

Brent Climate Change Strategy

Appendices:

STRATEGY AND ACTION PLAN

Executive

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1 Climate change

Policymakers, businesses and individuals across the world have become deeply concerned about the implications of global climate change on our everyday lives. That is why world leaders are attempting to reach a global deal to reduce emissions of greenhouse gases. They are motivated by the messages from the world's climate scientists, who are warning that, not only will climate change bring severe disruption in the coming decades, but that the process of climate change has already begun and we must learn to cope with it as quickly as possible.

As the following sections of this Strategy explain, Brent will be significantly affected by climate change and so the borough needs a Strategy of how to cope and respond to the challenges and opportunities that climate change brings.

The Strategy will need the support and input of everyone who lives, works, invests in and visits Brent. That is why it has been designed to be inclusive and to evolve over time as the various organisations and residents in Brent provide their input and help to deliver the objectives set out below.

1.1 What is climate change?

Climate change is a process by which our 'usual' weather patterns begin to change at an unnatural rate because of a gradual warming of the earth's surface. As well as causing gradual changes, climate change is predicted to increase the number of extreme weather events, such as flooding, heatwaves, droughts and storms. Scientists agree that this is caused by the massive amounts of gases¹ we emit from burning fuels to make electricity or power vehicles². These gases act like the walls of a greenhouse, trapping warm air in the atmosphere. That is why we often refer to the gases that cause climate change as 'Greenhouse Gases' (or GHGs).

The world's climate system is very complex and some of the impacts of climate change may seem confusing. For example, the south-east of England is likely to receive more intense rainfall, which will cause flash flooding in parts of Brent. However, there will also be more frequent droughts (periods with very little rainfall) that will lead to hosepipe bans and cause trouble for local residents and businesses. In other words, climate change may bring problems of too much water at some times and too little at others. There are issues to do with extreme weather events as well as gradual changes in our normal weather conditions that Brent will need to prepare for.

Here are some of the key messages about what climate change will mean for Brent:

- Temperatures will be higher all year round, for example an average of +3.6°C in summer and +2°C in winter by 2050.
- In the summer, there will be more frequent and intense heatwaves – periods of 3 days or more when the temperature is 5°C higher than average.
- Along with hot periods, there will be increased chances of drought, meaning that water supplies may be limited and gardens and parks will dry out. Drought can also lead to subsidence, which is already a problem for constructors in Brent.
- In the winter, heavy rainfall will become more frequent, especially in short, sharp bursts. This will cause flooding in many streets, roads and industrial estates and may even cause underground stations to be flooded, causing widespread disruption.
- The sea level will gradually rise, increasing the risk of major flooding in London.

¹ Specifically, gases called 'Greenhouse gases' or GHGs, which include carbon dioxide, methane and various others.

² Intergovernmental Panel on Climate Change (

See the Supporting Evidence document for further information on the causes of climate change and detailed descriptions of how climate change will impact Brent.

There are two main responses to these challenges:

Slow it down: this means tackling the causes of climate change by cutting emissions of greenhouse gases. This response is called '*mitigation*'.

Coping with a changing climate: this means learning to adapt to changes in the weather. This response is called '*adaptation*'.

1.2 Climate change means increased risks

Heat

Brent is a largely urban area with comparatively little parkland. This means that large areas of concrete and tightly packed housing are common. High temperatures have a bigger impact in places like Brent because of the concrete and buildings (see Urban Heat Island in the Supporting Evidence document). High temperatures also affect people at work, including those who work outdoors (e.g. construction or park maintenance), within confined spaces (e.g. in workshops or garages) or in vehicles (e.g. taxi, delivery, bus, train or tube drivers). A hotter Brent will mean more people suffer from illnesses and could also lead to damage to roads, railways and buildings.

Rainfall & Flooding

Heavy thunderstorms and intense winter downpours will become more common. Because most of Brent is built-up, almost all rainfall ends up in drains, which were not designed to cope with the kinds of rainfall that climate change will bring to Brent now and in the future. It is hard to predict where flash flooding will occur, but even temporary flood events can block roads, cause damage and lead to prolonged disruption to the local economy.

Storm Damage

Brent suffered from a tornado in the winter of 2006, when over 100 houses were damaged, requiring structural repairs. Increased storminess as a result of climate change would increase the chances of a similar event striking the borough in the near future.

Global Impacts

Many of Brent's residents have family and friends overseas, for example in South Asia or in Africa. Climate change will have even more severe impacts in countries beyond Europe. The potential impacts include:

- In Africa by 2020, between 75 million and 250 million people will not have enough water as a result of climate change. Food security will become a major issue as rain-fed agricultural production is projected to drop by up to 50% by 2020.
- Glaciers in the Himalayas are already melting rapidly, causing flooding in India, Pakistan and central Asia whilst threatening the supply of freshwater to over 2 billion people who depend on rivers that take water from the Himalayan glaciers.

- Sea level rise threatens a number of low lying island states throughout the world, as well as entire countries, such as Bangladesh –where millions of people may be displaced as the sea level rises, particularly as the population grows in coming years.
- In addition, 20-30% of plants and animals risk extinction if climate change continues. Incidences of disease and malnutrition will increase rapidly and conflicts will erupt because of competition for water resources and food. For example, water and food shortages may have helped to cause the recent wars in Darfur, Sudan, which has been labelled the world’s first “climate change war”.

Source: IPCC 4th Assessment Report

Table 1-1 Possible Future Risks for Brent as a result of climate change

<ul style="list-style-type: none"> • The iconic Wembley Stadium hosts major world sporting and cultural events. If an intense heatwave was to hit Brent, it could affect thousands of travelling fans and sports stars, possibly leading to the cancellation of big events or embarrassment on the part of Stadium officials and the Borough, if people weren’t able to cope. • The London to Birmingham train line runs through Brent, which might be damaged by heat stress, causing major delays and possibly major reconstruction work. • Densely populated areas, such as South Kilburn, will heat up very quickly, causing discomfort and possibly severe heat stress and premature death to residents. People with existing illnesses or mental health problems are especially vulnerable to heat stress. • The areas close to the North Circular Road (A406), where air quality is currently the worst in the borough, will suffer during hot weather because air quality deteriorates rapidly as temperatures rise. This will cause medical difficulties and affect peoples’ quality of life. • Food Processing is one of the key sectors in Brent’s economy. Food safety is one of the top concerns for health managers during a heatwave. Without changes to training and facilities, the sector could be badly affected by the challenges of maintaining high standards of food hygiene during heatwaves in future. • Small sections of the North Circular may be flooded, causing traffic chaos in the borough. • Brent’s retail industry will be negatively affected if climate change disrupts travel into, within and out of the borough. • Brent is home to the largest Industrial Estate in Europe, Park Royal, which could be significantly impacted by flash flooding after intense rainfall. • Despite having some award winning green spaces, only 8% of Brent’s area is covered by green spaces³. Not only will these spaces become more difficult to manage as drought becomes more frequent, but the borough will require more green spaces in order to cope with a warmer climate in future.
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A more detailed account of climate change impacts and its implications for life and work in Brent is given in the Supporting Evidence document.

