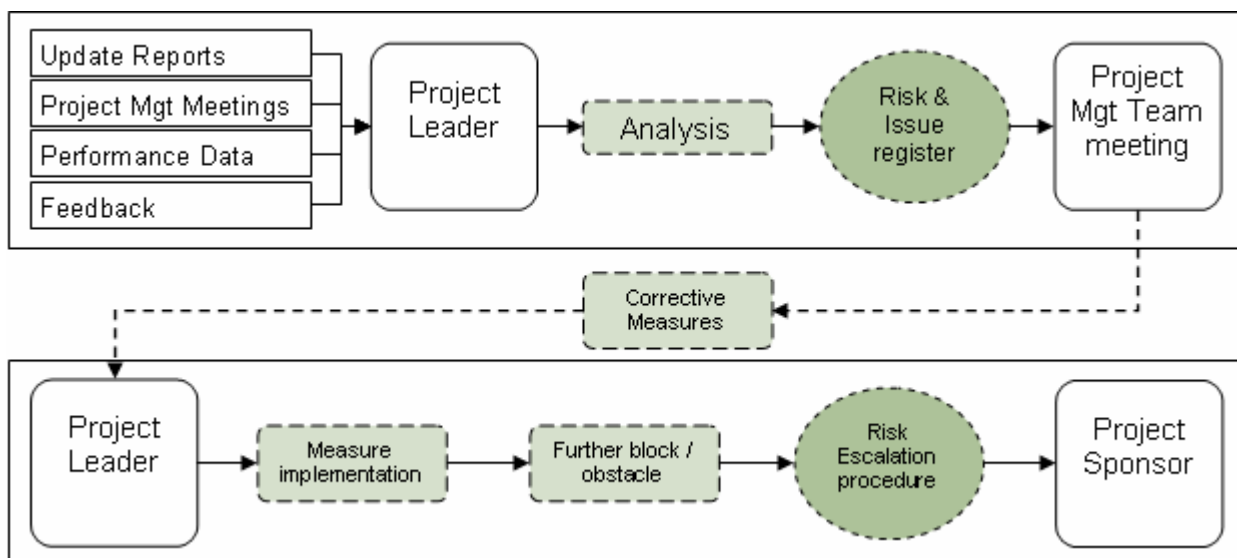


Figure 6 Risk and issue management procedure

SIGNIFICANT RISKS AND ISSUES

RISK / ISSUE	DESCRIPTION	EFFECT	LIKELIHOOD	SEVERITY	MAGNITUDE	CONTROL OR INFLUENCE (For Project Coordinators)	Score
RISK	Significant proportion of projects are only partly funded or are unfunded	Project delays. Missed targets. Missed opportunities. Carbon savings are not realised, failure to meet target.	High	High	High	Influence	9
ISSUE	Data is unavailable / delayed / inconsistent	Targets may be unrealistic and reporting inaccurate. Carbon emissions may be higher than expected. Benchmarking is impossible.	High	High	Medium	Influence	8
ISSUE	Failure to engage staff from Brent Housing Partnership	No discernable savings made to SAP ratings between 2006-2011	Medium	High	High	Influence	8
RISK	Civic centre fails to include strong energy self-sufficiency (greater than 50%)	Missed opportunity to reduce carbon emissions, potential poor publicity.	Medium	Medium	High	Control	7
RISK	Member of core project leaves / long term sick / post cut	Decision making vacuum. Communication gap. Lack of project direction. Missed expertise.	Medium	High	Medium	Control	7
RISK	Energy management knowledge and skills gaps in key building management staff	Attractive projects may not be undertaken due to skills gaps. Lack of knowledge may lead to missed opportunities and lower confidence levels in staff. Difficult / complex project actions may be ignored. Quick wins may be missed.	Medium	High	Medium	Influence	7
RISK	Low meeting attendance	Slows project momentum causing missed deadlines. Lack of staff input leads to missed ideas, expertise, and subsequent opportunities. This increases the potential project blocks due to a lack of information reaching key stakeholders	Medium	Medium	High	Influence	7
RISK	Confusion over project objectives	This would compromise the achievement of the objectives by potentially causing conflict and duplication, it could make reporting with confidence difficult, and lead to audit non-conformances	Medium	Medium	High	Control	7
ISSUE	Continued lack of understanding on climate change and belief that the climate change being recorded is natural and positive	Puts doubt into the minds to project owners and project budget holders, especially if opinion held by influential senior staff, and can delay or halt projects.	High	Medium	Medium	Influence	7


ISSUE	Lack of senior management commitment	Project work is not prioritised, funded, or communicated. This threatens the level of achievement from the project.	Low	High	High	Influence	7
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4 Appendices

4.1 PROJECT DETAILS

4.1.1 LEADERSHIP

ENERGY EFFICIENCY ACCREDITATION SCHEME

Name	Energy Efficiency Accreditation Scheme	
Code	CMP01 Embedding CC4	
Category	Embedding	
Reference	Reference	
Description	<ul style="list-style-type: none"> The Energy Efficiency Accreditation Scheme is a standard to which our energy management, investment, and improvement work can aspire. Awarded by the Energy Institute, the leading professional body for the energy industries, the Scheme is managed by the National Energy Foundation on behalf of the Carbon Trust. It is estimated that Brent has already met, or is progressing well with, approximately 75% of the requirements of this standard as a result of the Local Authority Carbon Management Programme. 	
Year	Begin process at the end of year 2 (March 2008) to be certified by April 2009 in year 3.	
Owner	Deputy Head of Property and Asset Management	
Department	Property and Asset Management	
Resources	£10,000 will be needed to ensure certification for the first 3 years to be provided by Property and Asset Management	
Baseline area	Minimum – council building energy. Full scope of certification TBD	
Targets	To have achieved energy efficiency certification by April 2009	
Tonnes CO₂ Saved	The scheme will link into other projects such as auditing, awareness work, and the energy efficiency fund so the figure will be accounted for elsewhere.	
% Contribution to CO₂ target	<p>Embedding actions will amount to an approximate 5% saving to those relevant areas of the baseline and is included as a total carbon dioxide emissions reduction in table 5: Project Summaries. The data included in this calculation is:</p> <ul style="list-style-type: none"> Energy use in buildings Commuting Waste minimization and recycling 	
Ensuring success	<ul style="list-style-type: none"> Budget secured by Property and Asset Management Work load shared between members of the Asset Projects Board Sustainability Sub-group Certification management has an allocated staff resource Adequate training is provided, with budgets and tools sourced for this purpose 	
Sources of Information and guidance	http://www.carbontrust.co.uk/energy/takingaction/eeas.htm	

CIVIC CENTRE

Name	Civic Centre
Code	CMP02
Category	Direct emissions reduction
Reference	CC1, CC2, CC4, CC6

Description	Brent Council is very likely to move to a new civic centre, which will be a local new build well serviced by public transport (three stations, three tube lines, and three national rail lines all within walking distance). The centre shall replace current buildings, listed in the table below, which account for:																																																																						
	<table border="1"> <thead> <tr> <th>Building Name</th> <th>Electricity kWh</th> <th>tonnes CO2</th> <th>Heating kWh</th> <th>tonnes CO2</th> </tr> </thead> <tbody> <tr> <td>Elizabeth House</td> <td>1347364.00</td> <td>579.37</td> <td>215236.28</td> <td>58.11</td> </tr> <tr> <td>Cottrell House</td> <td>33978.00</td> <td>14.61</td> <td>4576.00</td> <td>0.87</td> </tr> <tr> <td>Brent House</td> <td>1700000.00</td> <td>731.00</td> <td>742287.00</td> <td>141.03</td> </tr> <tr> <td>Town Hall</td> <td>1022187.00</td> <td>439.54</td> <td>1568619.00</td> <td>298.04</td> </tr> <tr> <td>Chesterfield House</td> <td>51672.00</td> <td>22.22</td> <td>0.00</td> <td>0.00</td> </tr> <tr> <td>Brent House Annexe</td> <td>147502.00</td> <td>63.43</td> <td>15314.75</td> <td>2.91</td> </tr> <tr> <td>Quality House</td> <td>117315.00</td> <td>50.45</td> <td>0.00</td> <td>0.00</td> </tr> <tr> <td>Pyramid House</td> <td>140220.00</td> <td>60.29</td> <td>0.00</td> <td>0.00</td> </tr> <tr> <td>London Road</td> <td>50568.00</td> <td>21.74</td> <td>8046.50</td> <td>1.53</td> </tr> <tr> <td>Triangle House</td> <td>23928.00</td> <td>10.29</td> <td>5755.75</td> <td>1.09</td> </tr> <tr> <td>Bridge Park</td> <td>867892.00</td> <td>373.19</td> <td>57697.75</td> <td>10.96</td> </tr> <tr> <td>Park House</td> <td>11904.00</td> <td>5.12</td> <td>10667.25</td> <td>2.03</td> </tr> <tr> <td>Total</td> <td>5,514,530.00</td> <td>2,371.25</td> <td>2,628,200.28</td> <td>516.58</td> </tr> </tbody> </table>	Building Name	Electricity kWh	tonnes CO2	Heating kWh	tonnes CO2	Elizabeth House	1347364.00	579.37	215236.28	58.11	Cottrell House	33978.00	14.61	4576.00	0.87	Brent House	1700000.00	731.00	742287.00	141.03	Town Hall	1022187.00	439.54	1568619.00	298.04	Chesterfield House	51672.00	22.22	0.00	0.00	Brent House Annexe	147502.00	63.43	15314.75	2.91	Quality House	117315.00	50.45	0.00	0.00	Pyramid House	140220.00	60.29	0.00	0.00	London Road	50568.00	21.74	8046.50	1.53	Triangle House	23928.00	10.29	5755.75	1.09	Bridge Park	867892.00	373.19	57697.75	10.96	Park House	11904.00	5.12	10667.25	2.03	Total	5,514,530.00	2,371.25	2,628,200.28	516.58
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Some of the data above is incomplete or missing.																																																																							
Annual Energy Cost: £558,352 per annum. Carbon Dioxide Emissions: 2888 tonnes CO2																																																																							
The Civic Centre shall also reduce carbon emissions from waste, mileage claims, water, and commuting																																																																							
Year	Contract decisions beginning at the end of year 1. Full project to be developed throughout year 2 and 3. Construction potentially begins in year 4 or 5 to be delivered in year 6 2012																																																																						
Owner	Civic Centre Project Manager – Anna Woda																																																																						
Department	Central Services – Policy and Regeneration Unit																																																																						
Resources	Central project budget																																																																						
Baseline area	Buildings, transport, waste																																																																						
Targets	BREAM Excellence No renewables target yet decided. 10% will probably be the minimum required to progress through planning.																																																																						
Tonnes CO₂ Saved	Based on a 50% reduction due to energy efficiency improvements above existing buildings and 10% renewables: 1732 tonnes CO2																																																																						
% Contribution to CO2 target	This saving will be achieved in year 6/7 – 2011-2012 and is therefore outside of the scope of this strategy.																																																																						
Ensuring success	<ul style="list-style-type: none"> Secure a minimum renewable energy generation proportion for new civic centre development. Secure green transport facilitation infrastructure (bike sheds, showers, electric charging points etc) Secure waste reduction and recycling facilities Secure excellent design Select consultants with experience in creating sustainable buildings Conduct full environmental impact assessment of project and details as they arise Conduct thorough environmental assessments of specifications. 																																																																						
Sources of Information and guidance	Civic Centre Report to Executive																																																																						