³ This is below the London average of 15%. Green spaces play an important role in providing cool, shaded areas with good air quality for older people and children during heatwaves, as well as providing year-round healthy recreational space for all of Brent’s residents. The Mayor of London plans to increase the area of green spaces in London as part of his strategy for tackling climate change and improving the environment in London.

Climate change will affect the regions surrounding Brent, which may cause disruptions that significantly impact Brent's economy and communities. It is essential that Brent is able to cope with its own problems, but also that its emergency services and hospitals are able to cope with requests from elsewhere in London or the south east of England. For example, if there was a major flood event on the banks of the Thames, or if a heatwave or disease outbreak began to overwhelm one or more of its neighbours, Brent's hospitals and other facilities would be needed to help cope with the crisis.

Climate change is also very likely to increase migration flows into London and the south-east, adding to Brent's population and diversity, whilst potentially putting strain on existing services and facilities such as hospitals, schools, housing and the transport network.

Climate change is often wrongly seen purely as an environmental issue. It is not; climate change will affect our everyday lives, work, homes, health, businesses and communities.

1.3 Why a borough-wide Strategy is needed

Brent has over 8,000 local businesses, most of which are small or medium sized enterprises (SMEs). As many as 95% of the businesses in Park Royal are SMEs. SMEs are particularly vulnerable to climate change because they often lack the resources, time and awareness to adapt and protect their employees and assets. The economy of Brent is therefore especially vulnerable.

Brent's population is one of the most diverse in the UK, with over half of the population from ethnic minorities and more than 135 languages being spoken by local school children. Brent also has a young population, acute concentrations of deprivation and a high population turnover (meaning many people live in the borough for a short time and then move on). A quarter of housing in Brent is owned by the public sector, there is a high privately rented sector and there are plans to build 11,000 new homes in the borough.

The specific context of Brent has affected the design of this Strategy. See Table 1-2 below.

Table 1-2 Features of Brent that have affected the design of the Strategy

Feature of Brent	Implication	Effect on the Strategy
Cultural diversity (135+ languages)	Communicating new issues (e.g. climate change) is difficult because messages need to be sent out in many different languages. Emergency, health and public services find it difficult to communicate with linguistic minority groups during crisis situations such as floods, heatwaves or disease outbreaks, leaving such groups more vulnerable than others.	Enable representatives of various communities to lead non-English speakers through climate change activities. Involve community groups in identifying at-risk individuals and households, and in early warning systems or emergency response.
High numbers of SMEs	SMEs are less flexible and less able to invest in new technologies or solutions or process new information.	Tailor information campaigns specifically to SMEs. Involve SMEs in the implementation of the Strategy and setting of milestones and targets.

Young population	Young people are more vulnerable but also more likely to speak English and be adaptable.	Focus on Schools as a place for effecting change and communicating to households. Encourage partners in Brent to think about how young people can be involved in decision-making and action on climate change.
Acute concentrations of deprivation	Inability to afford investments for climate change.	Concentrate on the cost-saving opportunities from climate change. Make an effort to raise awareness of climate change impacts around the world, e.g. in southern Asia and Africa.
Climate change is a low priority	Residents, community groups and SMEs do not engage with the Strategy.	Make it as easy as possible for residents to participate in actions to tackle climate change. Focus actions on those who are most able to act.
Disengagement or mistrust of 'officials'	Scepticism towards the Strategy if it is seen as an 'official' or 'government' initiative.	Engage non-official actors (e.g. community groups) wherever possible. Seize climate change as an opportunity to build trust between official and non-official groups.
High population turnover	Official services do not always identify or communicate with vulnerable people.	Enable community groups (e.g. faith groups), who are better in touch with short-term visitors to Brent, to be involved in providing the response to climate change risks and opportunities.
High privately rented/ public housing sector	Tenants are not able to invest in energy efficiency or have low incentives/ few opportunities to reduce energy consumption .	Begin a dialogue with landlords Embed energy efficiency into Council housing services. Concentrate on lifestyle, consumption and transport options for reducing energy consumption.
Ethnic diversity	Many residents will be used to different (often hotter) climate conditions. Active system of trusted social networks (e.g. faith groups, ethnic communities). High level of concern for people elsewhere in the world.	Make use of existing knowledge and coping mechanisms from community groups to adapt to changing UK climate. Engage with these existing, trusted groups and networks to communicate issues around climate change. Make clear the connections between mitigation in Brent and the benefits this brings to people in other countries.

It should be clear from the table above that Brent's specific circumstances present opportunities as well as challenges. This Strategy lays out a framework for making the most of Brent's rich diversity for the purposes of tackling climate change.

1.4 Policy context

Climate change is not just an issue for Brent. Responses to climate change are needed from every corner of the globe –from international treaties right down to individual choices about which food, transport and products to buy and what to do with our waste and water. Starting at the top, here is a quick run down of some of the key activities around climate change:

Global: Post-Kyoto Treaty?

World leaders are currently preparing for an all-important conference organized by the United Nations in Copenhagen for December 2009, aimed at agreeing a successor to the Kyoto Protocol, which expires in 2012. This meeting is the official opportunity to create a global deal that will see all countries commit to reducing their greenhouse gas emissions in order to prevent future climate change. Although it seems unlikely that a perfect deal will be struck, all governments are under pressure from their citizens and international organizations to find a new solution.

UK: The Climate Change Act

The first legally binding GHG emissions legislation in the world sets an 80% reduction target for the UK by 2050 (against 1990 levels). The Act formally established the Committee on Climate Change (see below). The Act also establishes obligations on parliament to assess the risks that climate change poses to the UK and to begin taking action to adapt.

UK: The Committee on Climate Change (CCC)

The CCC is an independent body established under the Climate Change Act to advise government on setting carbon budgets, and to report to Parliament on the progress made in reducing greenhouse gas emissions. The CCC's first report⁴ in October 2008 led the government to adopt its 80% reduction target.

The CCC report recommends an interim target of 29-43% reduction of emissions by 2020 - depending on global agreements - which would cost 0.3-0.8% of the UK's GDP in 2020. They recommend that policy action to decarbonise power generation, improve the energy efficiency and reduce transport emissions, could deliver the majority of the necessary savings by 2020. The largest potential savings are seen from power generation, where they estimate that wind power could generate 30% of electricity by 2020; however, the introduction of further financial incentives and regulation, especially for carbon capture and storage, is needed. Significant savings are also possible from improving energy efficiency in buildings and the CCC recommends tougher requirements on energy suppliers and appliance standards, as well as targeting smaller companies to improve their energy efficiency. Imposing lower taxes for clean cars and investing in better driving education are recommended to reduce transport emissions. The significance for Brent of the CCC recommended targets are covered in section 3.3.

UK: The Carbon Reduction Commitment

The CRC is a groundbreaking, legally binding, emissions trading scheme. The CRC will affect around 5,000 UK organisations. The initial phase will be compulsory for organisations that consume over 6,000 MWh (6,000,000 kWh) of half-hourly metered electricity. It is designed to target low energy-intensive sectors and will therefore have a significant impact on public sector organisations, as well as many service sector businesses.

London: A Leading Global City

The current and previous Mayors of London have worked hard to establish London as a leading city in the fight against climate change. The Mayor's **Climate Change Action Plan**⁵

⁴ See <http://www.theccc.org.uk/reports/>

⁵ Action Today to Protect Tomorrow (2007) Available at, <http://www.london.gov.uk/mayor/environment/climate-change/ccap/index.jsp>

sets out a path for London to tackle this challenge and to deliver London's CO₂ targets. In order to comply with wider legislative targets a limit to the total amount of CO₂ produced between now and 2025 of 600 million tonnes has been proposed.

The Mayor's draft **Climate Change Adaptation Strategy**⁶ was released in 2008 and sets out a programme for making the capital resilient to future climate over the coming years. The document sets out the key risks to London posed by a changing climate and promotes a vision for adaptation that will rely to a large extent on London Boroughs as strategic partners of the GLA in achieving adaptation on the ground.

Brent: The Council commits...

As a result of its obligations as a London Borough and a Local Authority of the UK Government, Brent Council has recognised the need for local action and leadership to fight climate change. It has signed up to two 'indicators' that will measure the Council's progress in managing climate change (see Table 1-3 on National Indicators). The Council has committed to:

- Reduce emissions from the Council's own buildings and facilities (NI185);
- Assess the risks posed by climate change within the borough and plan to adapt (NI188).

As such, Brent is playing its role in the global effort to reduce GHG emissions and so reduce the level of future climate change. It is also following the national lead to prepare for inevitable climate change by planning adaptation. This creates the context within which this Climate Change Strategy exists: it sets out a framework which will allow Brent to meet these national objectives in the best, most Brent-specific way possible.

Table 1-3 National Indicators

The new Local Government Performance Framework sets out a number of national indicators, which will be used to assess the performance of Local Authorities (LAs) under their Local Area Agreement (LAA). **The London Borough of Brent and its partners** have selected two climate change indicators to measure performance over the coming years:

NI185: Percentage CO₂ reduction from LA operations;
NI188: Planning to Adapt to Climate Change.

NI185 will require measures to manage emissions from the Council's buildings, transport, energy use and waste performance, as well as those of its outsourced suppliers, whose emissions can also be counted under NI185. Defra have produced a tool to help LAs calculate the CO₂ emission from their own operations (including suppliers).

Brent Council have a Carbon Management Strategy and Implementation Plan 2006-11 to address this indicator. Public services actions also look to reduce carbon from council operations.

Local Authorities therefore have a key role to play in meeting the overall reduction targets, as set out in the Climate Change Act and potential forthcoming international agreement.

NI188 is a process based indicator that will require the risks posed by physical climate change to be assessed and prioritised. Brent Climate Change Strategy seeks to mitigate some of the risks and Brent Council will complete a Local Climate Impacts Profile in the near future.

Other indicators, which Brent will be required to report on, even though these have not been selected under the local Area Agreement, include:

⁶ Draft Climate Change Adaptation Strategy (2008) Available at, <http://www.london.gov.uk/mayor/publications/2008/docs/climate-change-adapt-strat-summary.pdf>

NI 186 - Per capita CO₂ emission in the LA area. This indicator is designed to encourage LAs to provide leadership and vision in cutting emissions from communities. LAs are well-placed to deliver emissions savings from the public as well as private enterprise in their local area because of their powers and responsibilities for housing, planning and local transport. Brent Climate Change Strategy addresses this indicator.

NI 187 - Tackling Fuel Poverty. NI187 measures progress in tackling fuel poverty through the improved energy efficiency of households inhabited by people claiming income related benefits.

Brent Council have a **Fuel Poverty Strategy** to address this indicator some aspects of the Climate Change Strategy will aid progress also.

NI 194 - Air Quality: percentage reduction in NO_x and primary PM₁₀ emissions through local authority's estate and operations. Defra have produced a tool for LAs to calculate their NO_x and PM₁₀ emissions, which is the same tool that can be used to calculate CO₂ emissions under NI185. Brent Council have an **Air Quality Action Plan 2005-2010** to address this indicator, however they will also need to collect baseline data along with indicator 185.

See the Implementation Plan for more detail on how the Strategy will help Brent make progress towards its National Indicator targets.

There are also national and London policies that make mitigation and adaptation more difficult. For example the London Plan requires each borough to accommodate 11,000 additional dwellings, which will increase carbon emissions and add pressure to existing transport infrastructure and facilities. Partners in Brent are therefore working to maintain or increase current services against these pressures, which makes the job of cutting emissions and considering adaptation more difficult. The increased development that is implied by the London Plan will also add considerable pressure to Brent's scarce green space: with only 8% of its surface area covered by green space, Brent is below the London average⁷, making the challenge of preventing the effects of heatwaves on the population more difficult. Further development may make this task even harder.

⁷ The London average is 15% of surface area given over to green space, which includes parks, gardens and recreational areas.

2 Aims of the Climate Change Strategy

This Strategy is a response to the challenge of climate change. It has three aims:

- 1) ***Cut emissions;***
- 2) ***Cope with extreme weather;***
- 3) ***Adapt to future climate change.***

2.1 Cut emissions

The first response to climate change is to slow it down (mitigation). This involves finding ways to reduce the greenhouse gases (GHGs) we emit in Brent and to reduce the emissions associated with the jobs we do, things we buy and way we move around in our own neighbourhoods.

Almost everything we do is connected with GHG emissions: the clothes we wear, food we eat, electricity we use, rubbish we produce – even the water we drink – almost everything has caused or will at some point cause some GHG emissions. The challenge of cutting emissions therefore extends across everything. Some simple examples include:

Food: reducing the ‘food miles’ and environmental impact of the food we eat and the waste we throw away, for example by buying more British grown or organic foods where possible and by reducing or recycling food waste rather than throwing it in the bin (which then ends up as landfill).

Transport: many solutions exist, including new transport routes for trains and trams, new low-emitting vehicles, greener fuels for existing buses and cars or increasing facilities for bicycles and pedestrians. As the technology and infrastructure/facilities become more easily available and Brent’s new developments are designed so that we do not need to use transport as frequently, it is important that individuals begin to adjust their routines so that they choose less polluting modes of transport every day.