4.1.2 AWARENESS

GOING GREEN

Name	Going Green intranet resource
Code	CMP03
Category	Embedding
Reference	CC3
Description	Continually improve the going green and greening Brent intranet and internet resource to empower staff and communities to take action to tackle climate change
Year	By end of year 1: Complete content overhaul to be achieved The ongoing maintenance and updating by the Environmental Projects and Policy Team.
Owner	Environmental Projects and Policy – Claire Smith
Department	Environment and Culture
Resources	Officer time
Baseline area	All
Targets	To be set based on current intranet site hits.
Tonnes CO₂ Saved	NA
% Contribution to CO₂ target	Embedding actions will amount to an approximate 5% saving to those relevant areas of the baseline and is included as a total carbon dioxide emissions reduction in table 5: Project Summaries
Ensuring success	Publicity and marketing of the going green site will need to be consistent, continuous, and widespread.
Sources of Information and guidance	http://intranet.brent.gov.uk/greenbrent.nsf http://www.brent.gov.uk/greenbrent.nsf

BRENT GREEN NETWORK

Name	Brent Green Network
Code	CMP04
Category	Embedding
Reference	CC3
Description	Staff will be encouraged to sign up for the Brent Green Network. This will simply be an email network with quarterly updates on living a green lifestyle to keep their pledges to reduce their contributions to climate change. There may be competitions, interviews, case studies, events, and so on.
Year	To commence at the beginning of year 2
Owner	Environmental Projects and Policy - Claire Smith
Department	Environment and Culture
Resources	Environment and Culture Directorate budget
Baseline area	Council buildings, commuting, waste, water
Targets	300 staff on network by April 2008
Tonnes CO₂ Saved	NA
% Contribution to CO₂ target	Embedding actions will amount to an approximate 5% saving to those relevant areas of the baseline and is included as a total carbon dioxide emissions reduction in table 5: Project Summaries

Ensuring success	<ul style="list-style-type: none"> ▪ Communications will need to be relevant, of good quality, positive, and not over-loaded ▪ An officer will need direct responsibility for managing the list
Sources of Information and guidance	Publications such as the ecologist and green futures

POSTER CAMPAIGN

Name	Poster Campaign
Code	CMP05
Category	Embedding
Reference	CC3
Description	16 part, four year rolling poster campaign to relay important messages to Brent Staff and the wider community (where posters are appropriate) to facilitate behavior change. Includes a climate change pledge for action and going green road shows
Year	Pledges taken at the end of year one during going green road shows. 2-5 ongoing roll out following the communications plan.
Owner	Environmental Projects and Policy – Claire Smith
Department	Environment and Culture
Resources	Environment and Culture Directorate budget
Baseline area	All
Targets	NA
Tonnes CO₂ Saved	NA
% Contribution to CO₂ target	Embedding actions will amount to an approximate 5% saving to those relevant areas of the baseline and is included as a total carbon dioxide emissions reduction in table 5: Project Summaries
Ensuring success	<ul style="list-style-type: none"> • Support from Facilities Management to roll out the posters quarterly • Posters contain appropriate messages to stimulate behaviour change
Sources of Information and guidance	http://www.climatechallenge.gov.uk/communicate.html

WELSH HARP ENVIRONMENTAL EDUCATION CENTRE

Name	WHEEC
Code	CMP06
Category	Embedding
Reference	CC3
Description	Refurbish the WHEEC by renovating the disused chapel building to make this a carbon neutral building and make improvements to the existing centre. This project shall help to increase visitor numbers and therefore increase access to environmental education for school children. The lessons offered will also be able to include energy efficiency, which could result in energy reductions in schools.
Year	2
Owner	<ul style="list-style-type: none"> • Arts Libraries and Heritage Service – Alex Sydney • Energy Solutions North West London – Roger Kelly
Department	Environment and Culture
Resources	<ul style="list-style-type: none"> • Lottery funding • Energy Solutions North West London funding
Baseline area	NA - current energy use by the chapel building is not included in the baseline.

Targets	Refurbish the Welsh Harp Environmental Educational centre by 2010 and encourage at least 3,500 schoolchildren a year to visit the centre
Tonnes CO₂ Saved	NA
% Contribution to CO2 target	Embedding actions will amount to an approximate 5% saving to those relevant areas of the baseline and is included as a total carbon dioxide emissions reduction in table 5: Project Summaries
Ensuring success	<ul style="list-style-type: none"> • Application made for lottery funding • Appropriate monitoring in place • Building subsidence can be fixed cost effectively
Sources of Information and guidance	http://intranet.brent.gov.uk/heritage.nsf/61b63a407eca7a438025663c0065cadd/208ec63898eae9628025712000534065!OpenDocument

4.1.3 BUILDING ENERGY



ENERGY EFFICIENCY FUND

Name	Energy Efficiency Fund
Code	CMP07
Category	Facilitation / direct emissions reduction
Reference	CC1, CC2
Description	Invest to save energy efficiency fund worth £600,000. Fund will provide internal interest free loans for energy efficiency technologies with proven energy savings records, paybacks of less than five years, and carbon dioxide emissions savings at a cost of less than £100 per tonne of CO ₂ saved.
Year	Fund to be received in four tranches, April 2007, September 2007, April 2008, September 2008. Loan agreements to spend the first tranche need to be in place by April 2007. 50% of the total value of the fund must thereafter be spent every 12 months as a requirement from Salix Finance to ensure ongoing energy efficiency investment.
Owner	Deputy Head of Property and Asset Management – James Young
Department	Finance and Corporate Resources
Resources	<ul style="list-style-type: none"> • Salix finance grant 50% £300,000 • Prudential borrowing 50% £300,000
Baseline area	Council Buildings, Schools
Targets	To reduce the overall carbon dioxide emissions from schools and council buildings by 10% by 2011
Tonnes CO₂ Saved	<p>Current fund projects: Investment: £325,918 Year 1 (of fund, yr 2 of strategy) savings: £122,472 Annual CO₂ savings: 1430.22</p> <p>This investment equals 54.3% of the value of the Energy Efficiency fund. Based on this performance, the full investment of one cycle of the fund may return a carbon dioxide saving of: $1430.22 / 54.3 \times 100 = 2634$ tonnes CO₂</p> <p>We estimate that we will be able to re-invest a further 50% between years 3-5 of the Carbon Management Strategy (2008-2009 – 2010-2011) from loan repayments, achieving a further 1325 tonnes of CO₂ savings by 2011.</p> <p>Total projected savings: $2634 + 1325 = 3959$ tonnes of CO₂</p>
% Contribution to CO₂ target	33.5%
Ensuring success	<ul style="list-style-type: none"> • Budget holders are willing to sign loan agreements based on predicted savings • Fund is adequately advertised internally • Use of fund directed towards high carbon dioxide emissions saving projects • Fund is ring fenced and Salix draw down constraints are met • Technology is accompanied by an installation protocol ensuring that the technology is used to maximum benefit
Sources of Information and guidance	http://www.salixfinance.co.uk/overview.html

Project	Capital LT Cost (not incl 10% management fee)	Annual Savings	Projected payback	CO2 Savings	Cummulative CO2 Saviings	Cummulative Target %	£/Tonne CO2 LT
Schools Part - Thermostatic Radiator Valves & Zone Control Valves	£17,292.00	£5,764.00	3.00	121.19	121.19	1.03	£40.77
Schools - Lighting Controls	£4,000.00	£1,000.00	4.00	26.86	148.05	1.25	£42.55
Schools - Linked Heating System	£15,000.00	£4,285.71	3.50	89.89	237.94	2.02	£27.81
Council Loft Insulation: 4 Council Sites	£16,906.00	£8,180.27	2.07	71.99	309.92	2.63	£9.47
Buildings Energy Management Systems - Schools (2)	£20,000.00	£5,000.00	4.00	134.64	444.56	3.77	£24.76
Buildings Energy Management Systems - Council Buildings (7)	£70,000.00	£17,500.00	4.00	193.14	637.70	5.40	£60.41
Council Buildings Electrical Equipment Controls (approx 250 document centres, plotters, and misc equip)	£1,500.00	£3,023.25	0.50	20.00	657.70	5.57	£44.12
Lockdown thermostatic radiator valves and zone controls in Council Buildings	£25,900.00	£12,950.00	2.00	86.87	744.57	6.31	£85.19
Lighting Upgrades and Controls / sensors in Council Buildings	£87,500.00	£29,166.67	3.00	507.65	1252.22	10.61	£36.67
Power Perfector - 4 council sites	£67,820.00	£35,603.00	1.90	178.00	1430.22	12.12	£43.30
Total	£325,918.00	£122,472.91			1430.22		

Table 9 Energy Efficiency Fund project quantification – based on projects included in the salix application