Housing: again several options are available – the organisations that build and run our housing facilities need to invest to improve the energy efficiency and reduce the need for electricity in our homes; we, as residents, also need to make choices that reduce our energy use, for example by using energy efficient products and switching appliances off, which can help us to save money at the same time as reducing emissions.

The Strategy therefore aims to provide a framework whereby the kinds of measures described above can be implemented in Brent in order to reduce emissions of GHGs, to thus reduce the scale of climate change in the future.

2.2 Cope with extreme weather

Extreme weather events, such as heatwaves, droughts and floods, will become more common and probably more intense in future as a result of climate change. However, we already experience extreme weather, albeit on rare occasions, and so there is a benefit to learning how to cope better with current experiences/situations of extreme weather.

For example, in August 2003 there was a heatwave in London, which led to a spike in the number of deaths among older people. In such circumstances, many deaths are avoidable if people know who is at-risk, what advice to give them and if housing, health services and green spaces are able to cope with hot weather and provide comfort.

The Strategy therefore aims to create a borough that is better able to cope with extreme weather. This will provide improvements in the quality of life and resilience of Brent, irrespective of how much climate change occurs in future.

2.3 Adapt to future climate change

Nevertheless, scientists are convinced that climate change is a reality and that we are faced with several decades of inevitable changes to our weather. It is therefore important to plan and adapt what we do in Brent in order to anticipate and prepare for this future change. Many adaptation decisions require early investment, for example building houses that are water efficient and able to provide cooling in hot weather, which will last for 80 to 100 years. It is therefore important to start adapting today.

The Strategy therefore aims to enable Brent to adapt to future climate change by involving all the necessary partners and providing some of the initial information that these partners will need to assess the future threat of climate change and to begin taking steps towards being climate resilient.

3 Vision & Objectives

3.1 Vision

Given the three aims of the Strategy, the following describes how we would like to see Brent in the future:

“Brent is a pleasant place to live and work. The diverse communities of Brent, local businesses and public services are well-informed and able to act independently and in partnership to protect their members from climate variability and extremes. People and businesses make independent choices that lead to a low level of emissions in the borough. The infrastructure and layout of the borough make low carbon living easy and are resilient to climate impacts. Public services are delivered consistently, strategically and are able to cope with changes or extremes in weather, including heatwaves, flash flooding and drought. Brent plays its part as a responsible London Borough – helping to achieve London-wide emissions reductions targets and contributing to the resilience of London as a city and strong economy. Brent has become an example to other boroughs and city councils, demonstrating a new sense of trust and teamwork in matters relating to climate vulnerability, resilience and emission reduction.”

3.2 Objectives

This Strategy has five key objectives. The Strategy and supporting documents are structured around these objectives. To some extent the objectives overlap and are self-reinforcing. The objectives are:

Objective 1: **To secure commitment from all relevant partners and to enable Brent to act**

This Strategy is a call for all partners to publicly commit to working in partnership to help Brent respond to the challenge of climate change. The aims of the Strategy are long term and will require considerable and sustained effort on the part of various partners in Brent. This includes local businesses, residents, community groups, public services, government departments, local organisations and the Council. **All partners need to publicly commit to the aims of the Strategy and to stay committed over time.**

The aims will not be achieved if climate change is seen as the responsibility of one single stakeholder, for example the Council. Ultimately, it is the choices that individuals, households, public services and businesses make that will determine whether the aims are realised. In return for making a commitment to act, these partners therefore need to be enabled to understand, be prepared for and be able to respond adequately to future changes in climate - they require the information, means, channels, motivation, incentives and support to make choices and find new solutions. They also need the barriers that prevent them from taking such decisions now to be removed. The Strategy therefore recognises the need to *enable* Brent as a community and economy to act independently. This is the only truly sustainable way to achieve the aims of the Strategy.

Objective 2: **To work in partnership to achieve wide-ranging and inclusive solutions to the challenge of climate change**

The Strategy recognises explicitly the need to work in partnership to achieve its aims; the objectives cannot be achieved by any one actor working alone. However, the objective is not just to work in partnership as a process, but to achieve *outcomes* that meet the needs of all partners in Brent. The Strategy cuts across all sectors and groups within the borough. It is therefore necessary to find wide-ranging solutions that help to address the needs of various different groups.

Objective 3: To provide user-friendly information to those who need it

Climate change is a highly complex issue that is often widely discussed but poorly understood. One of the main barriers to progress in responding to climate change is the lack of suitable information. This does not always mean that information is not available, but that sometimes information is not presented in a way that is helpful and engaging for certain audiences. This barrier is particularly acute in Brent given the diversity of languages and cultures, meaning that traditional as well as modern communication media are not always effective. Businesses also need specific kinds of information in order to make informed choices that may affect their profits. SMEs require different information to multi-national corporations. The objective, therefore, is to provide user-friendly information tailored to those who need it.

Objective 4: To collect evidence and continually assess progress

Some aspects of cutting emissions can be very technical and require thorough management of data and evidence. Technology is developing rapidly in response to demand for lower-emitting systems and products. It is therefore important that advice is up to date and based on a sound analysis of the best available information. Information on current emissions needs to be collected from the full spectrum of users in Brent in order to monitor progress and improve performance.

The impacts of climate change are also highly complex. It is therefore important to continually assess and re-assess evidence on impacts, vulnerabilities and risk within Brent in order to inform decision-makers and partners with as much accuracy as possible.

Progress in meeting the objectives of the Strategy needs to be monitored and managed effectively in order to find out what improvements are being seen on the ground and to identify where further effort is needed. Progress should be reported to the Climate Change (CC) Steering Group/ Local Strategic Partnership and circulated to a wider audience of stakeholders on a regular basis.

Objective 5: To mainstream climate change into our everyday activities

Whilst the first four overarching objectives are needed to get Brent moving on the road to a low-emissions and climate resilient future, the ultimate objective is for climate change to be mainstreamed as a central issue into everything we do. This will mean that people’s work decisions are influenced by the need to cut emissions and adapt, that all strategic plans are made with climate change in mind and that our everyday choices reflect the reality of climate change in our lifetimes. The Strategy recognises ‘mainstreaming’ as the ultimate objective.

The Objectives are cross-cutting and will help to achieve the Aims of the Strategy:

	Cut emissions	Cope with extreme weather	Adapt to future climate change
Objective 1: To secure commitment from all relevant partners and to enable Brent to act	✓	✓	✓
Objective 2: To work in partnership to achieve wide-ranging and inclusive solutions to the challenge of climate change	✓	✓	✓
Objective 3: To provide			

user-friendly information to those who need it

✓

✓

✓

Objective 4: To collect evidence and continually assess progress

✓

✓

Objective 5: To mainstream climate change into our everyday activities

✓

✓

✓

3.3 High Level Targets

This section outlines the National and London emissions targets and draws out the implications for sectors in Brent.

Nationwide targets

There are nationwide targets for total emissions and some specific sector targets that the Borough of Brent, like the rest of the nation, will need to contribute to meeting. In October 2008, the Government announced an 80% reduction target by 2050 of Kyoto greenhouse gas emissions compared to 1990 emission levels⁸ (this equates to 77% below 2005 levels). There are also some sector specific targets with 20% of electricity generation to be from renewables by 2020⁹ and a draft heat and energy saving strategy, which is currently under consultation, with a target of 33% reduction of household emissions (through energy efficiency and low carbon energy) by 2020.¹⁰

There are not specific nationwide targets for many sectors, however, a report by the CCC has modelled a scenario to produce the needed 80% reduction (see Figure 3-1). The scenario shows an interim target of between 29-43% reduction (from 1990 levels) by 2020 and then a more dramatic decline in the last 30 years to reach the 2050 target.¹¹ The modelling shows the majority of savings by 2020 come from decarbonising electricity generation. Reducing energy use in buildings and industry and reducing transport emissions are also proposed as important abatement measures to provide the reduction by 2020.

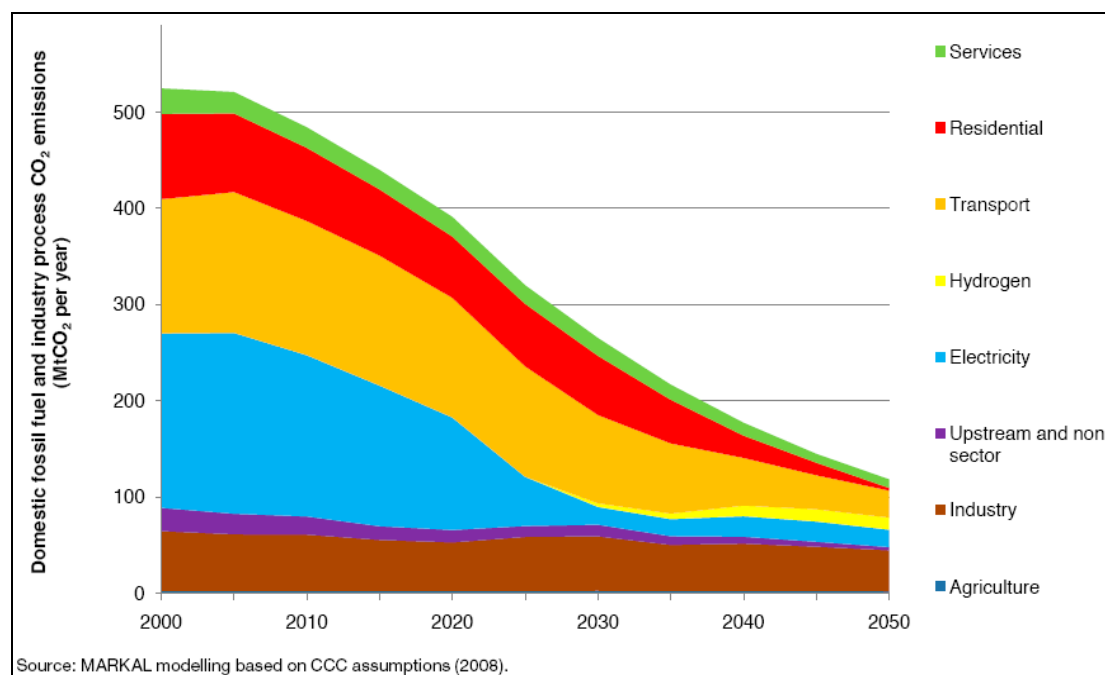


Figure 3-1: A possible 80% emissions reduction path for the UK by 2050 by sector

⁸ http://news.bbc.co.uk/1/hi/uk_politics/7673748.stm

⁹ <http://www.berr.gov.uk/energy/sources/renewables/index.html>

¹⁰ DECC & CLG, 2009. Heat and Energy Saving Strategy Consultation Document. See http://hes.decc.gov.uk/consultation/consultation_summary

¹¹ CCC, 2008. Building a Low Carbon Britain. See <http://www.theccc.org.uk/reports>

London targets

The Borough of Brent, as part of London, is included in more stringent targets than the nation as a whole. In 2006 Greater London accounted for 9% of the UK's total CO₂ emissions¹² and in 2007 the Mayor of London committed the city to an emissions reduction of 60% by 2025 compared to 1990 levels, with a 20% reduction to be achieved by 2016.¹³

The Greater London Authority (GLA) set out proposed measures to achieve the 19.6 MtCO₂ savings by 2025 for London (see Figure 3-2). In a similar way to the CCC report the most significant area of potential saving is from decarbonising the energy supply but energy efficiency, behavioural change and reducing transport emissions also contribute substantially. These savings from energy supply, behavioural change and new builds are proposed to come from approximately equal contributions from the domestic, commercial and public sectors. In total, 39% of the saving is proposed to come from the domestic sector, with a further 39% from the commercial and public sectors, and the remaining from transport through improved physical infrastructure, shifting to lower carbon modes and fuels and greater efficiency.¹⁴