ELECTRICAL EQUIPMENT

Name	Electrical Equipment Rationalisation
Code	CMP08
Category	Direct emissions reduction
Reference	CC2
Description	<p>Move away from printers, copiers, scanner, and faxes to multi-functional document centres with energy star rating and preferably and eco-label such as:</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
Year	Procurement decisions to be made at the end of year 1 – April 2007. Roll out of new document centres throughout years 2-5
Owner	Information Technology Unit – Prod Sarigianis
Department	Finance and Corporate Resources
Resources	Department budgets for office equipment
Baseline area	Council Buildings
Targets	
Tonnes CO₂ Saved	<p>Standard individual printer, copier, fax in idle uses 175 watts and 15 watts in off / low power: Copier: 131 watts in power save Fax: 14 in sleep mode Printer: 30 watts in power save</p> <p>Average of a selection of multifunctional devices use an average of 125.8 watts in idle and 10.1 in off / low power.</p> <p>Current energy use: We have 666 printers: $30 \times 666 \times 12$ (hours on a day) $\times 260$ working days / 1000 = 62,337 kWh We have 312 faxes: $14 \times 312 \times 12 \times 260 / 1000 = 13,628$ kWh We have approximately 60 copiers: $60 \times 131 \times 12 \times 260 / 1000 = 24,523$ kWh = 42.2 tonnes of CO₂</p> <p>If we replace these with approximately 175 multifunctional devices @ $175 \times 125.8 \times 12 \times 260 / 1000 = 30$ tonnes of CO₂ Difference of 12.2 tonnes. If we combine these machines with electronic timers so that they are only on for 9 hours of the day the saving would be $42 - 22.1 = 20.1$ tonnes If we select machines with a lower average power save watt usage we can save even more.</p>
% Contribution to CO₂ target	At least 0.1%
Ensuring success	<ul style="list-style-type: none"> • Lowest machine specification is purchased to meet customer needs • Devices set to highest possible power saving mode • Replaced equipment is sent for recycling • Accompanied by standard for machine provision densities per staff member • Devices include electronic timers to ensure automatic shut down in evenings and weekends
Sources of Information and	Eco-label specifications: http://www.svanen.nu/Eng/criteria/kriterie.asp?pgn=15

guidance	http://www.blauer-engel.de/englisch/navigation/body_blauer_engel.htm
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SWITCH OFF POLICY

Name	Switch Off Policy
Code	CMP09
Category	Embedding
Reference	CC4
Description	Policy to provide clear corporate guidance on the use off electrical equipment, focusing on reducing on-time of equipment by specifying when equipment can and can not be turned off.
Year	2
Owner	Information Technology Unit – Prob Sarigianis
Department	Finance and Corporate Resources
Resources	Officer time
Baseline area	Council Buildings
Targets	NA
Tonnes CO₂ Saved	On average 2100 monitors and 800 PCs are left on each night in Council offices. This equates to approximately one PC in five and three monitors (left in standby) in five. This is based on the results of out of hours energy audits. Roughly, this equals 66.3 kW energy wasted, and 338,793 kWh per annum at a total carbon dioxide cost of 145.6 tonnes. Assuming that this Switch Off Policy encourages a 50% increase in switching PCs and Monitors off, we can save 72.8 tonnes of carbon
% Contribution to CO2 target	0.6%
Ensuring success	<ul style="list-style-type: none"> • Policy is publicized adequately (link to poster campaign) • Policy is supported and enforced by managers and senior managers • Use of the policy is audited – after hours energy audits
Sources of Information and guidance	<ul style="list-style-type: none"> • Energy myths answered on going green • Out of hours energy audit results published on ISO14001

ENERGY AUDIT

Name	Building Energy Audit Programme
Code	CMP10
Category	Facilitation
Reference	CC1
Description	Develop and conduct an ongoing programme of energy audits in council buildings.
Year	Year 2: develop audit programme as a standard part of building assessments. Year 2-5 commence audits and maintain database of audit recommendations and corrective actions.
Owner	Property and Asset Management – James Young, John Bowtell (Schools)
Department	Finance and Corporate Resources
Resources	Audits to be carried out as part of standard assessments. Fees to be paid out of existing budgets for building management.
Baseline area	Council Buildings and Schools
Targets	To have conducted an energy audited of all council buildings by April 2011
Tonnes CO₂ Saved	NA see project CCP07

% Contribution to CO2 target	NA
Ensuring success	<ul style="list-style-type: none"> • Recommendations from energy audits are recorded and acted on • Building managers are open to audits and acting on findings • Knowledge and skills exist to conduct energy audits and act on findings
Sources of Information and guidance	

ITU RELOCATION AND SERVER ROOM RATIONALISATION

Name	Move to Data Centre
Code	CMP11
Category	Direct emissions reduction
Reference	CC2
Description	<p>This project is in the very initial stages. Two options are being considered on how to best meet the needs of the council – server reduction and virtualization. Virtualization will have the greatest energy savings.</p> <p>In general the numbers of server will be reduced, equipment will be upgraded, and the environmental considerations of energy use embedded within the project design.</p>
Year	2
Owner	Information Technology Unit – Tom Lloyd
Department	Finance and Corporate Resources
Resources	Budget supplied by Unit. Initial costs of equipment and consultancy approximately £500K
Baseline area	Council Buildings
Targets	
Tonnes CO₂ Saved	TBD
% Contribution to CO2 target	TBD – significant
Ensuring success	<ul style="list-style-type: none"> • Consultants consider environmental specification of equipment • Information supplied on best practice environmental specifications for air conditioning equipment • Unit seeks advice on heat exchange / energy efficient technologies from experts
Sources of Information and guidance	http://www.energystar.gov/index.cfm?c=heat_cool.pr_hvac

PROPERTY MANAGEMENT STANDARDS

Name	Property Management Standards
Code	CMP12
Category	Embedding
Reference	CC2
Description	<p>To develop a suite of property management standards that cover energy audits, monitoring, waste reduction and recycling, water, parking, and so on.</p> <p>These standards shall be included within the Property Management Manual</p>
Year	2
Owner	Deputy Head of Property and Asset Management – James Young
Department	Finance and Corporate Resources
Resources	Any resources needed to meet the standards shall need to be provided by individual units.

Baseline area	Council Buildings, waste, water, transport
Targets	NA
Tonnes CO₂ Saved	<p>Embedding actions will amount to an approximate 5% saving to those relevant areas of the baseline and is included as a total carbon dioxide emissions reduction in table 5: Project Summaries. The data included in this calculation is:</p> <ul style="list-style-type: none"> • Energy use in buildings • Commuting • Waste minimization and recycling
% Contribution to CO2 target	NA
Ensuring success	<ul style="list-style-type: none"> • A methodology for enforcing standards is developed and implemented • The standards are well publicized.
Sources of Information and guidance	Property Management Manual

4.1.4 COMMUTING

TRAVEL PLAN

Name	Staff Travel Plan
Code	CMP13
Category	Facilitation
Reference	CC2, CC3, CC4
Description	<p>The travel plan is being developed throughout year 1. The plan was initiated in response to a controlled parking zone being implemented around Wembley Stadium on event days which would limit the ability of staff to park their cars. Initially targeted at the major sites immediately in the vicinity of the stadium, the plan shall be rolled out across the council in due course.</p> <p>The travel plan currently lists the following measures to help promote sustainable transport:</p> <ul style="list-style-type: none"> • Travel plan notice boards • Special events • Information in new starter packs • Inclusion within e-Learning • Site access maps • Subsidised public transport • Interest free travel card loans • Journey planning • Cycle parking facilities • Showers, lockers, and changing facilities • On site bike hire (OyBikes) • Adult cycle training • Tax free cycle purchase loans • Review pedestrian access • Improve personal security • Walk to work incentives • Review facilities for motorcyclists • Car share scheme and incentives • Oyster cards for pre-paid business travel • Provide a shuttle bus where travel patterns demonstrate viability after mapping transport patterns • Car clubs • Pool vehicles and bikes • Business cycle mileage rate • Policy mechanisms • Compressed working hours and flexible working / homeworking options • Reducing the need to travel by better coordination of journeys
Year	2-5
Owner	Transportation Unit – Mike Evans
Department	Environment and Culture
Resources	£20K funding from TFL Revenue from parking charges received by staff
Baseline area	Commuting, Mileage, Fleet
Targets	The travel plan is draft and it is too early at this stage to set targets.
Tonnes CO₂	The travel plan, controlled parking zone, and other measures in projects CCP13 and 14,

Saved	we estimate will contribute to a 20% reduction in commuting carbon dioxide emissions. 600 tonnes of CO2
% Contribution to CO2 target	5%
Ensuring success	<ul style="list-style-type: none"> • Securing funding to implement hard travel plan measures • Support from senior management for tough travel disincentive measures • Ensure that vehicles are sustainable / alternative and provide electric charging as necessary • Conduct mid-point and end of programme staff commuting survey to obtain data • Integrate sustainable travel within the Civic Centre project
Sources of Information and guidance	http://intranet.brent.gov.uk/transpor.nsf/fb3ab239a93b22d0802570a200400b36/cc3a44bf8be76814802570a0003f2853!OpenDocument

PARKING POLICY

Name	Parking Policy
Code	CMP14
Category	Facilitation
Reference	CCP4
Description	To develop a parking that discourages unnecessary car use by charging for parking
Year	2
Owner	Environment and Culture Directorate / Property and Asset Board – Michael read Support from Adrian Piggott and John Dryden
Department	Environment and Culture
Resources	This policy will create revenue that a proportion of will be fed into delivering the staff travel plan.
Baseline area	Commuting, business mileage
Targets	NA
Tonnes CO₂ Saved	See project CCP13
% Contribution to CO2 target	See Project CCP13
Ensuring success	<ul style="list-style-type: none"> • The policy shall need to pass an equalities assessment • The policy shall need to be endorsed by senior management and the Executive • The policy shall require an environmental assessment
Sources of Information and guidance	

ESSENTIAL USER PERMITS

Name	Essential User Permits
Code	CMP15
Category	Embedding
Reference	CCP4
Description	The number of essential car user permits issued by Brent Council has increased significantly over recent years. The aim of this initiative is to redefine the criteria for issuing permits to provide consistency, prevent exploitation of the benefit, and ensure that really only the essential users have permits.
Year	2
Owner	Environment and Culture Directorate / Asset Projects Board / Human Resources –

	Michael Read Support from Adrian Piggott and John Dryden
Department	Environment and Culture lead
Resources	This policy is expected to have no significant associated costs that are not recuperated elsewhere.
Baseline area	Commuting, business mileage
Targets	NA
Tonnes CO₂ Saved	See project CCP13
% Contribution to CO2 target	See Project CCP13
Ensuring success	<ul style="list-style-type: none"> • The policy shall need to pass an equalities assessment • The policy shall need to be endorsed by senior management and the Executive • The policy shall require an environmental assessment
Sources of Information and guidance	http://intranet.brent.gov.uk/HumanRes.nsf/ad4469eeb74c632d80256dd6004f89bc/9d67cc0d381504d9802570c30056bc5e!OpenDocument