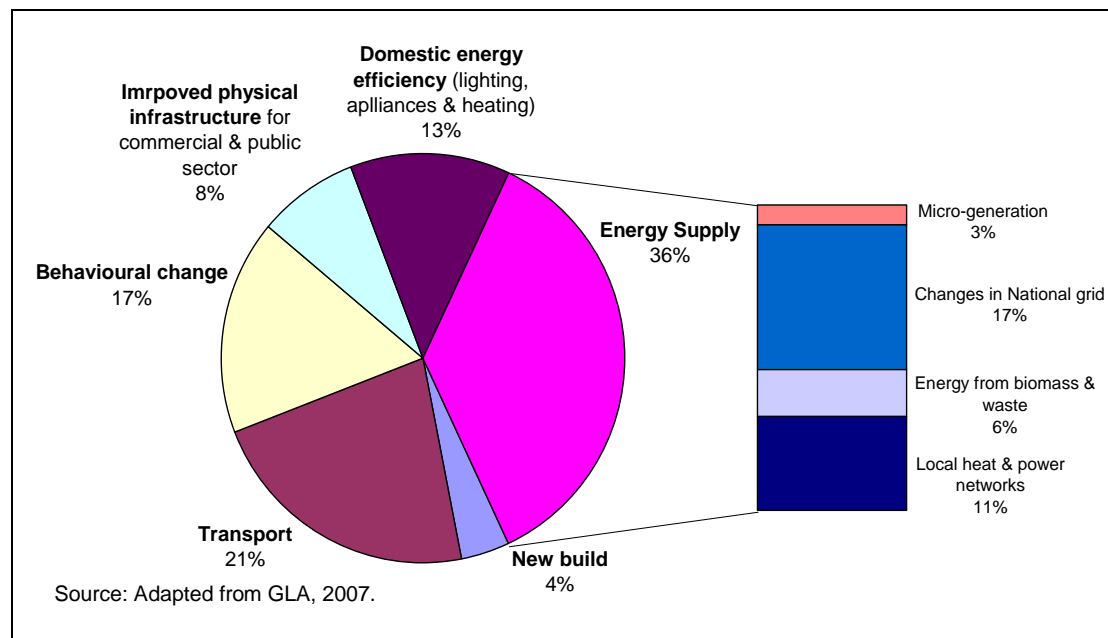


Figure 3-2: Contribution to London's CO₂ saving by 2025

Targets for Brent

In 2006, the Borough of Brent accounted for 3% of Greater London's CO₂ emissions and 0.3% of those of the UK.¹⁵ Nearly half of Brent's emissions come from the domestic sector, with over a third from industry and commercial and a fifth from road transport.¹⁶ The London targets are applied by sector; by 2025 the target is a 60% reduction from each sector. So, there must be significant reductions in all emissions sectors in Brent to meet the UK and London targets (see Figure 3-3). Both the CCC report and the GLA report illustrate the saving potential from measures, for example the CCC finds potential savings of up to 43

¹² Defra emissions data <http://www.defra.gov.uk/Environment/statistics/globalatmos/download/regionalrpt/local-regionalco2emissions05-06.xls>

¹³ GLA, 2007. Action Today to Protect Tomorrow -The Mayor's Climate Change Action Plan. See <http://www.london.gov.uk/mayor/environment/climate-change/ccap/index.jsp>

¹⁴ Ibid

¹⁵ Defra emissions data <http://www.defra.gov.uk/Environment/statistics/globalatmos/download/regionalrpt/local-regionalco2emissions05-06.xls>

¹⁶ Defra emissions data <http://www.defra.gov.uk/Environment/statistics/globalatmos/download/regionalrpt/local-regionalco2emissions05-06.xls>

MtCO₂ (9% of total reduction needed to meet the UK's 2050 target) from insulating residential buildings across the UK.

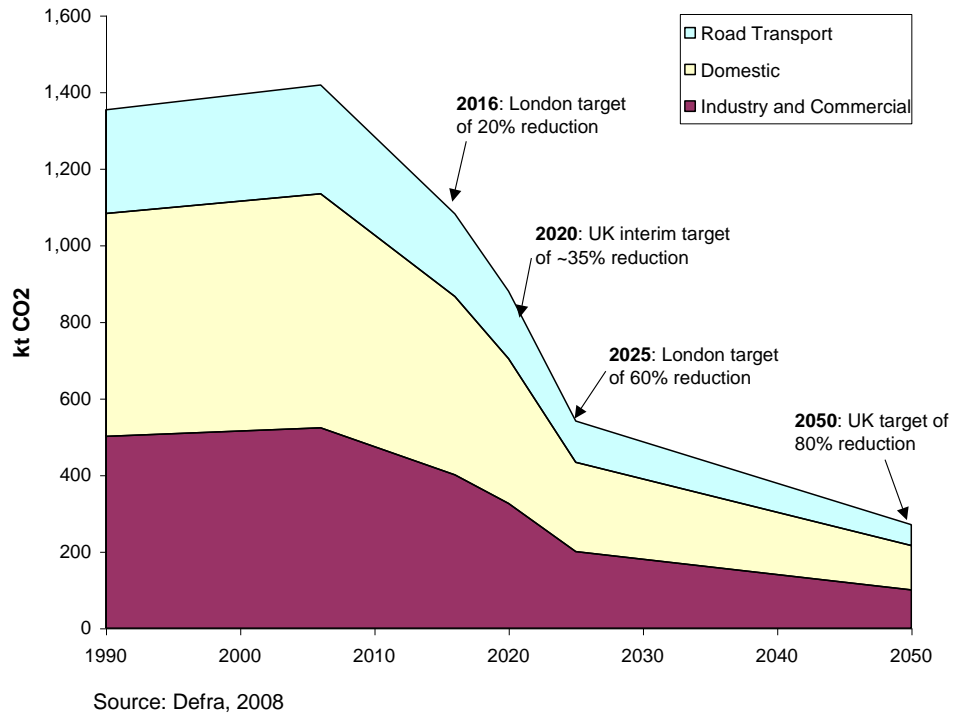


Figure 3-3 Possible emission reduction targets for Brent (extrapolated from London targets)

4 The framework

The Strategy has been written for a wide audience but contains too much material for one document. It has therefore been structured according to the following sections:

- Strategy
- Action Plan
- Implementation Plan
- Resources Plan
- Communications Plan
- Supporting Evidence

The Strategy (this document) gives an overview of the entire Strategy, focusing on the background, context, aims and objectives.

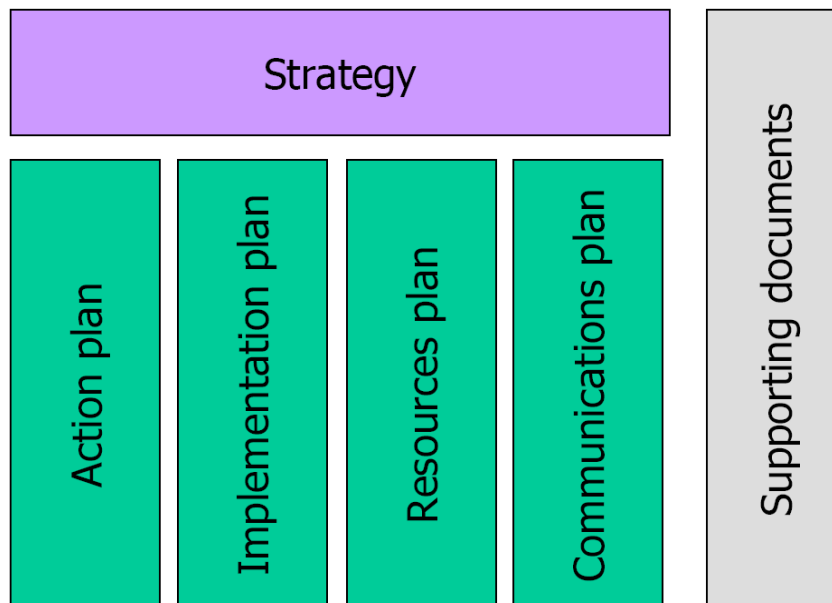
The Action Plan lists the specific measures that make up the Strategy. It describes what should be done and by which group(s) of actors in order to achieve the aims of the Strategy.

The Implementation Plan sets out initial guidance on how to begin putting the actions into practice. This document is intended to aid various partners involved in helping to deliver the Strategy in the near future.

The Resource Plan sets out an initial estimate of the resources required to deliver each action and points delivery agents in the direction of some possible funding streams.

The Communications Plan sets out a methodology for communicating the Climate Change Strategy to Brent and also acts as a working document, providing a framework for communicating with Brent's diverse audience.

The Supporting Evidence document includes a lot of the background research that underpins the statements and structure of the other documents listed above. This collection includes information on the background of Brent and an explanation of climate change and its implications for Brent. Analysis of the stakeholder consultations that have been undertaken in the preparation of this Strategy are also given in the Supporting Evidence document.



5 Management architecture and delivery partners

The success of delivering this Strategy is dependant on having a suitable driving force behind it. A driving force will be apparent in the form of a **Climate Change Steering Group** to coordinate the Strategy and oversee its implementation. This group will report directly to the Local Strategic Partnership (LSP), working together with the Brent Sustainability Forum (BSF).

The Steering Group should include strategic leaders for the Council, NHS and PCT, police, fire, business (for example Park Royal Partnership), community groups representation (for example, Brava) and other strategic partners that will be involved in delivery, for example LDA and Groundwork. It will reflect Brent's demographic to ensure there are no gaps created in the delivery of the Strategy.

In turn, as climate change is likely to affect the delivery of local strategic objectives, it is logical that strategic delivery bodies have a hand in the Climate Change Steering Group to ensure local objective delivery is not put at risk and to identify opportunities for local objectives that are complementary to the Climate Change Strategy.

As the Steering Group will be driving delivery, it is essential that it is able to commit significant time and resources in order to fulfil its role as facilitator for the Strategy. The group will be responsible for driving actions outlined in the Strategy, identifying individuals who can deliver actions, lobbying other agencies and bodies whose cooperation is essential and generating momentum within Brent. It is likely that the group will be needed in the medium term and long-term delivery of the Strategy.

It is anticipated that information gathering, monitoring and communicating on the Strategy will be led through the Steering Group. The Steering Group may need to include smaller Working Groups to take forward specific actions or sets of actions.

The Steering Group will also need to have open lines of communications with climate change experts. This could be achieved by formalising a relationship with the London Climate Change Partnership. Links through individuals and member organisations of the Brent Sustainability Forum may also enable the flow of expert advice and information on climate change through to the Steering Group.

It is essential to have a full-time coordinator to manage the group's objectives and delivery on a day-to-day basis. Brent Council will fund this position. The Steering Group will report to the LSP on a quarterly basis.

The Council will play an important and key role in sitting on the Steering Group and delivering aspects of the Strategy. Brent Council has already gone to great steps to demonstrate leadership in the borough and are ahead in setting examples for others to follow.

The Strategy also places expectations and great hopes on other partners, namely public services, the private sector in Brent, community groups, households and individual residents. In return for the leadership being shown by the Council and BSF, these groups and individuals are expected to play their part in cutting emissions and adapting to climate change, especially where the Strategy provides the means, information and incentives to help this process.

Delivery Partners

Within the Strategy itself, the relevant partners in Brent have been divided into five themes:

- Leadership
- Public services
- Private sector
- Residents
- Community groups

Leadership

The Strategy requires leadership. It is clear from the public consultation during the development of this Strategy that it would be inappropriate for the Council to take sole leadership, given that the Strategy addresses the Borough of Brent as a whole. Leadership includes the LSP, BSF, Brent Council and the Climate Change Steering Group (yet to be established).

Public services

This refers to all of the state and public services that are delivered in Brent, including schools, hospitals, emergency services, housing and utilities. Some of these services are delivered by the Council, whilst others are the responsibility of central departments (e.g. Metropolitan Police Service).

Private sector

This group includes all commercial organisations of whatever size, recognising that there are several different tiers and type of private sector organisation. Actions are addressed specifically to this group, which contributes over one third of Brent's GHG emissions. It is important to accommodate the private sector into the Strategy if meaningful emissions reductions are to be achieved.

Residents

Residents are the biggest GHG emitters in Brent and the group whose vulnerability is arguably the biggest concern to Brent as a community and economy. Residents means individuals and households within the borough: people who call Brent home.

Community groups

Part of what makes this Strategy unique is the importance that it assigns to Community Groups. Community groups, which includes faith groups, organised ethnic communities, voluntary groups, housing groups, youth groups and local charities, are distinct from residents in that they are organised and represent people that share some form of common interest, culture or belief. In a diverse community such as Brent, such groups often hold considerable influence and legitimacy. Given the high population turnover in Brent, they also provide one of the most effective communications channels for reaching some of the most vulnerable individuals in the borough.

6 The journey

6.1 So far...

The Strategy has been in development since Spring 2008. Reflecting the Council's desire that the Strategy should be inclusive and speak to the borough as a whole, various stages of consultation were undertaken with partners (meaning organisations and people who will be involved to some extent in the Strategy's implementation) and the Brent public. Below is a short summary of the journey so far. For a more detailed account of the consultation stages, results and analysis, see the Supporting Evidence document.

Public consultation

The Strategy is very much concerned with the implications of climate change on residents in Brent. Every effort was made, using the available resources, to speak to the population of Brent about climate change. The results show that a fairly representative sample of the public responded to the online consultation, with a slightly higher number of white British respondents in relation to other ethnic groups. However, the need to engage more directly with some of the most vulnerable groups (e.g. refugee groups) in Brent is clearly recognised in this Strategy and the Action Plan. In fact, many of the actions are designed specifically to engage with vulnerable people, most notably creating a network of Community Climate Change Champions.

The following stages of consultation informed the development of the Strategy:

- A presentation launch of the project on World Environment Day 2008 at Willesden Green Library Centre to raise awareness of the Strategy.
- Public consultation via an on-line survey. The survey was advertised through the Brent Magazine (which every household in Brent receives for free) and via emails sent to a number of Brent Consultation fora. Hard copies of the survey were also made available.
- The following public events in Brent were attended in order to carry out face-to-face consultation using hard copies of the survey in order to reach residents who do not have access to the internet and those who may not traditionally respond to consultation:
 - 'Living Green' Fair at Gladstonbury Festival, 22nd June 2008
 - Brent Respect Festival, 6th July 2008
 - Brent Youth Parliament 19th July 2008.

Partner consultation

The following stages of consultation with organisations and groups informed the development of the Strategy:

- First partner workshop: held in June 2008 to gain an understanding of the current awareness of climate change issues in Brent, any actions already underway and a first impression of the priorities for the borough;
- Second stakeholder workshop: held in September 2008 to discuss a list of proposed actions for the Strategy.

Interviews

Structured interviews were held with key figures in Brent, including public sector bodies, businesses and business support organisations, community support groups and voluntary organisations. In addition, discussions were held with representatives of London-wide organisations and London government.

The results of these interviews formed a substantial source of data. Their purpose was to:

- Gain an appreciation of where particular groups have gaps in their understanding of climate change impacts;
- Understand what is motivating groups to make changes and take action on climate change;
- Enable us to draw a more complete picture and better understand and develop practical and realistic actions that can be measured.