4.1.5 FLEET

BIO-DIESEL

Name	Bio-Diesel
Code	CMP16
Category	Direct emissions reduction
Reference	CC2
Description	<p>Firstly trial a 10% bio-diesel blend, secure supply, and get this working well. Then trial a 20% blend by 2011</p> <p>It is essential to stress that Brent will only support locally and sustainably produced bio-diesel and will always prefer that sourced from used cooking oil.</p>
Year	<p>Year 2: Trial 10% bio-diesel and report results.</p> <p>Energy Solutions North West London will work with the supply side.</p>
Owner	Brent Transport Services – Alex Connell / Dave Shelly
Department	Children and Families
Resources	Linking with Energy Solutions North West London Bio-Nett Project which is funded.
Baseline area	Fleet
Targets	20% reduction in proportion of fleet CO ₂ emissions from BTS (combined with increasing Euro standards)
Tonnes CO₂ Saved	$545.55 \times 0.2 = 109.11$ tonnes of CO ₂
% Contribution to CO₂ target	0.9%
Ensuring success	<ul style="list-style-type: none"> Steady supply of bio-diesel can be sourced Guarantees of vehicles accept bio-diesel use Finance available for any infrastructure required
Sources of Information and guidance	

INCREASED EURO EFFICIENCY OF VEHICLES

Name	Euro Standards
Code	CMP17
Category	Direct emissions reduction
Reference	CC2
Description	30 vehicles need upgrading to Euro 3 standard to comply with new regulations
Year	3
Owner	Brent Transport Services – Dave Shelly
Department	Children and Families
Resources	TBD
Baseline area	Fleet
Targets	NA
Tonnes CO₂ Saved	TBD
% Contribution to CO₂ target	Combined with the project to increase the amount of bio-diesel in fuel, which together should see reductions of around 20%
Ensuring success	

Sources of Information and guidance

GREEN FLEET REVIEW

Name	Green Fleet Review
Code	CMP18
Category	Facilitation
Reference	CC2
Description	Delivery of the Green Fleet Review Action Plan below.
Year	2007
Owner	Dependant on report recommendations
Department	Environment and Culture and Children and Families

Action	Description	Implementation
Business Mile Reimbursement Claims	Review the current business mileage reimbursement system and replace it with a more robust system for capturing and disseminating business mileage and the resultant CO ₂ emissions as outlined.	Carbon Management Project Sponsor and Sustainable Transport Officer
CO ₂ Footprint	Produce a more accurate CO ₂ footprint for Brent's transport provision based on the information from above	Environmental Projects and Policy to devise footprinting system for grey and business fleet, commuting, and contracts.
Environmental Target	Establish environmental targets for the transport provision i.e. business mileage and CO ₂ emissions from vehicles until April 2011 in line with the current Carbon Management Strategy. Consider standardising on one business mileage reimbursement rate	20% reduction target set. Needs to be adopted by all fleet owners and vehicle users.
Reporting	Monitor and at least annually report on the fleet's environmental performance to Carbon Management Steering Group	Ongoing. Responsibility of data provisions lies with fleet and vehicle owners. Report responsibility lies with Environmental Projects and Policy
Inclusiveness	Ensure BTS and other fleet operators are actively engaged in the carbon management working group, providing measures of performance and project work to improve performance	Travel related carbon management projects are due to report to the carbon management steering group in June and December.
Parking	Review the criteria for access to car parks at Brent's Offices, consider introducing a fee and redefine 'job need'	Parking policy project in the carbon management strategy implementation plan under the responsibility of Michael Read.
	Investigate the feasibility of providing a car-sharing	

Car-sharing	incentive or discount scheme funded through the reduction of the car parking provision	This action lies within the Council's proposed travel plan measures
Car club	Investigate the feasibility of providing a car club in lieu of using privately owned vehicles for Council business travel	See above
Manage down the age of grey fleet vehicles	Introduce an upper age limit, which may be progressively reduced over time, on the use of private cars used on Council business journeys. The ultimate aim should be that no vehicle used on Council business should be older than 6 years of age.	Action to be included in the final travel plan.
Publicity	Provide staff with information on selecting vehicles which are fuel-efficient, safe and have low environmental and health impacts. Promote eco friendly driving and the use of cleaner fuels through information education and maybe training.	To be provided through the going green campaign by June 2007.

4.1.6 HOUSING

BOILER REPLACEMENT

Name	BHP Boiler Replacement
Code	CMP19
Category	Direct Emissions Reduction
Reference	CC2
Description	<p>1500 properties have been identified as having boilers older than 15 years and they will form part of the ongoing boiler replacement programme.</p> <p>Projects such as these contribute to the Standard Assessment Procedure results for the Brent and financial awards, such as the Public Services Agreement reward grant of £149,000.</p> <p>In addition, there are other incentives for meeting the government's standards for decent homes and SAP ratings contribute to the Audit Commission's comprehensive performance assessment targets for Brent.</p>
Year	2-5
Owner	Suraj Shah
Department	Brent Housing Partnership
Resources	TBD
Baseline area	Housing
Targets	Target SAP ratings by 2011?
Tonnes CO₂ Saved	<p>Replacing old boilers with new boilers can save between 15-20% off of energy use for heating a property and water. The calculations here have taken the 17.5% mid point:</p> <p>Carbon saving per year = 13,292KWh/pa (gas heating) X 0.175 = 2326 KWh/pa</p> <p>2326 KWh X 1500 = 3,489,160 KWh saved per annum</p> <p>3,489,160 KWh X 0.43 / 1000 = 1500 tonnes CO2</p>
% Contribution to CO2 target	12.7%
Ensuring success	BHP become more actively engaged with Brent Council in tackling Climate Change, including Energy Solutions North West London
Sources of Information and guidance	http://www.defra.gov.uk/environment/energy/heca95/index.htm

INSULATION

Name	BHP Insulation Programme
Code	CMP20
Category	Direct Emissions Reduction
Reference	CC2
Description	Brent Housing Partnership are in negotiations with British Gas and London Warm Zone to undertake energy efficiency works in 2006/07. Measures such as loft insulation and cavity wall insulation will be carried out in up to 2000 properties.
Year	1-2
Owner	Suraj Shah
Department	Brent Housing Partnership
Resources	TBD
Baseline area	Housing
Targets	Target SAP ratings by 2011?

Tonnes CO₂ Saved	Loft and cavity wall insulation can save between 10-20% of energy usage from heating. The calculations here are based on the mid point 15% saving: Carbon saving per year = 13,292KWh/pa (gas heating) X 0.15 = 1994KWh saving per annum per property. 1994KWh X 2000 = 3,987,611.5 KWh saved per annum 3,987,611.5 KWh X 0.43 / 1000 = 1714.7 tonnes CO ₂
% Contribution to CO₂ target	14.5%
Ensuring success	
Sources of Information and guidance	http://www.defra.gov.uk/environment/energy/heca95/index.htm

ENVIRONMENTAL POLICY IMPLEMENTATION

Name	BHP Environmental Policy Implementation
Code	CMP21
Category	Embedding
Reference	CC4, CC6
Description	<p>BHP have recently introduced a new environmental policy. The Policy is based on Brent Council's policy and commits the unit to:</p> <ul style="list-style-type: none"> Integrating environmental considerations into all decision making considered to have significant environmental implications. integrating environmental considerations into all procurement; improving resource use and waste management by encouraging waste minimisation, reuse, and recycling; responding to Climate Change by cutting emissions from our buildings and vehicles, by promoting the use of renewable energy, and by adapting our services; motivating and training our staff; <p>To implement the Policy, BHP are proposing to:</p> <ul style="list-style-type: none"> Conduct environmental assessments of contracts Choose condensing energy efficient boilers wherever possible Use low energy lighting in communal areas Investigate the use of micro-renewables for some blocks
Year	Ongoing
Owner	Suraj Shah
Department	Brent Housing Partnership
Resources	TBD
Baseline area	Housing
Targets	TBD for individual projects
Tonnes CO₂ Saved	NA
% Contribution to CO₂ target	NA
Ensuring success	<ul style="list-style-type: none"> BHP propose adequate resources to deliver this policy BHP become involved in this work in Brent Council, and take advantage of the resources offered by the Environmental Projects and Policy Team (going green, e-Learning, environmental assessments of contracts, etc)
Sources of Information and guidance	Report available on the Environmental Policy sent to the BHP board.

4.1.7 STREETLIGHTING

LED LIGHTING TRIAL

Name	LED Lighting Trial
Code	CMP22
Category	Facilitation
Reference	CC2
Description	<p>Pilot study into LED lighting. Trial involves a public footway 100m long with approximately 3-4 lighting columns that will be fitted with LED technology. The pilot will last for two months and involve public consultation on the lighting levels provided. It is important to note that LED lighting does not meet the British Standards under standard lighting designs for highways. Designs are optimised to reduce street clutter (the number of columns on the highway), and ensure a broad spread of high quality light at street level. Use of LEDs, which give a slightly weaker light output, could require installing a greater number of lamp columns to meet BS5489 lighting standards.</p> <p>The LACM guidance best practice case study states that replacing only the 3737 columns with a 70W bulb is most feasible for use of LED lighting. Assuming successful trial results and compliance with BS5489, we can replace these bulbs, with the following CO2 and financial savings:</p>
Year	2
Owner	StreetScene Management - Graeme Maughan
Department	StreetCare, Environment and Culture
Resources	<p>Finances</p> <p>3737 columns @70W, under the two season lighting periods described above = £91,227/annum</p> <p>3737 columns @55W = £71,659/annum</p> <p>Saving = £19568/annum in electricity costs</p> <p>Cost to replace bulbs = £200/standard bulb: £200 X 3737 = £747,700 (paid for out of standard bulb replacement, or would further investment be needed?)</p> <p>For 3737 existing bulbs we can expect 25% to fail in any one year. The cost for bulb replacements over 5 years is therefore: $0.25 \times 3737 \times £200 \times 5\text{yrs} = £934\text{k}$</p> <p>For LED bulbs with a 12 year lifespan, we should allow for a failure rate of 1/12 each year. So cost to replace LED bulbs within the 5 year project: $1/12 \times 3737 \times £200 \times 5\text{yrs} = £311\text{k}$</p> <p>Expected maintenance savings therefore in the region of: $£934\text{k} - £311\text{k} = £623\text{k}$</p>
Baseline area	Street lighting
Targets	TBD
Tonnes CO₂ Saved	<p>Carbon Dioxide</p> <p>3737 columns @ 70W = 1146kWh = 493tnCO₂/annum</p> <p>3737 columns @55W = 900kWh = 387tnCO₂/annum</p> <p>Saving = 106 tnCO₂/annum</p>
% Contribution to CO₂ target	0.9%
Ensuring success	<ul style="list-style-type: none"> • A suitable area for the pilot needs to be found • Pilot needs to be successful
Sources of Information and guidance	

4.1.8 TRAINING

ENERGY MANAGEMENT

Name	Energy Management Training
Code	CMP23
Category	Facilitation
Reference	CC2, CC3
Description	A training course is to be developed to supply relevant staff with basic to intermediate level energy management skills. The training course will be put together and delivered by Energy Solutions North West London
Year	2
Owner	Deputy Head of Property and Asset Management – James Young
Department	Finance and Corporate Resources
Resources	£7,000 P&AM budget
Baseline area	Building energy use
Targets	NA
Tonnes CO₂ Saved	Embedding actions will amount to an approximate 5% saving to those relevant areas of the baseline and is included as a total carbon dioxide emissions reduction in table 5: Project Summaries
% Contribution to CO₂ target	NA
Ensuring success	<ul style="list-style-type: none"> • The needs of potential delegates are adequately assessed • The training includes practical measures and is re-visited • Feedback is taken and the training updated
Sources of Information and guidance	

E-LEARNING

Name	E-Learning
Code	CMP24
Category	Facilitation
Reference	CC3
Description	<p>An e-learning course titled 'An Introduction to Our Environment' is being developed. The course modules are:</p> <ul style="list-style-type: none"> • Climate Change • Sustainable Transport • Waste and Recycling • The Natural Environment • Environmental Information • Environmental Management. <p>The course is being developed by external consultants, Red Tray, using the IDeA Authoring tool. The course will be hosted on Brent's e-learning site which is accessible through the internet.</p> <p>All staff in ISO14001 certified areas of the council will be required to take the course. It is hoped that all new starters will be required to take the course and that non-ISO14001 certified areas of the council will choose to take the course.</p>
Year	Year 1: Course development Year 2 course roll out and evaluation

Owner	Environmental Projects and Policy Team – Claire Smith
Department	Environment and Culture
Resources	Environment and Culture Directorate. £11,000
Baseline area	Council buildings energy use, transportation, waste, water
Targets	Targets to be developed based on take up of course, test results, etc
Tonnes CO₂ Saved	Embedding actions will amount to an approximate 5% saving to those relevant areas of the baseline and is included as a total carbon dioxide emissions reduction in table 5: Project Summaries
% Contribution to CO2 target	NA
Ensuring success	<ul style="list-style-type: none"> • Commitments are made at a senior level to encourage or require this course to be taken • Course undergoes user testing in advance • Course is managed and updated, with an officer in the Environmental Projects and Policy Team with this responsibility
Sources of Information and guidance	http://www.course-source.net/sites/brent/

4.1.9 PROCUREMENT

GREEN PROCUREMENT POLICY

Name	Green Procurement Policy
Code	CMP25
Category	Embedding
Reference	CC4 & CC6
Description	To develop and implement a green procurement policy and strategy for Brent Council to ensure that the authority meets its requirements under the Mayor of London's Green Procurement Code. Currently a draft strategy exists and a sustainable procurement working group, supported by free consultancy days from London Remade.
Year	Year 2: Policy and Strategy finalization and adoption Year 3: Begin to fully implement all elements of the implementation plan
Owner	Procurement / Environmental Projects and Policy – Claire Smith / Candace Bloomfield
Department	Finance and Corporate Resources / Environment and Culture
Resources	Officer time
Baseline area	Building energy, internal waste, fleet, BHP, contracts using vehicles and contracted buildings
Targets	Conduct environmental assessments of 100% of contracts with significant environmental implications by 2011
Tonnes CO₂ Saved	NA
% Contribution to CO2 target	NA
Ensuring success	<ul style="list-style-type: none"> Officers need adequate time and resources to deliver the strategy Officers need the time and resources to support businesses not currently meeting the council's environmental standards to do so.
Sources of Information and guidance	Environmental Procurement Sustainable Procurement Steering Group

OGC BUYING SOLUTIONS QUICK WINS

Name	Energy Quick Wins
Code	CMP26
Category	Direct emissions reduction
Reference	CC2
Description	To implement the OGC buying solutions list of energy saving and environmental procurement quick wins throughout all council activities.
Year	3, as a core part of the environmental procurement strategy implementation plan.
Owner	Procurement / Environmental Projects and Policy – Claire Smith / Candace Bloomfield
Department	Finance and Corporate Resources / Environment and Culture
Resources	Officer time
Baseline area	Building energy
Targets	Double spend on products offering an environmental sustainability benefit by April 2011
Tonnes CO₂ Saved	NA – we will investigate measuring this through London Remade
% Contribution to CO2 target	NA

Ensuring success	<ul style="list-style-type: none">• Cost effective environmental products are sourced• The project receives senior management backing• A whole life costing approach to procurement is taken.
Sources of Information and guidance	http://www.ogcbuyingsolutions.gov.uk/environmental/products/environmental_quickwins_home.asp

4.1.10 WASTE AND RECYCLING

INTERNAL WASTE REDUCTION

Name	Internal Waste Reduction
Code	CMP27
Category	Direct emissions reduction
Reference	CC2
Description	Develop a waste reduction action plan, waste reduction information on going green, and Environmental Projects and Policy and Property and Asset Management to implement the plan. Work with each department to develop similar plans as part of the process of rolling out ISO14001
Year	2-5, including strong links to the environmental procurement implementation plan.
Owner	Environmental Projects and Policy – Claire Smith
Department	Environment and Culture
Resources	TBD More officer time required
Baseline area	Internal waste
Targets	Reduce waste by 20% by 2011
Tonnes CO₂ Saved	The current waste baseline stands at 1,800 tonnes with a carbon footprint of 804 tonnes. If we cut our waste by 20% this will reduce the baseline by 160 tonnes of CO ₂
% Contribution to CO₂ target	1.4%
Ensuring success	<ul style="list-style-type: none"> • Departments take ownership for reducing their waste • There is strong leadership corporately for developing waste reduction plans • Data baseline is improved and monitoring set up
Sources of Information and guidance	http://intranet.brent.gov.uk/greenbrent.nsf

INTERNAL WASTE RECYCLING

Name	Internal Waste Recycling
Code	CMP28
Category	Direct emissions reduction
Reference	CC2
Description	All sites are provided with internal recycling facilities by April 2008 Non-recyclable materials are reduced through green procurement measures Recycling solutions are found for new material streams
Year	Year 1: Roll out facilities to phase one sites. Year 2: Roll out facilities to phase sites and begin to educate to increase recycling rate Year 3-5: Move to focus on increasing recycling and reducing waste
Owner	Environmental Projects and Policy – Claire Smith
Department	Environment and Culture
Resources	ECD budget, StreetCare, £16,000 Further resources required to set up and run project to April 2009.
Baseline area	Internal Waste
Targets	Recycling facilities in place in all offices by April 2008 Recycle on average 60% of waste by 2011
Tonnes CO₂	If in 2011 we have reduced our waste by 20% to 1440 tonnes annually as a result of

Saved	project CCP26, then we recycle 60% (864 tonnes) of the waste, we reduce our carbon emissions baseline by 2225 tonnes.
% Contribution to CO2 target	18.8%
Ensuring success	<ul style="list-style-type: none"> • Waste data is improved • Staff resources are provided to roll out recycling facilities • Market provides more material recycling solutions
Sources of Information and guidance	http://intranet.brent.gov.uk/greenbrent.nsf/35cb47c7b6357d458025666a0062239d/17163869a0a1c9be802570cf00443336e!OpenDocument

4.1.11 WATER

WATER ACTION PLAN

Name	Water Action Plan
Code	CMP29
Category	Direct emissions reduction
Reference	CC2
Description	<ul style="list-style-type: none"> • Work with Three Valleys Water to: <ol style="list-style-type: none"> 1. Improve monitoring and building references 2. Install remote 'loggers' in high water consuming sites 3. Compare performance with water performance benchmarks 4. Take advantage of free water surveys 5. Set up email notification for logged sites if notification thresholds exceeded • Investigate services offered by Thames Water • Install water butts in suitable council sites: Cemeterys, WHEEC, Wedding Garden, Libraries, etc • Parks service – expand water harvesting capacity • Investigate ADSM water services • Install water butts in schools with outside green space / sports areas
Year	2-5
Owner	Parks – Amanda Haines
Department	Environment and Culture
Resources	TBA
Baseline area	Water
Targets	Action plan to reduce water consumption by 20%
Tonnes CO₂ Saved	Water creates a total of 439 tonnes of CO2 emissions annually If we reduce this usage by 20% we will reduce the baseline by: 87.8 tonnes
% Contribution to CO2 target	0.75%
Ensuring success	
Sources of Information and guidance	http://www.3valleys.co.uk/water_efficiency/ah_we_ob_business.shtml http://www.3valleys.co.uk/business/wm_watermeters.shtml http://www.3valleys.co.uk/business/yb_yourbill.shtml http://www.3valleys.co.uk/education/enviro_ecocentre.shtml http://www.3valleys.co.uk/water_butt/water_butt_offer.htm http://www.adsm.com/

4.1.12 RENEWABLES

ENERGY PARK

Name	Energy Park
Code	CMP30
Category	Feasibility Studies
Reference	CC2
Description	<p>Brent Council has approached the partnership for renewables about the possibility of siting an industrial wind turbine in the Park Royal industrial estate. This wind turbine would produce in the region of 1MW of electricity. The Partnership for Renewables will provide Brent with a desk based feasibility study. Major obstructions to this project include:</p> <ul style="list-style-type: none"> • A pre-existing historical planning application for the development site • Wind speeds in urban areas are generally not strong enough • Heathrow Airport may prove an obstacle as the turbine would be 120 meters at its highest point (although this is not as high as the Wembley Stadium arch) <p>Elements in the project's favour include:</p> <ul style="list-style-type: none"> • Very low density residential population, including very few properties within a 400m zone • Site located within an area of heavy industrial use, next to the North Circular Road • Existing high structures and planned high structures in the area • Favourable planning policy <p>The proposed site has also been suggested as an energy park, providing energy for the industrial estate users, which includes Bridge Park and the Twyford Civic Amenity Centre. Brent Council would be involved in this project and in a good position to take advantage of the renewable energy generation. Energy generation could take advantage of waste materials such as wood sent to the Civic Amenity Site and waste cooking oil from the food processors.</p>
Year	2 ongoing
Owner	Directorate / Planning – Michael Read
Department	Environment and Culture
Resources	Partnership for Renewables full finance for potential wind turbine London Green Fund (projects up to £5m)
Baseline area	Building energy / fleet
Targets	NA
Tonnes CO₂ Saved	Significant
% Contribution to CO₂ target	NA
Ensuring success	<ul style="list-style-type: none"> • Successful outcome from planning application challenge in Brent's favour • Secure land with help from the London Development Agency for use for energy generation • Secure funding from London Green Fund • Favourable feasibility study outcome from the Partnership for Renewables • Close partnership working with the Park Royal Partnership • Allocation of human resources to the project
Sources of Information and guidance	<ul style="list-style-type: none"> • Preliminary report available for the energy park proposal • GIS site information available