Second round interviews:

A second round of interviews was completed in May 2009 following the first round to add further value and seek feedback on the amendments made to the first draft Strategy.

The interviews were completed in order to:

- Strengthen commitment among partners

This was addressed through discussions around the actions. Participants were encouraged to discuss how they perceived the actions would be taken forward and what would be needed to enable them to do that;

- Gain further insight from key stakeholders inside and outside the Council (beyond that which was provided during previous phases of engagement), enabling a greater level of detail in the Action Plan

Requests for further specificity and information using participant knowledge were made and this greatly helped to shape the Strategy framework documents further.

Relevant work taking place over the last six months by stakeholders was gathered to gain further understanding of partners' objectives and where climate change fitted in and would fit in going forward.

Feedback on the content and direction of the Strategy and Action Plan was mainly positive.

Online Draft Strategy Consultation

The draft Strategy was posted on-line for public and partner organisation feedback on two separate occasions. Brent Council's Consultation web-pages hosted the draft document. Invitations were sent through the Brent Consultation Fora using a database of stakeholder contacts known to the Council. Partners who were involved in multiple stages of consultation had the opportunity to provide feedback from an early stage and throughout the development of the Strategy. This feedback has been incorporated into the final version of the Strategy.

Climate change expertise

Additional research has been undertaken to supplement the views of partners and specialist knowledge of the experts involved in drafting the Strategy, including:

- Research and evidence gathering on projections of how climate change will affect Brent;

- A review of existing Council Strategies and Action Plans to assess the implications of climate change on Council service delivery and strategy;
- A review of current climate change legislation and non-policy drivers affecting Brent Council and partners in the borough.

For more detailed information on the background research that underpins the Strategy, see the Supporting Evidence document.

6.2 Lessons Learned

A very wide range of views were expressed during consultation. Among the key messages were:

- The Council, its partners and its employees should lead by example;
- People want to see commitment from the private sector;
- Some key partner groups have a very strong understanding of climate change;
- Other partners and a large number of residents see climate change as a low priority issue;
- People and business need incentives to take action on climate change;
- Climate change mitigation is understood better than adaptation;
- More information is needed on climate change and its implications for the borough;
- There is some mistrust of 'official' bodies and actors;
- A wide range of stakeholders have shown enthusiasm and a willingness to be involved in the Strategy, including various community groups and public services.

Some respondents had extremely high expectations of the Strategy, for example hoping that it would lay the detailed blueprint for a zero-carbon Brent and specify how this would be achieved in the short term. Whilst the energetic contribution of all Brent partners will be a valuable resource to the development and implementation of this Strategy, the Strategy provides a framework for implementing actions within the borough that are achievable and make use of the current resources available to decision-makers, businesses, communities and residents of Brent.

In recognising the ambitions of many partners, the Strategy identifies one of the Leadership tasks as lobbying central government to support and implement policies that enable Brent to become carbon neutral in the near future. This sort of strategic step-change in politics and economics requires coordinated approaches that join-up local, national and even international actors. The achievement of such a goal is beyond the scope of this Strategy, but it is intended that the actions and framework provided here lay a strong foundation for working towards this ultimate objective.

Some consultees would have preferred more time to digest the draft Strategy and provide feedback, which unfortunately was not always possible. However, the actions themselves were widely consulted upon and the Strategy has been designed with the flexibility to evolve based on future discussion between partners and implementing agents. This will allow relevant stakeholders to remain involved in the evolution of the Strategy and Action Plan.

Some consultees asked for more precision in the setting of objectives, deadlines and targets. Brent's Climate Change Strategy sets out the framework for future action, the objectives and outlines the initial actions that are needed to begin the implementation of the Strategy. It is therefore inappropriate for the Strategy to set specific targets or objectives for any group of actors. These details need to be decided through dialogue with the relevant agents, for example SMEs and landlords, rather than dictated by the Strategy. The Council and some of Brent's larger businesses are subject to national legislation on emissions reduction, and so have their own targets.

A number of specific recommendations were made during consultation, which have proven extremely useful and been incorporated into the Action Plan and objectives of the Strategy. For example, specific objectives to begin a dialogue with landlords on achieving emissions reduction and climate resilience in rented accommodation, or advice on how to engage community groups to achieve meaningful change in lifestyles and choices to reduce the risks posed by extreme heat and flooding.

The development of the Strategy has taken longer than initially planned mostly because of the need to take all of this information and feedback on board. The Strategy that has been produced is greatly improved as a result of receiving this feedback and we appreciate the patience of all Brent partners.

6.3 The Journey from here onwards

As far as we know, this is the first ever community-based climate change strategy. We have identified the challenges of tackling climate change in Brent as unique:

- Brent has no large emitters who can be targeted easily as 'low hanging fruit';
- Brent has a large number of SMEs, with relatively low emission reduction potentials;
- Brent has a diverse population for whom climate change is a low priority;
- Communicating climate change issues with the most vulnerable groups in Brent is problematic;
- The range of stakeholders in Brent makes for a complex social and political structure;
- Brent has a rich and active social fabric.

The framework outlined in this Strategy sets out a new model for tackling climate change, which has not been tried before at the borough scale. Brent is therefore setting off on a relatively un-trodden but exciting path; a new approach is needed to ensure that, despite the negative impacts of a changing climate, climate change does not exacerbate social inequalities and that the core strategic objectives of the Local Strategic Partnership and the Council can be achieved. This new approach is flexible and dynamic; it will change over time and can be moulded to suit the specific demands of partners in the borough. It requires actions from, but also promises benefits to, all partners:

- The **Local Strategic Partnership**, together with key strategic partners, such as Brent Sustainability Forum, will need to set up the **Climate Change Steering Group**;
- **Community groups** need to be allies of the Leadership of Brent in providing and disseminating information to residents and in communicating vulnerabilities and responding to extreme weather events;
- **Brent Council** is willing to show leadership and to facilitate action across the borough. It will commit to providing resources and person-hours towards the Strategy and play its part during implementation;
- **Businesses in Brent** should be offered support in return for committing to take action to reduce emissions and reduce vulnerability;
- Brent's **public services** also need to demonstrate commitment, but will also benefit heavily if their job of maintaining service delivery is made easier through the increased involvement of community groups and residents;
- If these official and un-official organisations commit and play their part in achieving Brent's climate change objectives, individual **residents and households** are more likely to engage in the issue and be willing to change their choices in order to reduce emissions and improve their own resilience to the risks of climate change.

An innovative and creative response to the threats and opportunities of climate change could provide the foundation for achieving a more joined-up, sustainable and trusting Brent, to the benefit of all who visit, live and work in the borough.

For more detailed information on how the actions in this Strategy are to be implemented, see the Implementation Plan.