COMBINED HEAT AND POWER

Name	CHP Mahatma Gandhi House
Code	CMP31
Category	Feasibility / Direct emissions reduction
Reference	CC2
Description	Mahatma Gandhi House could benefit from a relatively small 49Kw (e) CHP unit installed on the roof of the building. It would save over 90 tonnes of CO2 per year. Its £65,000 cost would be paid back in 6 years. It would be containerised and linked into the existing heating system in the boiler house. Cabling to link the CHP's output to the main switchboard would be required.
Year	2-3
Owner	Deputy Head of Property and Asset Management – James Young
Department	Finance and Corporate Resources
Resources	Capital Asset Budget / Third Party Finance
Baseline area	Building Energy
Targets	NA
Tonnes CO₂ Saved	93 tonnes as identified by feasibility study.
% Contribution to CO2 target	0.78%
Ensuring success	<ul style="list-style-type: none"> • More detailed proposals need to be sent to Property and Asset Management • Solution found to getting CHP unit onto the roof of the building • Funding would need to be agreed <p>Note: MGH is not one of those buildings to be disposed of in the move to the proposed civic centre.</p>
Sources of Information and guidance	Feasibility report is available. Two sites were not considered feasible: the Town Hall and Bridge Park, given uncertainty as to the future use of these buildings. www.thecarbontrust.co.uk/loans

ENERGY EFFICIENCY IMPROVEMENTS: LEISURE CENTRES

Name	Energy Efficiency Improvements: Leisure Centres
Code	CMP32
Category	Feasibility / Direct emissions reduction
Reference	CC2
Description	<p>A feasibility study into CHP, such as that conducted for MGH, the Town Hall, and Bridge Park (also a leisure centre) is required for Vale Farm.</p> <p>This is a Leisure Centre with a swimming pool and therefore ideal for CHP technology. In addition, the future of this out of date centre is uncertain. The building may be replaced, in which case there is scope for installation on energy reduction and renewable energy technologies</p> <p>All leisure centres could benefit from comprehensive energy audits.</p> <p>The effect of the new Willesden Leisure Centre on emissions is as yet unknown.</p>
Year	Year 2 for the feasibility study, and / or proposal about the future of the building
Owner	Sports – Gerry Keifer / Rez Cameron
Department	Environment and Culture
Resources	<p>Third Party Finance</p> <p>Carbon Trust building design services</p> <p>Energy Efficiency fund</p>
Baseline area	Building Energy, water
Targets	NA

Tonnes CO₂ Saved	Significant, in the region of 400 tonnes. Based on the efficiency potential of the current building.
% Contribution to CO₂ target	3.4%
Ensuring success	<ul style="list-style-type: none"> Data must be supplied by the Vale Farm Leisure Management company before this feasibility study can go ahead.
Sources of Information and guidance	www.thecarbontrust.co.uk/loans

SMALL SCALE RENEWABLES: WIND TURBINE

Name	Wind Turbine(s)
Code	CMP33
Category	Feasibility
Reference	CC2
Description	Investigation into a small scale wind turbine for energy generation and educational purposes, such as swift or quiet revolution QR5. Micro-renewables are available through government grant programmes such as Low Carbon Buildings that provide up to a 40% grant for public sector organizations.
Year	2
Owner	Property and Asset Management / Energy Solutions North West London
Department	Finance and Corporate Recourses / Environment and Culture
Resources	Capital Asset Budget / Low Carbon Buildings grant
Baseline area	Building energy
Targets	NA
Tonnes CO₂ Saved	TBD
% Contribution to CO₂ target	TBD
Ensuring success	<ul style="list-style-type: none"> An efficient turbine that can pay for itself can be sourced A suitable windy site can be found Free consultancy can be found Budget available and resources to make grant applications Willing schools / educational centres Facilitation provided by Council / ESNWL
Sources of Information and guidance	http://www.renewabledevices.com/swift/specification.htm www.quietrevolution.co.uk

SMALL SCALE RENEWABLES: SOLAR PANELS / SOLAR THERMAL (WATER HEATING)

Name	Solar Panels / water heating
Code	CMP34
Category	Feasibility / Direct Emissions Reduction
Reference	CC2
Description	Micro-renewables are available through government grant programmes such as Low Carbon Buildings that provide up to a 40% grant for public sector organizations. Solar technology could be used for both energy generation and educational purposes.
Year	2-3
Owner	Property and Asset Management / Energy Solutions North West London
Department	Finance and Corporate Recourses / Environment and Culture

Resources	Capital Asset Budget / Low Carbon Buildings grant
Baseline area	Building energy
Targets	NA
Tonnes CO₂ Saved	TBD
% Contribution to CO2 target	TBD
Ensuring success	<ul style="list-style-type: none"> • Budget available and resources to make grant applications • Willing schools / educational centres • Suitable council site • Facilitation provided by council / ESNWL
Sources of Information and guidance	http://www.solarcentury.com/what_we_do/commercial_projects/

SMALL SCALE RENEWABLES: BIOMASS BURNER

Name	Bio-mass burner
Code	CMP35
Category	Feasibility / Direct Emissions Reduction
Reference	CC2
Description	<p>A biomass burner is most suitable where there is bio-mass readily available, such as in a park office located near to woodland, or a building located to a wood recycling facility.</p> <p>Bio-mass can be an externally sourced fuel, but it is more positive environmentally to source if locally.</p>
Year	2
Owner	Energy Solutions North West London / Parks Service
Department	Environment and Culture
Resources	Third party finance / grant scheme
Baseline area	Building energy
Targets	NA
Tonnes CO₂ Saved	TBD
% Contribution to CO2 target	TBD
Ensuring success	<ul style="list-style-type: none"> • Site, funding, and suitable technology need to be sourced • Continue to keep up to date with the Creative Environmental Networks Project
Sources of Information and guidance	

4.1.13 OFFSETTING

TREE PLANTING

Name	Tree Planting
Code	CMP36
Category	Offsetting
Reference	CC5
Description	<p>The StreetCare department has secured funding to plant a significant number of new trees in the Borough by 2010.</p> <p>The types of trees must comply with the Tree Policy, but many planted in parkland will be large broadleaf trees.</p> <p>The numbers of trees to be planted are as yet unknown, as two approaches to tree planting are being considered:</p> <ol style="list-style-type: none"> 1. More, but younger trees planted 2. Less, but more mature (and more likely to survive) trees
Year	2-5
Owner	Keith Ellis, StreetCare, Leslie Williams, Parks
Department	Environment and Culture
Resources	£200,000 capital funding
Baseline area	All – offsetting measure
Targets	Plant hundreds of new trees in the borough by 2010 – figure to be determined
Tonnes CO₂ Saved	TBD
% Contribution to CO₂ target	TBD – any calculation must take into consideration the negative effect of replacing London Plane Trees with smaller trees.
Ensuring success	<ul style="list-style-type: none"> • Decision made as to what approach • Parks contractors, wildlife, and the public, do not damage young trees • Young trees conform with Tree Policy and are resistant to drought
Sources of Information and guidance	<p>GIS mapping and tree surveys (both recording species, numbers, and condition)</p> <p>http://gisdev2.brent.gov.uk/website/StreetTrees/viewer.htm</p>

TREE POLICY

Name	Tree Policy
Code	CMP37
Category	Embedding
Reference	CC5
Description	<p>The tree policy must meet the following statement in the Corporate Strategy: ‘A consistent approach to tree planting and removal that balances the need to minimise subsidence claims while encouraging the replanting of broad leaf, native and suitable species’</p> <p>The policy is in favour of large broadleaf trees in parks and natural spaces, and more suitable ornamental trees in streets (to prevent subsidence)</p>
Year	2 – 5
Owner	Landscape – Planning and StreetCare
Department	Environment and Culture
Resources	Officer time
Baseline area	See project 37

Targets	NA
Tonnes CO₂ Saved	NA
% Contribution to CO2 target	NA
Ensuring success	<ul style="list-style-type: none">• Trees are resistant to climate change
Sources of Information and guidance	http://intranet.brent.gov.uk/services.nsf/86166609d379966f8025693700442df5/b799e6079b911af18025694b004d2365/\$FILE/Street%20Tree%20Policy%20-%202004.pdf

4.2 FUTURE AREAS FOR INVESTIGATION

4.2.1 SCHOOLS

Schools produce 28% of the council's emissions of carbon dioxide. It is therefore crucial to achieving the 20% carbon emissions reduction target by 2011 that schools are engaged in carbon management activity.

TOOLS FOR ACHIEVING ENERGY REDUCTION IN SCHOOLS:

- Brent Council's Energy Efficiency Fund
- Supporting Governors and Head Teachers to apply for Low Carbon Buildings funding
- Compliance with Part L of the buildings regulations
- Increasing sustainable planning policy goals to achieve 20% renewables in large scale new build developments
- Energy audits conducted by the Carbon Trust
- Energy audits conducted by Energy Solutions North West London

In addition, the Government is developing a strategy on renewable energy generation and carbon reduction for schools. This will include a whole life costs toolkit to help decision makers prioritise expenditure on energy efficiency measures and low and zero carbon energy systems

The Building Schools for the Future (BSF) programme applies to secondary schools. The aim of the programme is to have re-built or refurbished / renewed all UK secondary schools by 2015. Brent is in wave 4-7 and will be receiving funding from 2011, and addressing how this money shall be spent will be an issue to be addressed by the Carbon Management Steering Group in years 4 and 5 of the implementation of the carbon management strategy.

However, the Primary Capital Programme (PCP) refers to rebuilding Primary Schools in the borough and funding will be available for Brent from 2009. Buildings regulations, forthcoming regulation under the Sustainable and Secure Buildings Act, and planning policy should ensure that new buildings are sustainable, however, the council should take advantage of service providers with expertise in building sustainable buildings and of advice from experts on building carbon neutral buildings.

PRESSURES

By 2016 we need to add to Brent's existing capacity a further 16 forms of entry at secondary level, which is equal to 480 places, and a further 9 forms of entry at Primary level, which is equal to 270 places. This will equate to an increase in total school floor area, which is currently 307,592 sqM, and an increase in carbon dioxide emissions.

Completed and Current Works to Schools

Yellow - New Schemes completed
Orange - New Schemes currently on site
Red - Asset Disposals

SCHOOLS BY 'ELEMENT'	ENERGY IMPLICATION	DETAILS	COMMENTS
COMMITMENTS FROM 05/06 & EARLIER			
Electrical			
Furness		Total rewire - in conjunction with 1st fl ceiling renewal (Roofing).	Carried out as part of roofing contract - see below
Gladstone Park		Complete rewire + ext lighting - main bldg (not fire alarm)	-
Mount Stewart – Infants		Rewire incl fire Alarms - School non compliant	-
Park Lane		Complete rewire + replacement fire alarm + external lighting	-
Mechanical			
Harlesdon		Renewal of heat distribution system throughout	Scheme was done by APS.
Kensal Rise		Heat Distribution System incl rads	-
Leopold		Renewal of heat distribution system in Nursery	-
Roofing			
Newfield		Part reroof of school	SW question need to do Nursery, but other areas need repairs
Salisbury		Reroofing Ph 2&3. Main Block	Brought Forward from 06/07, 08/09
Salisbury		Lower Flat Roofs	Brought Forward from 06/07, 08/10
Kingsbury High		Princes Rd - Phase 2 - Pitched reroofing 55%.	-
Elsley	Improved thermal insulation	Reroofing rectification works	EMERGENCY WORKS
Manor		Repair of major HW services leak	Risk of Legionella due to low HW temps.
Windows			
Oliver Goldsmith		Renewal of steel windows ph1 + associated repairs	Brought forward from 06/07
Oliver Goldsmith	Improved thermal insulation	Renewal of steel windows ph2 + associated repairs	-
Salisbury		Main Block Ph 1&2	Brought forward from 06/07. Problem with Planners resolved
Kingsbury High		Continuation of rolling program	Brought forward from 08/09
Preston Manor High		Replacement Block C (Science) windows, ext doors, cladding	Scope of work extended

SCHOOLS BY 'ELEMENT'	ENERGY IMPLICATION	DETAILS	COMMENTS
Wembley High		Phase 1 - windows renewal - courtyard + outer + repairs.	Limited repair work pending BSF. 110k worth 06/07 work B/F also.
Wembley High	Improved thermal insulation	Phase 2 - windows renewal - courtyard + outer + repairs.	Brought forward from 06/07
Large OLD Schemes Finished on Site			
Donnington		Major remodelling to make school more suitable.	Contractor in Administration. Further legal complications. Finishing works in hand
Kingsbury Green – Primary		New Block - Kitchen, canteen, hall/gym	Dispute ruled against Council, costs may rise. Dispute now with AMEY.
Lyon Park Inf/Jun		Ph 1&2 Expansion to 3FE + Dining	Contractor delay in final accounts.
Mitchell Brook		Partial Redevelopment	Contractor in Administration. May be no further payment requests.
Park Lane		New Nursery block	All payments now completed
Uxendon Manor		Replacement of old hut by larger accessible hut	Project completed on site SURPLUS this year of £148,000
Wykeham		Remodelling	Legal dispute. Indicated 05/06 spend may be overestimate, but risk of claim
Wembley High		Major Extension & Adaptations	OW predicted costs - SURPLUS £99,000
06/07 NEW STARTS & CURRENT LARGE SCHEMES			
Electrical			
Mora	More efficient lighting	Total rewire	-
Mechanical			
Leopold	More efficient heating system	Renewal of heat distribution system in Main School	Nursery done last year
Roofing			
Salisbury	Improved thermal insulation	Dining Block Reroofing	Awaiting decision by school
Health & Safety			
Harlesdon	Removing wasteful leaks	Emergency pipe rerouting	-
Windows			
Claremont	Improved thermal insulation	Replacement Windows - final phase	Brought forward from 08/09
Current Development Schemes			
The Avenue	More efficient replacement building	Rebuild (TCF funded)	Scheme inputted in Aug 06
Preston Park – Primary	More efficient replacement building	Substantial extension to main block to replace old huts	+ £100,000 in budget, next yr ONLY Note slippage in 05/06

SCHOOLS BY 'ELEMENT'	ENERGY IMPLICATION	DETAILS	COMMENTS
St Mary Magdelaine	More efficient replacement building	Rebuild (TCF funded)	-
Wembley Manor - Inf/Jnr	More efficient replacement building, but it may be larger	School redevelopment / expansion	Delays until next year
Academy 2	Start of new school development	Land purchase	May not be spent this year
John Kelly - Girls + Boys	Start of replacement school development - more efficient	Land Purchase	-
Primary School Expansions			
Kensal Rise	Increased impact	Adaptations to return to 3FE	-
Stonebridge	Increased impact	Adaptations to return to 2FE	-
Secondary School Expansions			
Claremont	Efficient extension but more floor area	Expansion by 1 FE	PROVISIONAL SUM - Will eventually need to find funding elsewhere.
Preston Manor	Efficient extension but more floor area	Expansion by 1 FE	-
Queen's Park	Efficient extension but more floor area	CLC extension	-
Hut Replacements			
Oliver Goldsmith	More efficient replacement building	Only Oliver Goldsmith now progressing	+ £1,000,000 pa budget for this & next 2yrs largely shelved.
School Loan Scheme			
Claremont	Efficient extension but more floor area	Sports Hall by Cube	To be spent in 06/07
Grove Park / Hay Lane	Efficient extension but more floor area	New build post 16 facility for both schools	-
Woodfield	Efficient extension but more floor area	Extension to form Primary 6th Form Centre + 1st fl mental Health Unit + Car park works	Budget grown from £400k to £600K. Extra from SEN Review elsewhere. School borrowing £400K for Mental Health part. O/L cost £1.0M
PRU (Ex Chalkhill Youth Centre)	Efficient extension but more floor area	Part renovations, part new build	-
PRU (Ex Stonebridge Welsh School)	Making use of existing building	Conversion of old school annexe	-
PRU KS3 (Stag Lane)	Efficient extension but more floor area	Additional KS2 accom + refurb	-
Big Lottery Fund (NOF)			
Chalkhill	Efficient extension but more floor area	New 2 courts & Performance Sports Hall	-

SCHOOLS BY 'ELEMENT'	ENERGY IMPLICATION	DETAILS	COMMENTS
Gladstone Park (PARK not school)	Efficient extension but more floor area	New Changing Pavilion adjacent old SS building.	20K of shown budget is for revenue. On top of stated Budget, there is £100K added from Parks Dept.
Newfield	Floodlighting energy use	Multi-use outside games area with floodlighting & rebound wall	-
St Mary's CofE - Primary (Garnet Rd)	Floodlighting energy use	Multi-use outside games area with floodlighting & rebound wall	Delays in land swap negotiations by Diocesan Board
St Mary's RC - Infants (Canterbury Rd)	Floodlighting energy use	Multi-use outside games area with floodlighting & rebound wall	-
Welsh Harp Centre	More efficient replacement building, but it may be larger	Environmental Centre fire rebuild + new WC block/orienting trail.	On top of stated Budget, there is an £65K added from insurance claim. Passed back from Env & Culture Dept.
PHASE 2 CHILDREN'S CENTRES			
Fryent School	Making use of existing building	Conversion / refurb of Caretaker's House / Horsa Huts	Scheme go-ahead subject to Brent Executive approval
Lyon Park School	Making use of existing building	Conversion / refurb of Caretaker's House + Extension to Nursery	Subject to Brent Executive approval
Queens Park Community School	Making use of existing building	New Build by the City Learning Centre	Subject to Brent Executive approval
St Raphael's Community Centre	Making use of existing building	Conversion / refurb of Community Centre	Subject to Brent Executive approval
Wembley Manor School	Making use of existing building	New build - Part of Redeveloped School	Subject to Brent Executive approval
Wembley Centre for Health & Care	Making use of existing building	Conversion / refurb of Office	Subject to Brent Executive approval
Willesdon Hospital	Making use of existing building	Conversion / refurb of Office	Subject to Brent Executive approval
NON SCHOOLS			
Scrapbank	Making use of existing building	Conversion of Building to PRU	-
Youth Service Brent (House Annexe)	Making use of existing building	Refurbishment of Youth Centre	-
Disposal of Asset			
Caretaker Houses			
Park Lane Primary	Disposal		
Sudbury Primary	Disposal		
Wykeham Primary	Disposal		
Mount Stewart Junior	Disposal		
Lyon Park Junior	Disposal		
Harlesden Primary	Disposal		

4.3 PROJECT WORKING GROUP MEMBERS

Name	Title	Department	Role
Claire Smith	Principal Environmental Projects and Policy Officer	Environment and Culture	Project Leader – project management Group Chair Various projects
Roger Kelly	Director – Energy Solutions North West London	Energy Solutions North West London	Project Leader – technical Various projects
James Young	Deputy Head of Property and Asset Management	Finance and Corporate Resources	Energy Efficiency Fund manager
John Bowtell	Asset Manager – Schools	Children and Families	Energy efficiency - Schools
Tom Lloyd	ITU Operations Manager	Finance and Corporate Resources	ITU projects
Tony Hirsch	Head of Policy & Research	Housing and Community Care	BHP Projects
Gerry Doherty	Director of Tech Services	Brent Housing Partnership	BHP Projects
Linda Saunders	Service Development Manager	Brent Housing Partnership	BHP Environmental Policy
Graeme Maughan	Policy Support Manager	Environment and Culture	Street Lighting
Mike Evans	Sustainable Transport Officer	Environment and Culture	Staff travel plan Green fleet review
Keith Ellis	Arboricultural Officer - StreetCare	Environment and Culture	Tree planting and policy
Rez Cameron	Recreation Commissioning Manager – Sports	Environment and Culture	Leisure Centres, specifically Vale Farm CHP
Dave Carroll	Head of Policy & Projects - Planning	Environment and Culture	Energy Park / wind turbine
Amanda Haines	Asset Manager – Parks	Environment and Culture	Water
Alex Connell	Workshop Manager - BTS	Children and Families (Brent Transport Services)	Bio-diesel Green fleet review Euro standards
Prod Sarigianis	Business Support Manager - ITU	Finance and Corporate Resources	OGC buying solutions energy quick wins / electrical equipment rationalisation
Harry Mackie	Centre Manager- Welsh Harp Environmental Education Centre	Environment and Culture	WHEEC improvements
Anna Woda	Project Director – Civic Centre	Central	Civic Centre
Rachel Smith	Environmental Projects Officer (temp)	Environment and Culture	Project Support
Jason Grimsley	Communications Officer	Environment and Culture	Communications plan delivery

4.4 CLIMATE CHANGE COMMUNICATION PLAN

4.4.1 INTRODUCTION

This plan has been put together by the project leader and environment and culture communications officer after establishing the communication channels currently used within Brent Council and the stakeholder analysis conducted at the start of the Local Authority Carbon Management Project. The purpose of this plan is to detail in terms of times and actions how climate change (and therefore carbon) issues will be communicated to the identified stakeholders in order to reduce the council's emissions of green house gasses from its 2005-2006 baseline.

The plan includes actions, methods, start dates, end dates, and responsibilities.

4.4.2 COMMUNICATION CHANNEL AUDIT

As recommended by the Carbon Trust a communications channel audit was conducted to identify the methods of communication available for use. The results were:

- Face to Face channels
 - Workshops
 - Steering Group Meetings
 - Working Group Meetings
 - Road shows
 - Staff forums
 - Network
 - Training sessions
 - Staff inductions
- Electronic channels
 - e-mail
 - Intranet
 - Internet
 - e-learning
 - CD ROMs
 - Consultation
 - Schools extranet
- Printed channels
 - Reports
 - Brent Magazine
 - E&C News and other departmental news letters
 - local press – press releases
 - Insight
 - Posters
 - Leaflets
 - Promotional items
 - Members Bulletin
- Other media channels:
 - Video
 - Telephone
 - Teleconference
 - Radio
 - Television
 - Images and photography

Not all of these channels and methods shall be utilised by this climate change communications plan given the resources available. The most appropriate, effective, and wide reaching methods have been selected.

4.4.3 PURPOSE OF THE COMMUNICATIONS PLAN

There are three themes that run through this communications plan that form its purpose. These are:

Theme 1: Communicate to key council officers the Carbon Management Strategy and implementation plan and obtain buy-in for the project.

Theme 2: Reduce the contribution of individuals and groups to the council's carbon dioxide baseline.

Theme 3: Communicate the council's work externally to demonstrate leadership to Brent's residents and stimulate positive behaviour change.

4.4.4 COMMUNICATION THEMES AND ACTIONS

Theme 1: Communicate to key council officers the Carbon Management Strategy and implementation plan and obtain buy-in for the project.

Desired outcomes:

- Proposed climate change projects to meet targets
- Strategic direction
- Smooth delivery of the strategy and implementation plan

Identified Stakeholders:

- Corporate Management Team
- Executive
- Climate change Steering Group
- Climate change Working Group
- Property and Asset Management – facilities managers/ Asset Board
- Achievement and Inclusion Unit
- Waste and Recycling Team
- Leisure Centre Management
- Brent Housing Partnership – Strategy and Regeneration
- ISO14001 Representatives Group
- Brent Green Network

Action	Start	End	Method	Facilitate / Responsibility
Engagement Meeting	Jun-06	Jun-06	Workshop	Claire Smith & Carbon Trust
Strategy and Planning Workshop	Jul-06	Jul-06	Workshop	Claire Smith & Carbon Trust
Intranet Site Launch and ongoing development	April-07	Mar-11	Intranet	Claire Smith
Report to CMT	Feb-07	Feb-07	Reports	Claire Smith
Monthly electronic project updates begin	Sep-06	Mar-07	e-mail	Claire Smith
Opportunities Workshop	Sep-06	Sep-06	Workshop	Claire Smith / Carbon Trust
First Ideas Sharing Conference	Oct-06	Oct-06	Network	Claire Smith / Carbon Trust
Training commences	June-07	Mar-11	Training sessions	Roger Kelly
Second Ideas Sharing Conference	Jan-07	Jan-07	Network	Claire Smith / Carbon Trust
Strategy and Implementation Plan consultation	Feb-07	Mar-07	Consultation	Steering Group Members/ Working Group
Report to Executive	May-07	June-07	Reports	Claire Smith / Steering Group
Publish CMS&IP on relevant LA networks	May 2007	May 2007	Publication	Claire Smith
Send report to interested parties, including school governors, Brent Friends of the Earth and so on	June 2007	June2007	Mail	Claire Smith

From June 2006:	Frequency	Method	Facilitate / Responsibility
Steering Group Meetings	Bi-monthly	Meeting	Project leader
Working Group (Individual meetings or electronic updates with / from project owners)	Bi-annual	Meeting	Project leader
Electronic project updates for Steering Group	Quarterly	e-mail	Project leader
Performance report against targets	Annual	Reports	Environmental Projects and Policy Team
Training sessions for asset managers and staff	Annual	Training	Energy Solutions North West London

Theme 2: Reduce the contribution of individuals and groups to the council's carbon dioxide emissions baseline.

Desired outcomes:

- Increased awareness of the causes and effects of climate change

- Increased individual and joint responsibility for climate change
- Empowered individuals and groups who can make their own carbon footprint improvement

Identified Stakeholders:

- All council staff
- Staff employed by contractors
- Visitors to council sites

Action	Start	End	Method	Facilitate / Responsibility
Role of Department Green Champions developed	June-07	Sept-07	Staff forum	Project Leader
Steering Group put forward department Green Champions	Sep-07	Oct-07		Steering Group
Lunch held for Green Champions	Nov-07	Nov-07		Project Leader
Communications campaign materials procured / obtained:	Oct-06	April -07		Going Green - Environmental Projects and Policy
• Product – glass, mouse mat, light bulb				
• Information DVDs				
• Images				
• Prizes and incentives				
Poster Campaign				
Four year rolling poster campaign, first four posters named below				
• Go Green	April-07	May-07	Articles, road shows, intranet, posters, promotional items, photography and images, etc	Going Green - Environmental Projects and Policy
• Go Public	June-07	Aug-07		
• Be Energy Efficient	Sept-07	Nov-07		
• Ditch the Disposables	Dec-07	Mar-07		
Develop intranet content including practical actions to reduce carbon emissions, relevant facts and information, images	Sep-06	Ongoing	Intranet	Going Green - Environmental Projects and Policy
Use content to write articles for departmental news letters, to go out with the quarterly focus	Sep-06	Ongoing	Images and photography	Going Green - Environmental Projects and Policy

Action	Start	End	Method	Facilitate / Responsibility
Hold a road show for each department at their main site, including promotional items, posters, pledges, certificates, information	Feb-07	Mar-07	Road show	Green Champions, Environmental Projects and Policy
Photo opportunity at road show for Member / Mayor photograph signing climate change pledge	Feb-07	Mar-07	Road show, Photography and images	Green Champions, Environmental Projects and Policy
Run screenings of an Inconvenient Truth	From December 2006			
Ongoing:				
Four new themes each year with similar quarterly focus				
DVD programme library for green champions to screen in their areas.				
Training				
Develop environmental awareness training e-learning course with one module dedicated to climate change	Sep-06	Mar-07	Training	Environmental Projects & Policy Team
Roll out training across the council	Apr-07	Mar-11	Training	CMT, Human Resources and Diversity, Claire Smith
Monitor performance of e-learning course	Apr-07	Mar-11	Training	Environmental Projects & Policy Officer

Theme 3: Communicate the council's work externally to demonstrate leadership to Brent's residents and stimulate positive behaviour change.

Desired outcomes:

- Brent's residents are satisfied that the council is taking responsibility for climate change and working efficiently
- Brent's residents have the information to be able to reduce their own carbon footprints

Identified Stakeholders:

- Local press
- Council Members
- Residents

Action	Start	End	Method	Facilitate / Responsibility
Carbon Projects Send final list of council climate change projects to Environment and Culture communications team to identify newsworthy items	Nov-06	Mar-11	Local Press, Brent Magazine. Leader's press brief. Local TV	Claire Smith / Jason Grimsley
Articles developed in advance for selected projects	Nov-06	Mar-11	Press releases	Jason Grimsley / E&C Communications Team
Appropriate external press contacted for interest	Mar-07	Ongoing	Telephone / email	Jason Grimsley / E&C Communications Team
Photo opportunities identified and undertaken	With project	With project	Photography and images	Jason Grimsley / E&C Communications Team and Project Owner
Images collated on intranet site	With project	With project	Photography and images, images	Going Green - Environmental Projects and Policy
Final communications piece put together and sent out	With project	With project	Local Press, Brent Magazine. Leader's press brief. Local TV	Jason Grimsley / E&C Communications Team
Greening Brent Internet				
Greening Brent to be modified in line with corporate website policy to be service only focused.	Feb-06	Mar-11	Internet	Going Green - Environmental Projects and Policy
Internet site launched in Brent Magazine and along with timely articles on carbon projects	With project and from Mar 07	Mar-11	Internet, Local Press	Jason Grimsley / E&C Communications Team + Going Green

4.4.5 FUTURE EVENTS

Action	Start	End	Method	Facilitate / Responsibility
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London Sustainability Weeks – green fair	June -07	June-07	Internet Local Press Photography and images	Environmental Projects & Policy Team
London Sustainability Weeks – green market	June-07	June-07	Intranet Photography and images	Environmental Projects & Policy Team
Community Consultations on Climate Change and other Environmental Issues	June-07	Ongoing	Internet Local Press Photography and Images	Environmental Projects & Policy Team

4.5 REPORT TEMPLATE

CARBON MANAGEMENT PROJECT PROGRESS REPORT		Reporting Period From: To:	
Project Name:			
Project Code: CMPXX			
Report Author:		Date:	
<p><u>Section A</u> - Summary of progress since last report sent to the Carbon Management Steering Group</p> <p><u>Section B</u> – Outlook/Key Activities for next 6 months</p> <p><u>Section C</u> (where quantification is possible) i.e please supply projected carbon emissions, energy reduction, number of installations, cost savings to date, and so on.</p> <p><u>Section D</u> – Please list any risks or issues that you would like brought to the attention of the Carbon Management Steering Group</p>			
Project Manager:			
Other Relevant Staff:			

Timescale for Reports:

Projects: CMP01 – CMP10

Report progress to Carbon Management Steering Group Meetings in April and October.

Projects: CMP11 – CMP22

Report progress to Carbon Management Steering Group Meetings in June and December

Projects CMP23 – CMP37

Report progress to Carbon Management Steering Group Meetings in August and February

As projects are completed they shall be signed off by the Steering Group.

New projects shall be coded from CMP38 onwards.